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Self-Efficacy as a Mediator of Entrepreneurial Knowledge, Family Environment and Digital Literacy Effects on Green Entrepreneurial Intention

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Abstract

This study aims to examine the relationships between entrepreneurial knowledge, family environment, and digital literacy and green entrepreneurial intention through self-efficacy. Previous studies have reported inconsistent findings regarding the effects of entrepreneurial knowledge, family environment, and digital literacy on entrepreneurial intention. Therefore, this study incorporates self-efficacy as a mediating variable to provide a more comprehensive explanation of green entrepreneurial intention among university students. The population consisted of 10.123 students from the 2023 cohort of Universitas Negeri Semarang. Using the Slovin formula, a sample of 385 respondents was selected through proportionate stratified random sampling. Data were collected through valid and reliable questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that entrepreneurial knowledge, family environment, digital literacy, and self-efficacy positively influence green entrepreneurial intention. In addition, entrepreneurial knowledge, family environment, and digital literacy positively affect self-efficacy. A notable finding is that self-efficacy only mediates the relationship between digital literacy and green entrepreneurial intention, while it does not mediate the effects of entrepreneurial knowledge and family environment. These findings extend the Theory of Entrepreneurial Event and Social Cognitive Theory by highlighting the distinctive mediating role of self-efficacy in the relationship between digital literacy and green entrepreneurial intention among university students.

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INTRODUCTION

Entrepreneurship is one of the fields that plays a fundamental role in the economy (Bruyat & Julien, 2001). This role is reflected in its contribution to promoting economic growth and improving societal welfare through job creation and income generation. The greater the number of entrepreneurs, the greater the opportunities for employment creation, which in turn contributes to increasing national income (Tusyanah et al., 2020). Consequently, fostering entrepreneurial interest has become one of the primaries focuses in management and economic studies over the past decade (Nguyen, 2020). In addition to contributing to economic growth, entrepreneurship is also regarded as a solution for addressing various changes and challenges in a dynamic era (Purwana et al., 2018). Therefore, the development of entrepreneurship is essential not only for supporting economic development but also for preparing future generations to create employment opportunities independently.

Entrepreneurship is understood as a series of activities involving the creation and management of businesses and resources, innovation, and risk-taking to generate both economic and social value (Lestari et al., 2025). However, in practice, entrepreneurial development has often been oriented primarily toward financial gain while paying insufficient attention to the environmental impacts of business activities. This has contributed to various environmental problems, including global warming, excessive exploitation of natural resources, and environmental pollution (Maryani & Yuniarsih, 2022). Meanwhile, the environment plays a vital role in sustaining human life, as human activities are inherently interconnected with the natural environment. Therefore, preserving environmental sustainability has become an essential consideration in the development of entrepreneurial activities.

In line with the achievement of the Sustainable Development Goals (SDGs) 2030, the Triple Bottom Line concept proposed by Elkington emphasizes the importance of balancing economic, environmental, and social dimensions in achieving sustainable development (Henriques & Richardson, 2004). According to Akkuş & Çalıyurt (2022), the SDGs have the potential to influence the development of policy frameworks that align with the long-term needs of the business sector. Therefore, businesses are encouraged to take an active role and initiative in supporting the achievement of the SDGs. Environmentally unsustainable entrepreneurial activities can threaten environmental preservation; consequently, greater attention has been directed toward environmentally responsible entrepreneurship, commonly referred to as green entrepreneurship.

Various environmental disasters occurring in Indonesia, such as floods and landslides, highlight the importance of maintaining a balance between economic development and environmental sustainability. In response to growing concerns about sustainability issues, green entrepreneurship has emerged as an approach that integrates economic, environmental, and social objectives into business activities (Humairoh et al., 2025). The role of green entrepreneurship has become increasingly important given the significant contribution of micro, small, and medium-sized enterprises (MSMEs) to the

national economy. However, the implementation of green entrepreneurship in Indonesia remains relatively low, with only about 12.19% of MSMEs partially adopting environmentally friendly business practices, while the remaining 87.81% have not yet embraced such practices (Shofihawa, 2025). This condition indicates a gap between the sustainable development agenda and entrepreneurial practices in society. On the other hand, considerable potential exists among young people, with approximately 84% expressing interest in environmentally friendly businesses (Ashari, 2025). Therefore, higher education institutions have a strategic role in fostering green entrepreneurial values and practices to encourage the emergence of entrepreneurs who are committed to sustainability (Maryani & Yuniarsih, 2022).

Although Indonesia has considerable entrepreneurial potential, its realization remains suboptimal, particularly among university graduates. Data from the Central Bureau of Statistics (BPS), as cited by Masitoh (2025), indicate that entrepreneurs in Indonesia are predominantly individuals with primary to secondary education backgrounds, while the contribution of higher education graduates remains relatively low, accounting for only 2.22% of Diploma I–III graduates and 10.84% of Diploma IV to doctoral graduates. This condition suggests that the involvement of university graduates in entrepreneurial activities has not yet reached its full potential. Furthermore, despite Indonesia having approximately 53.38 million nascent entrepreneurs and 5.13 million established entrepreneurs (Putra, 2025), the national entrepreneurship rate remains between 3.35% and 3.47%, which is below the World Bank's recommended benchmark of 4% and lags behind several Southeast Asian countries, including Singapore, Malaysia, and Thailand. These findings indicate that enhancing entrepreneurial interest and participation, particularly among university graduates, remains a significant challenge that requires greater attention.

The development of green entrepreneurial intention can be fostered through the internalization of sustainability values within higher education institutions. This effort is essential to encourage entrepreneurship that not only pursues economic benefits but also emphasizes environmental sustainability. Hameed et al. (2021) argued that educational institutions play a crucial role in promoting the adoption of green businesses through awareness-building initiatives, business idea development, and the enhancement of entrepreneurial skills. Furthermore, Sehabuddin et al. (2025) emphasized that universities have a strategic role in providing education and solutions related to environmental sustainability while supporting the acceleration of sustainable development. Given that green entrepreneurship contributes not only to economic growth but also to environmental preservation, green entrepreneurial intention should be nurtured through the strengthening of initiative, proactive attitudes, and commitment to environmentally responsible principles (Anisah & Wandary, 2015).

Green entrepreneurial intention is influenced by various factors. According to Maryani & Yuniarsih (2022), the determinants of green entrepreneurial intention include self-efficacy and entrepreneurial orientation. Angelia & Hidayah (2024) identified entrepreneurship education, entrepreneurial orientation, and self-confidence as key

influencing factors. Furthermore, Alvarez-Risco et al. (2021) found that educational development support, institutional support, and country support affect green entrepreneurial intention through the mediating role of entrepreneurial self-efficacy. Meanwhile, Wang et al. (2021) reported that green entrepreneurial self-efficacy, optimism, social responsibility, and ecological values are significant predictors of green entrepreneurial intention. Based on these findings, the present study focuses on entrepreneurial knowledge, family environment, digital literacy, and self-efficacy as factors that are expected to influence green entrepreneurial intention.

Research on the factors influencing green entrepreneurial intention has produced mixed findings. Several studies reported that entrepreneurial knowledge, family environment, and digital literacy significantly influence green entrepreneurial intention, such as those by Roy (2023), Sariutami & Soelaiman (2024), Pusparini et al. (2025), Mahfudzi & Fitri (2022), Gufron & Al-Madijah (2025) and A. Nugroho et al. (2023). In contrast, other studies found insignificant relationships, such as those by Hugo & Nuringsih (2020), Agusmiati & Wahyudin (2018), Wardani (2021), Farliana et al. (2024) and Islami (2019). These inconsistencies may arise from differences in research contexts, respondent characteristics, and the omission of psychological factors that influence entrepreneurial decision-making. For example, individuals may possess entrepreneurial knowledge, family support, or digital competencies, yet still lack confidence in their ability to initiate environmentally responsible businesses. Therefore, self-efficacy may serve as an important explanatory mechanism linking these factors to green entrepreneurial intention.

Although previous studies have examined the relationships between entrepreneurial knowledge, family environment, digital literacy, and entrepreneurial intention, limited attention has been given to explaining why these variables produce inconsistent effects on green entrepreneurial intention. Most studies have focused on direct relationships, while the psychological mechanism underlying these relationships remains underexplored. Therefore, this study proposes self-efficacy as a mediating variable to explain how entrepreneurial knowledge, family environment, and digital literacy influence green entrepreneurial intention. This study contributes to the literature by integrating the Theory of Entrepreneurial Event and Social Cognitive Theory in a single framework and by providing empirical evidence from Indonesian university students, a group considered crucial for the future development of sustainable entrepreneurship.

One approach to explaining these inconsistent findings is to incorporate a mediating variable, namely self-efficacy. Previous studies by Tan et al. (2013), Maryani & Yuniarsih (2022) and Ediagbonya (2023) found that self-efficacy has a significant influence on green entrepreneurial intention. Furthermore, studies conducted by Apriliani et al. (2025), Styadinata & Soelaiman (2024), N. E. Nugroho et al. (2023), Utari & Sukidjo (2020), Yuan et al. (2024), Prior et al. (2016) and Haliza (2022) demonstrated that entrepreneurial knowledge, family environment, and digital literacy significantly affect self-efficacy. Based on these research gaps, this study examines the mediating role

of self-efficacy in the relationship between entrepreneurial knowledge, family environment, digital literacy, and green entrepreneurial intention. Accordingly, this study is entitled "Self-Efficacy as a Mediator of Entrepreneurial Knowledge, Family Environment and Digital Literacy Effects on Green Entrepreneurial Intention"

METHODS

This study employed a quantitative research approach with a non-experimental survey design. The population comprised 10,123 undergraduate students from the 2023 cohort at Universitas Negeri Semarang. The sample size was determined using the Slovin formula with a 5% margin of error, resulting in 385 respondents. The respondents were selected through proportionate stratified random sampling to ensure proportional representation from each faculty. This study involved four constructs: green entrepreneurial intention as the dependent variable, entrepreneurial knowledge, family environment, and digital literacy as independent variables, and self-efficacy as a mediating variable. Data were collected using a structured questionnaire adapted from previous validated studies and measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to data collection, the instrument was subjected to validity and reliability assessments to ensure its adequacy for measuring the constructs under investigation. Inferential analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. The analysis procedure consisted of two stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The measurement model was assessed through convergent validity (factor loadings and Average Variance Extracted/AVE), discriminant validity (Heterotrait-Monotrait Ratio/HTMT), and reliability tests (Cronbach's alpha and Composite Reliability). Subsequently, the structural model was evaluated using the coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), and bootstrapping procedures to examine the significance of direct and indirect relationships among variables.

RESULT AND DISCUSSION

Outer Model

Convergent Validity

The measurement model was evaluated to assess the validity and reliability of the research constructs. Convergent validity was examined using Average Variance Extracted (AVE).

Table 1. Convergent Validity

Variables	Average Variance Extracted	Result
Green entrepreneurial intention	0,634	Valid
Entrepreneurial knowledge	0,552	Valid
Family environment	0,615	Valid
Digital literacy	0,556	Valid

Self-efficacy	0,620	Valid

Source: PLS-SEM output (2026)

The results indicate that all constructs satisfy the recommended criteria for convergent validity, suggesting that the indicators adequately represent their respective latent variables.

Discriminant validity

Discriminant validity was assessed to ensure that each construct was empirically distinct from the others. The results of the discriminant validity assessment are presented in Table 2 and Table 3.

Table 2. Discriminant Validity Fornell - Lacker Criterion

Variables	SE	GEI	FE	DL	EK
SE	0,788				
GEI	0,589	0,796			
FE	0,609	0,580	0,784		
DL	0,712	0,611	0,591	0,746	
EK	0,651	0,649	0,616	0,691	0,743

Source: PLS-SEM output (2026)

As shown in Table 2, the square root of the Average Variance Extracted (AVE) for each construct is greater than its correlations with other constructs. These results indicate that the constructs exhibit satisfactory discriminant validity based on the Fornell-Larcker criterion.

Table 3. Discriminant Validity Heterotrait-Monotrait Ratio (HTMT)

Variables	SE	GEI	FE	DL	EK
SE					
GEI	0,641				
FE	0,666	0,621			
DL	0,778	0,658	0,628		
EK	0,735	0,728	0,685	0,770	

Source: PLS-SEM output (2026)

Table 3 shows that all HTMT values are below the recommended threshold of 0.90. Therefore, the results further confirm that each construct is empirically distinct from the others, supporting the adequacy of discriminant validity in the measurement model.

Reliability Test

The reliability of the measurement model was assessed using Cronbach's Alpha and Composite Reliability to evaluate the internal consistency of the constructs. The results of the reliability assessment are presented in Table 4.

Table 4. Reliability Tests

Variabel	Cronbach's Alpha	Composite Reliability	Result
Green entrepreneurial intention	0,917	0,933	Reliable
Entrepreneurial knowledge	0,865	0,896	Reliable
Family environment	0,911	0,927	Reliable
Digital literacy	0,927	0,938	Reliable
Self-efficacy	0,898	0,920	Reliable

Source: PLS-SEM output (2026)

As shown in Table 4, all constructs exceeded the recommended thresholds for

Cronbach's Alpha and Composite Reliability. Therefore, the measurement model demonstrates adequate internal consistency reliability, indicating that the indicators consistently measure their intended constructs.

Inner Model

Direct Effect Test

Hypothesis testing was conducted using the bootstrapping procedure in PLS-SEM. The results of the direct effect analysis are presented in Table 5.

Tabel 5. Results of Direct Influence

Variables	Path Coefficient	P Value	F Square	Result
EK → GEI	0,314	0,000	0,087	Supported
FE → GEI	0,197	0,002	0,042	Supported
DL → GEI	0,183	0,009	0,027	Supported
SE → GEI	0,134	0,039	0,015	Supported
EK → SE	0,216	0,000	0,051	Supported
FE → SE	0,220	0,000	0,066	Supported
DL → GEI	0,433	0,000	0,215	Supported

Source: PLS-SEM output (2026)

The findings indicate that the proposed relationships were generally supported, demonstrating the significant roles of entrepreneurial knowledge, family environment, digital literacy, and self-efficacy in explaining green entrepreneurial intention.

Indirect Effect Test

In addition to direct effects, the mediating role of self-efficacy was examined to determine whether it serves as an underlying mechanism linking the independent variables to green entrepreneurial intention.

Table 6. Results of Indirect Influence

Variable	Path Coefficient	P Value	Upsilon V	Result
EK→SE→ GEI	0,029	0,084	0,00083	Not Supported
FE→SE→ GEI	0,030	0,055	0,00086	Not Supported
DL→SE→ GEI	0,058	0,044	0,00336	Supported

Source: PLS-SEM output (2026)

The results suggest that self-efficacy serves as a significant mediating mechanism linking digital literacy to green entrepreneurial intention. However, self-efficacy does not mediate the effects of entrepreneurial knowledge and family environment on green entrepreneurial intention, indicating that these variables exert their influence primarily through direct pathways.

R Square and Q Square

The structural model was evaluated using the coefficient of determination (R^2) and predictive relevance (Q^2). The R^2 values indicate the extent to which the endogenous constructs are explained by the exogenous variables, while the Q^2 values assess the predictive capability of the model. The results are presented in Table 7.

Table 7. R Square and Q Square

Variabel	R Square	Q Square	Result
Efikasi Diri	0,583 (58,3%)	0,574 (57,4%)	Predictive Relevance
Intensi Wirausaha Hijau	0,509 (50,9%)	0,485 (48,5%)	Predictive Relevance

Source: PLS-SEM output (2026)

The results indicate that the proposed model has moderate explanatory power in predicting both self-efficacy and green entrepreneurial intention. Furthermore, the positive Q^2 values demonstrate that the model possesses adequate predictive relevance, suggesting that the exogenous variables included in the model are capable of predicting the endogenous constructs satisfactorily.

Based on the proposed hypotheses and theoretical framework, a structural model was developed to examine the relationships among entrepreneurial knowledge, family environment, digital literacy, self-efficacy, and green entrepreneurial intention. The proposed research model is presented in Figure 1.

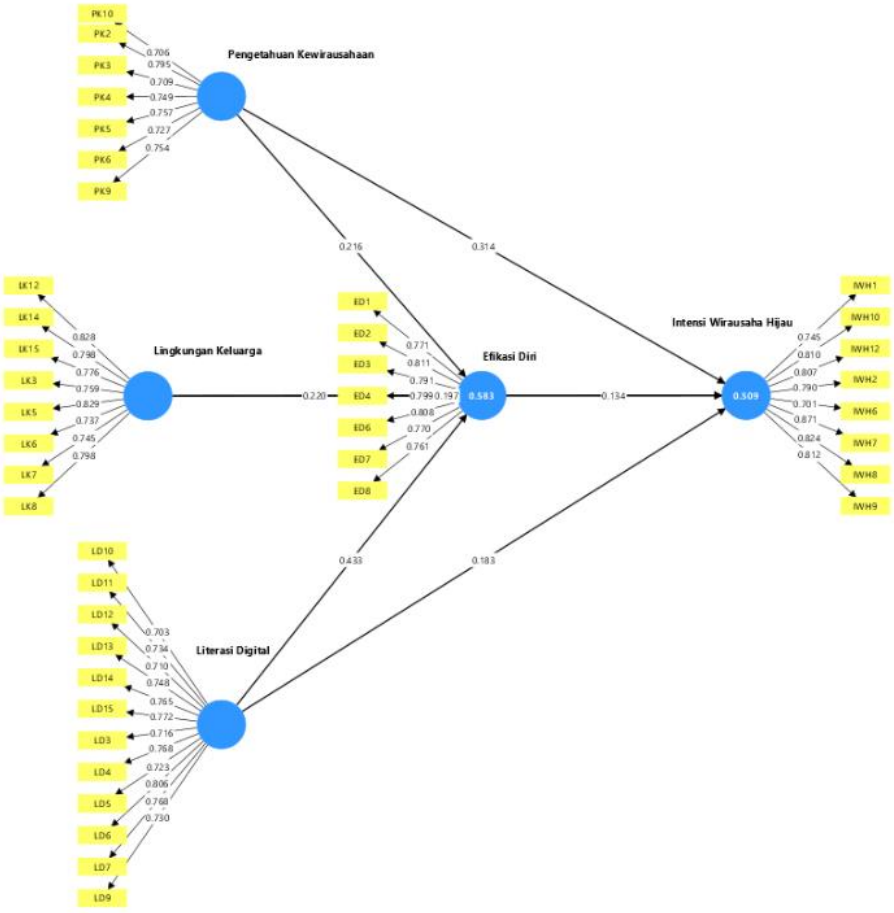

Figure 1. Research Model

As shown in Figure 1, the model proposes both direct effects of entrepreneurial knowledge, family environment, and digital literacy on green entrepreneurial intention, as well as indirect effects through self-efficacy.

The results indicate that entrepreneurial knowledge has a positive and significant effect on students' green entrepreneurial intention. This finding suggests that entrepreneurial knowledge plays an important role in shaping students' intentions to engage in environmentally sustainable business activities. Entrepreneurial knowledge helps students understand business opportunities, recognize market needs, evaluate potential risks, and develop appropriate business strategies. As a result, students are more capable of identifying business opportunities that not only generate economic value but also contribute to environmental sustainability. In the context of green entrepreneurship, greater knowledge enables students to perceive environmentally responsible businesses as more feasible and achievable. This finding supports the Theory of Entrepreneurial Event, which posits that entrepreneurial intention is strengthened when individuals perceive entrepreneurial activities as feasible. Therefore, students with higher entrepreneurial knowledge are more likely to develop stronger intentions to establish green businesses.

The results indicate that the family environment has a positive and significant effect on students' green entrepreneurial intention. This finding suggests that the family environment serves as an important source of support in shaping students' intentions to engage in environmentally sustainable business activities. Family support, including encouragement, motivation, guidance, and access to resources, can create a favorable environment for entrepreneurial development. Through continuous interactions with parents and other family members, students are exposed to entrepreneurial values such as independence, responsibility, innovation, and risk-taking. Furthermore, family members often act as role models whose experiences and attitudes influence students' career preferences and entrepreneurial aspirations. In the context of green entrepreneurship, a supportive family environment can strengthen students' perceptions that establishing environmentally responsible businesses is both desirable and worthwhile. This finding is consistent with the Theory of Entrepreneurial Event, which emphasizes the importance of perceived desirability in shaping entrepreneurial intention. Therefore, students who receive stronger family support are more likely to develop green entrepreneurial intentions.

The results indicate that digital literacy has a positive and significant effect on students' green entrepreneurial intention. This finding suggests that digital literacy plays an important role in enabling students to recognize and pursue environmentally sustainable business opportunities. Students with higher levels of digital literacy are better able to access, evaluate, and utilize information related to market trends, environmental issues, consumer preferences, and green business practices. As a result, they can more effectively identify innovative business opportunities that align with sustainability principles. In addition, digital literacy facilitates the use of digital platforms for marketing, networking, communication, and business management, thereby reducing

barriers associated with starting a business. These capabilities increase students' perceptions that green entrepreneurship is both feasible and achievable. From the perspective of the Theory of Entrepreneurial Event, digital literacy strengthens perceived feasibility by enhancing students' confidence in their ability to initiate and manage environmentally responsible ventures. Consequently, students with stronger digital literacy are more likely to develop green entrepreneurial intentions.

The results indicate that self-efficacy has a positive and significant effect on students' green entrepreneurial intention. This finding suggests that students who have stronger beliefs in their entrepreneurial capabilities are more likely to develop intentions to establish environmentally sustainable businesses. Self-efficacy influences how individuals evaluate opportunities, challenges, and risks associated with entrepreneurial activities. Students with high self-efficacy tend to perceive entrepreneurial challenges as manageable rather than intimidating, making them more willing to pursue green business opportunities. In addition, confidence in their ability to identify opportunities, solve problems, mobilize resources, and make business decisions increases their motivation to engage in entrepreneurial activities. Within the context of green entrepreneurship, individuals often face additional challenges related to sustainability practices, innovation, and market uncertainty. Therefore, students with stronger self-efficacy are more likely to remain optimistic and persistent in pursuing environmentally responsible business ventures. This finding supports Social Cognitive Theory, which emphasizes that self-efficacy is a key determinant of individual motivation, intention, and behavior.

The results indicate that entrepreneurial knowledge has a positive and significant effect on students' self-efficacy. This finding suggests that entrepreneurial knowledge strengthens students' confidence in their ability to initiate and manage business ventures. Individuals tend to develop stronger self-efficacy when they possess adequate knowledge and understanding of a particular domain. In the context of entrepreneurship, knowledge regarding opportunity recognition, business planning, resource management, decision-making, and problem-solving reduces uncertainty and increases students' perceptions of competence. As students gain a better understanding of entrepreneurial processes, they become more confident in their ability to overcome challenges and perform entrepreneurial tasks successfully. From the perspective of Social Cognitive Theory, knowledge serves as a cognitive resource that shapes individuals' beliefs about their capabilities. Therefore, students with higher entrepreneurial knowledge are more likely to develop stronger entrepreneurial self-efficacy.

The results indicate that the family environment has a positive and significant effect on students' self-efficacy. This finding suggests that a supportive family environment plays an important role in shaping students' confidence in their ability to overcome challenges and achieve their goals. Family members serve as the closest social environment where individuals receive encouragement, guidance, emotional support, and constructive feedback. Such support helps students develop positive beliefs about their capabilities and strengthens their confidence when facing various academic and entrepreneurial challenges. Furthermore, through interactions with parents and other

family members, students learn values such as independence, perseverance, responsibility, and courage in decision-making. These experiences contribute to the development of stronger self-efficacy because students perceive themselves as capable of handling difficulties and achieving desired outcomes. From the perspective of Social Cognitive Theory, social support and positive social experiences are important sources of self-efficacy. Therefore, students who grow up in supportive family environments are more likely to develop stronger confidence in their entrepreneurial abilities.

The results indicate that digital literacy has a positive and significant effect on students' self-efficacy. This finding suggests that the ability to access, evaluate, and utilize digital technologies enhances students' confidence in their capability to perform entrepreneurial tasks. Digital literacy provides students with access to a wide range of information, learning resources, market insights, and technological tools that support entrepreneurial activities. Through the effective use of digital technologies, students can identify business opportunities, solve problems, communicate with stakeholders, and manage business operations more efficiently. These experiences foster a sense of competence and control over entrepreneurial activities, which strengthens their confidence in dealing with challenges and uncertainties. From the perspective of Social Cognitive Theory, individuals are more likely to develop stronger self-efficacy when they perceive themselves as capable of successfully performing relevant tasks. Therefore, students with higher levels of digital literacy are more likely to develop stronger entrepreneurial self-efficacy because they feel better equipped to navigate the demands of entrepreneurship in a digital environment.

The results of the indirect effect analysis indicate that self-efficacy mediates the relationship between digital literacy and green entrepreneurial intention but does not mediate the effects of entrepreneurial knowledge and family environment on green entrepreneurial intention. This finding suggests that digital literacy influences green entrepreneurial intention through both direct and indirect pathways. Students with strong digital literacy are not only able to access information and identify green business opportunities but also develop greater confidence in their ability to utilize digital technologies for entrepreneurial activities. The ability to effectively use digital tools for market analysis, communication, networking, and business management enhances students' perceptions of competence, which in turn strengthens their self-efficacy and encourages green entrepreneurial intention.

In contrast, entrepreneurial knowledge and family environment appear to exert a more direct influence on green entrepreneurial intention. Entrepreneurial knowledge provides students with an understanding of business opportunities and sustainable business practices, enabling them to directly develop entrepreneurial aspirations without necessarily relying on self-efficacy as an intermediary mechanism. Similarly, family support may directly shape students' entrepreneurial intentions through encouragement, value transmission, and role modelling. Therefore, while self-efficacy serves as an important psychological mechanism linking digital literacy to green entrepreneurial intention, its mediating role is less prominent in the relationships involving

entrepreneurial knowledge and family environment. This finding extends Social Cognitive Theory by demonstrating that the mediating function of self-efficacy may vary depending on the characteristics of the antecedent variables influencing entrepreneurial intention.

This study contributes to the Theory of Entrepreneurial Event Shapero & Sokol (1982)by providing empirical evidence that entrepreneurial knowledge, family environment, and digital literacy influence green entrepreneurial intention through different mechanisms. Entrepreneurial knowledge and digital literacy enhance students' perceptions of feasibility by increasing their capability to identify and manage green business opportunities, whereas the family environment strengthens perceived desirability through social support, encouragement, and entrepreneurial role modelling. These findings suggest that both cognitive and environmental factors play complementary roles in shaping green entrepreneurial intention.

Furthermore, this study extends Social Cognitive Theory Bandura (1977)by demonstrating that the mediating role of self-efficacy is not equally applicable across all antecedents of green entrepreneurial intention. While self-efficacy was found to mediate the relationship between digital literacy and green entrepreneurial intention, it did not mediate the effects of entrepreneurial knowledge and family environment. This finding indicates that the influence of antecedent variables on entrepreneurial intention may operate through different psychological mechanisms depending on their characteristics. Therefore, the study provides a more nuanced understanding of how cognitive, environmental, and technological factors interact in shaping green entrepreneurial intention among university students.

Overall, the findings of this study are broadly consistent with previous research demonstrating the importance of entrepreneurial knowledge, family environment, digital literacy, and self-efficacy in shaping entrepreneurial intention. However, this study extends the existing literature by examining these factors simultaneously within the context of green entrepreneurship and by investigating the mediating role of self-efficacy. The results reveal that self-efficacy does not function as a universal mediator, as it only mediates the relationship between digital literacy and green entrepreneurial intention. This finding provides new insights into the mechanisms through which different antecedents influence green entrepreneurial intention and highlights the distinctive role of digital competencies in fostering environmentally sustainable entrepreneurial behavior among university students.

CONCLUSION

This study aims to examine and analyze the mediating role of self-efficacy in the relationships between entrepreneurial knowledge, family environment, and digital literacy and the green entrepreneurial intention of students at Universitas Negeri Semarang. The findings indicate that: (1) entrepreneurial knowledge, family environment, digital literacy, and self-efficacy have positive and significant effects on green entrepreneurial intention; (2) entrepreneurial knowledge, family environment, and

digital literacy have positive and significant effects on self-efficacy; and (3) self-efficacy mediates the effect of digital literacy on green entrepreneurial intention, but does not mediate the effects of entrepreneurial knowledge and family environment on green entrepreneurial intention.

Based on the findings of this study, students are encouraged to enhance their entrepreneurial knowledge, digital literacy, and self-efficacy through seminars, training programs, entrepreneurial communities, and practical business experiences in order to strengthen their green entrepreneurial intention. Students should also make effective use of digital technologies to identify business opportunities, develop innovative business ideas, and expand their professional networks. Families are expected to provide moral and emotional support, foster positive communication, and respect students' career choices. Meanwhile, lecturers and higher education institutions should promote entrepreneurial spirit through practical learning approaches and green entrepreneurship development programs. Furthermore, future researchers are encouraged to incorporate additional variables beyond the current research model to provide a more comprehensive explanation of green entrepreneurial intention.

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