



Understanding Green Creative Behavior Driven by Parenting and Entrepreneurial Orientation on Entrepreneurship Students in Indonesia and Malaysia

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ABSTRACT

The objective of this study is to explain the influence of parenting and entrepreneurial orientation on green creative behavior (GCB) among entrepreneurship students in Indonesia and Malaysia, with a focus on sustainable innovation and family support in promoting environmentally friendly business models. This research employed a quantitative approach with surveys as the data collection method. Data were gathered from 124 respondents using questionnaires distributed through Google Forms, targeting students who own environmentally friendly businesses. The analysis was conducted using SmartPLS to examine the relationships between variables through the structural equation modeling (SEM) approach. The study's results indicate that parenting has a significant and positive impact on green creative behavior, and entrepreneurial orientation acts as a mediator in this relationship. Parenting not only influences values and attitudes toward environmental sustainability but also supports the development of higher entrepreneurial orientation among students. However, this study had several limitations, such as restricted geographic and demographic scope, making the results not globally generalizable. Future research is recommended to expand the research scope and employ a combination of quantitative and qualitative methods to gain more comprehensive insights.

Keywords: Entrepreneur Orientation, Green Creative Behavior, Parenting, Entrepreneurial Student

JEL Classifications: L26, Q56, I23

1. INTRODUCTION

The presence of entrepreneurs positively impacts a country's economic growth (Kurniawati and Yulianto, 2015; Machmud, 2017, n.d.; Susana and Andarwati, 2021), contributing up to 40% of the GDP in developing nations (worldbank.org, 2022). Entrepreneurs also create new job opportunities and reduce unemployment rates (Idris and Primiana, 2015) As a result, entrepreneurship has become a growing trend in Indonesia. Additionally, 94% of young generations are interested in the zero-waste concept to protect and preserve the Earth Gen Z and millennials understand the importance of preserving the Earth, making them interested in adopting the zero-waste movement.

According to the number of entrepreneurs in various regions of Indonesia is steadily increasing. In 2020, there were 4,209,817 entrepreneurs, with 3,909,718 classified as micro-businesses and 300,099 as small businesses (Indonesia Bank, 2022). However, the percentage of young entrepreneurs in Indonesia remains stagnant at 3.4% of the population in 2022 lagging behind ASEAN countries like Thailand (4.26%), Malaysia (4.74%), and Singapore (8.76%) Ministry of Industry of Indonesia (Fanani, 2021). According to the latest report by the Department of Statistics Malaysia, MSMEs accounted for 96.9% (1,101,725 firms) of the total establishments in Malaysia in 2023. Therefore, empowering entrepreneurship is crucial to fostering the creation of sustainable, resilient, and risk-tolerant businesses.

The process of building sustainable businesses begins with innovation and creativity rooted in environmental awareness. Green creativity behavior (GCB) involves eco-friendly innovations that help organizations develop sustainable services, solve problems, and mitigate environmental risks (Lagu et al., 2018). Integrating sustainability principles with creative thinking is essential for companies to generate eco-friendly business ideas (Cheng and Shiu, 2012; Wu et al., 2015). However, despite its importance, research on the factors influencing GCB, especially among youth in generating business ideas, remains limited (Lagu et al., 2018). Youth entrepreneurship is gaining momentum globally, supported by government initiatives such as training, mentoring, and infrastructure support to foster entrepreneurial orientation. However, based on previous research, these efforts have not been entirely effective due to the lack of a conducive environment. A dynamic environment influenced by technological turbulence, competitive intensity, and market uncertainty can either enhance or hinder entrepreneurship orientation (Al Dhaheri et al., 2024). The family environment is a significant factor in shaping entrepreneurship orientation. A supportive family can positively influence entrepreneurial interest through direct or indirect interactions among family members (Moussa and Kerkeni, 2021). Previous studies confirm that family support affects entrepreneurial interest and orientation. However, previous research argues that family environment may not always influence entrepreneurship orientation, as external factors can also play a significant role.

Research exploring the role of parenting in fostering entrepreneurial spirit and creative behavior remains scarce. This study aims to provide broader insights into developing entrepreneurial mindsets and creative behaviors among young entrepreneurs. In the field of entrepreneurship studies, the relationship between family support, entrepreneurial orientation, and green creative behavior rarely receives attention. Based on previous research, integrating sustainable practices into entrepreneurial endeavors is becoming increasingly crucial. This study's conceptual framework is based on the theory of entrepreneur orientation as a mediating factor in the relationship between parenting and green creative behavior, which in turn has a significant impact (Chauhan et al., 2024). Additionally, Raj et al. (2023) present sustainability as a critical factor affecting the entrepreneurial environment. By offering a nuanced understanding of how parenting and entrepreneur orientation interact to influence green creative behavior, especially among university students, this study seeks to add to the body of literature. The results might have an impact on sustainable business practices, policy formation, and entrepreneurship education. It is imperative to comprehend the complex interactions among parenting, entrepreneur orientation, and green creative behavior in the quickly changing field of entrepreneurship. By shedding light on this complex relationship, this study hopes to provide strategies for encouraging university students to pursue sustainable entrepreneurial endeavors. Despite strong sustainability awareness and growing entrepreneurial interest among young generations, university students remain largely unable to convert environmental concern into entrepreneurial orientation and green creative behavior, thereby undermining progress toward the Sustainable Development Goals especially SDG 8 (decent work and economic growth) and SDG 12 (responsible consumption and production) as

a result of weak parenting influence and an inadequately supportive entrepreneurial ecosystem.

2. LITERATURE REVIEW

2.1. Theory of Reasoned Action

The theory of reasoned action (TRA) is effective at explaining psychological/cognitive processes to comprehend consumers' contextual decision-making (Han et al., 2019). TRA's central tenet is individuals' intention to engage in a given behavior. In this context, "intention" refers to the willingness or readiness to engage in behavior under consideration (Ajzen, 2002; Han et al., 2019). Under this theory, green product purchase intention indicates the extent to which consumers are willing/ready to purchase green products or adopt green choices/alternatives. Intention is considered as a precursor to and best predictor of behavior (Ajzen, 2002). In social psychology, TRA has been widely studied (Malhotra and McCort, 2001; "The Psychology of Attitudes. Eagly and Chaiken. Fort Worth, TX: Harcourt, Brace, and Janovich, 1993, 794 Pp. Reviewed by Christopher Leone, University of North Florida," 1995). Various scholars have tested and validated Fishbein and Ajzen's model in different settings, including health behaviors, voting, online mediums, organic food, alcohol use, etc. (Netemeyer and Bearden, 1992). Having excellent predictability, TRA has been quite useful in predicting behavioral intentions and behaviors in the areas of marketing and consumer behaviors (Choo et al., 2004; Lam and Hsu, 2004). More specifically, TRA has been utilized to predict the intentions in green marketing areas, such as examining energy conservation, recycling behaviors (Davies et al., 2002) and green purchase behaviors (Wahid et al., 2011). According to the Theory of Reasoned Action, entrepreneurial orientation (EO) plays a crucial role in fostering green creative behavior (GCB).

2.2. Entrepreneur Orientation

The concept of entrepreneurial orientation was first introduced in the 20th century by Miller and Friesen and later developed and studied across various industries, cultures, and countries (Amin, 2015). Its roots lie in strategic decision-making processes. According to (Baker and Sinkula, 2009), entrepreneurial orientation is defined as the methods, practices, and decision-making styles used by managers in their actions. Amin (2015) further defines it as a process, practice, and activity involving decision-making aimed at driving the company toward new ventures. Entrepreneurial orientation reflects how companies prioritize identifying and exploiting market opportunities (Baker and Sinkula, 2009). Covin and Lumpkin (2011) state that the characteristics of entrepreneurial orientation pertain to entrepreneurial practices within organizations and their overall strategic attitudes. The EO concept has received increasing scholarly attention (Hernández-Linares and López-Fernández, 2018) as a firm attribute reflecting what it means to "be entrepreneurial" in an operational or practical sense (Covin and Lumpkin, 2011; Escamilla-Fajardo et al., 2022).

Thus, entrepreneurial orientation encompasses the methods, processes, and activities involved in corporate strategy, supported by managers' willingness to innovate, act proactively, and take risks as the basis for action and business decision-making. The

measurement of entrepreneurial orientation is based on constructs derived from several behavioral dimensions (Campos et al., 2012). Previous research identifies two approaches to measuring entrepreneurial orientation: Unidimensional and multidimensional.

The unidimensional construct refers to innovativeness, risk-taking, and proactiveness (Amin, 2015; Campos et al., 2012), all of which must align to be effective. On the other hand, the multidimensional construct expands upon the unidimensional approach, suggesting that entrepreneurial orientation can emerge from different aspects and combinations of dimensions. Covin and Lumpkin (2011) propose adding competitive aggressiveness and autonomy as dimensions, forming the multidimensional entrepreneurial orientation framework. Based on this explanation, the indicators used in this study include innovativeness, risk-taking, and proactiveness. Innovativeness, in this context, differs from innovation in firm performance metrics. It refers to a company or manager's willingness to support creativity and experimentation in developing new products and adopting technologies to open up new markets, processes, and services (Amin, 2015). The risk-taking indicator reflects managers' willingness to commit to risky business decisions involving company resources under uncertain conditions (Amin, 2015). Lastly, proactiveness indicates a company's ability to take the initiative and act opportunistically in pursuing market opportunities (Baker and Sinkula, 2009).

2.3. Parenting

Parenting plays a vital role in shaping children's creativity, environmental awareness, and entrepreneurial orientation. Within entrepreneurial families, parents often act as primary role models, influencing their children's aspirations and values through both direct involvement and environmental cues (Turker and Selcuk, 2009). Supportive parenting has been shown to positively correlate with creative personality development in adolescents. (Park and Kim, 2024) found that students who perceived strong parent-child relationships demonstrated enhanced creative traits, suggesting that emotional closeness with parents nurtures the capacity for original thinking. This supports the ecosystem model of creative development, where familial environments are essential for fostering creativity (He et al., 2024). Specifically, mindful parenting, which emphasizes presence, empathy, and mutual respect, encourages a child's connection to nature, further amplifying both creative inclinations and pro-environmental behavior.

In line with this, Jia et al. (2018) emphasized that when parents actively engage in environmental activities and model eco-friendly behaviors, children are more likely to adopt similar attitudes. The transmission of environmental values and knowledge from parents to children is a critical factor in building environmental literacy and responsible behavior (Masykuroh et al., 2024). Furthermore, the dynamic between parents and children is reciprocal; (Xia and Li, 2022) found that not only do parents influence their children's ecological behavior, but children can also affect their parents' environmental attitudes over time. Interestingly, challenging parenting practices, where parents set high expectations while offering emotional support can also enhance children's creative self-efficacy and resilience. (Shi et al., 2024) demonstrated that

such parenting increases creative tendencies, especially when mediated by positive emotions and confidence in one's creative capabilities.

In the domain of entrepreneurship, these parenting patterns are also instrumental. Children raised in entrepreneurial households often internalize values like risk-taking, innovation, and proactiveness. This exposure contributes to the development of entrepreneurial orientation, which serves as a foundation for engaging in green creative behavior, defined as the generation of innovative, eco-friendly ideas for products, services, or processes (Cheng and Shiu, 2012). Hence, parenting that is both supportive and cognitively stimulating not only fosters environmental awareness and creativity but also promotes the entrepreneurial mindset necessary for sustainable innovation.

2.4. Green Creative Behavior

According to Joo et al. (2013), creative behavior refers to the production of original and useful ideas or solutions for practical application. As a specific type of creative behavior, green creative behavior (GCB) is viewed as new ideas or solutions aimed at environmental preservation or improvement that can be transformed into practical green processes, products, or services (Cheng and Shiu, 2012) such as ecotourism or conservation projects at tourism destinations. Similar to other forms of creative behavior, green creative behavior relies on two foundational elements: Cognitive resources and affective resources (Luu, 2021). Individuals can achieve environmentally friendly, creative outcomes when they possess not only affective resources, such as motivation to contribute to society, but also cognitive resources, such as knowledge of environmental preservation benefits, factors that harm the environment (e.g., plastic waste or exhaust emissions), and eco-friendly practices (e.g., efficient use of paper, water, and electricity). Additionally, they must have the skills to develop green processes, products, or services (Luu, 2021).

Therefore, the researcher proposes the following hypotheses. Hanis et al. (2019) underscores the importance of environmental factors and entrepreneurial experiences in shaping entrepreneurial orientation and related practices. Within this framework, parenting emerges as a critical environmental factor that plays a pivotal role in nurturing entrepreneurial traits and creative thinking. Supportive parenting that emphasizes innovation, problem-solving, and pro-environmental values can foster green creative behavior. By encouraging exploration, providing emotional support, and promoting a mindset oriented towards sustainability, parents can instill behaviors that align creativity with environmental responsibility. Based on these insights, we hypothesize that parenting has a positive influence on green creative behavior. Previous researchers found that the transmission of entrepreneurial values within enterprising families plays a crucial role in shaping the entrepreneurial mindset of the younger generation. Parenting within these families not only emphasizes the transfer of knowledge and skills but also instills values such as innovation, risk-taking, and proactivity. These values form the foundation for entrepreneurial orientation, as children are encouraged to explore opportunities, think creatively, and develop resilience in navigating challenges. This aligns with the notion that parenting practices,

particularly those fostering independence and entrepreneurial behavior, significantly contribute to the development of entrepreneurial orientation. Accordingly, we hypothesize that parenting has a positive influence on entrepreneurial orientation.

Hanis et al. (2019) highlights the significant role of entrepreneurial orientation in influencing various educational and behavioral practices, particularly in the context of entrepreneurship education. Entrepreneurial orientation, characterized by innovation, proactivity, and risk-taking, serves as a driving force for fostering creative problem-solving and opportunity recognition. These traits are closely linked to green creative behavior, as individuals with a strong entrepreneurial orientation are more likely to develop innovative solutions to environmental challenges. By leveraging their entrepreneurial mindset, they can integrate sustainability goals with creativity, resulting in behaviors that address environmental issues through novel and impactful approaches. Based on this, we hypothesize that entrepreneurial orientation has a positive influence on green creative behavior. Previous researchers highlight how entrepreneurial values are transmitted within enterprising families, emphasizing the role of parenting in nurturing traits such as innovation, proactivity, and risk-taking. These traits form the basis of entrepreneurial orientation, which plays a pivotal role in shaping creative behaviors. Similarly, Hanis et al. (2019) demonstrate the influence of environmental factors, including parental support, on entrepreneurial orientation and its role in fostering innovative practices. Parenting that encourages exploration, problem-solving, and sustainability values can indirectly influence green creative behavior by cultivating an entrepreneurial mindset. Entrepreneurial orientation acts as a mediator by channeling parental influence into specific behaviors focused on addressing environmental challenges through creativity and innovation. Based on these findings, we hypothesize that entrepreneurial orientation mediates the relationship between parenting and green creative behavior. Figure 1 presents the research model illustrating the relationships among parenting, entrepreneurial orientation, and green creative behavior.

3. METHOD, DATA, AND ANALYSIS

Method, Data, and Analysis This study adopted a quantitative research approach, which seeks to quantify data and typically

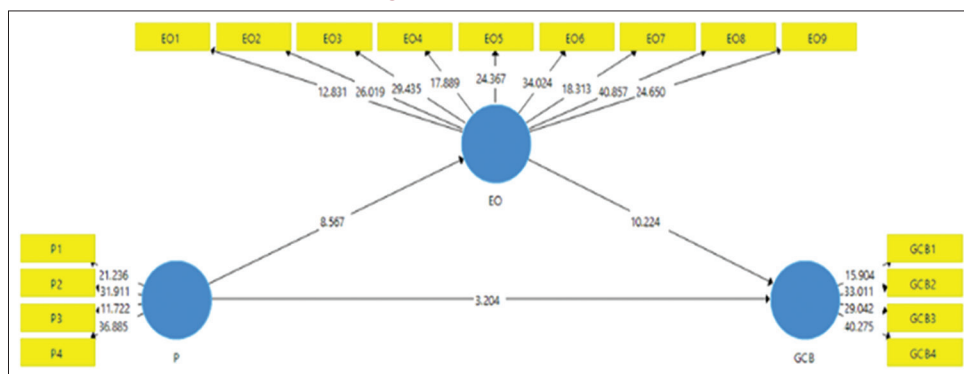
applies specific statistical analyses. Quantitative research aims to achieve accurate measurements of phenomena (Cooper and Schindler, 2019). This study examined factors such as parenting, entrepreneurial orientation, and green creative behavior among students in Indonesia and Malaysia. Parenting, according to Hieu et al. (2022) is measured using two indicators: parental influence on entrepreneurial aspirations and family support for entrepreneurial decisions. Entrepreneurial orientation is assessed through three indicators: risk-taking, innovativeness, and proactiveness. Green creative behavior, (Luu, 2021) is measured using two indicators: Proposing and supporting green ideas and implementing and problem-solving with green ideas. The measurement items used for each construct and their corresponding sources are summarized in Table 1.

This study utilized a two-step SEM approach, starting with the evaluation of the measurement model, followed by the assessment of the structural model. SmartPLS was chosen because it enables researchers to model complex relationships between latent variables, both direct and indirect. Moreover, PLS-SEM is more suited for predictive models than theoretical models, emphasizing which variables significantly influence outcomes. Data collection was conducted from 2023 to 2024, resulting in 124 completed questionnaires. Regarding gender distribution, the majority of respondents were female, accounting for 104 participants. In terms of educational background, 91 respondents held a bachelor’s degree. The age demographics of the respondents were primarily within the young adult range, specifically 18-27 years old. Concerning income levels, most respondents reported a monthly income below 10 million rupiahs. Additionally, statistical data indicated that the majority of respondents engaged in business activities as a source of side income.

4. RESULTS AND DISCUSSIONS

In this study, we investigated complex constructs operationalized at a more abstract level using a higher-order model (Hair et al., 2022). Following a two-step structural equation modeling (SEM) approach, we began by examining the measurement model using outer loadings and average variance extracted (AVE). The outer loading for each indicator must exceed 0.5, with a minimum AVE value of 0.5. Table 2 demonstrates that the remaining items for

Figure 1: Research model



Source: SmartPLS

Table 1: Summary of items

Code	Item	Source
EO	Entrepreneur orientation	(Ince et al., 2023)
EO1	The term ‘risk taker’ is considered a positive attribute for people in our business	
EO2	People in our business are encouraged to take calculated risks with new ideas.	
EO3	Our business emphasizes both exploration and experimentation for opportunities	
EO4	We actively introduce improvements and innovations in our business	
EO5	Our business is creative in its methods of operation	
EO6	Our business seeks out new ways to do things	
EO7	We always try to take the initiative in every situation	
EO8	We excel at identifying opportunities	
EO9	We initiate actions to which other organizations respond	
P	Parenting	Hieu et al., (2022)
P1	My parents influence me in pursuing a career in entrepreneurship	
P2	Assisting my parents in business has increased my desire to be an entrepreneur	
P3	If I decide to be an entrepreneur, my family members will support me	
P4	If I decide to be an entrepreneur, my relatives will support me	
GCB	Green creative behavior	Luu, (2021)
GCB1	This employee proposes new green ideas to improve environmental performance	
GCB2	This employee promotes and champions new green ideas to others	
GCB3	This employee develops adequate plans for the implementation of new green ideas	
GCB4	This employee would find out creative solutions to environmental problems	

Source: Secondary data

all three variables met these required thresholds, allowing us to conclude that the items are valid.

Table 3 presents the results of the reliability assessment using Cronbach’s alpha and composite reliability. The reliability of our measurement model was tested using Cronbach’s alpha and composite reliability. According to Hair et al. (2022), a minimum value of 0.7 for Cronbach’s alpha and composite reliability is considered acceptable. As presented in Table 3, our analysis shows that the measurement model meets these requirements, allowing us to conclude that the model is reliable.

Table 4 reports the R-square values used to evaluate the explanatory power of the structural model. The structural model was analyzed to evaluate the predictive capability and relationships among constructs (Hair et al., 2022). This evaluation consists of two components: Predictive relevance (Q^2), which measures the predictive power of exogenous variables on endogenous variables; and R Square (R^2), which assesses the model’s predictive strength. For the entrepreneurial orientation variable, the R^2 value is 0.362 or 36.2%. This indicates that the parenting variable explains 36.2% of the entrepreneurial orientation variable. The R^2 value for the green creative behavior variable is 0.731 or 73.1%. This value indicates that parenting explains 73.1% of the green creative

Table 2: Convergent validity

Variable	Item	Outer loading	AVE	Conclusion
Entrepreneur Orientation	EO1	0.764	0.679	Valid
	EO2	0.838		
	EO3	0.852		
	EO4	0.759		
	EO5	0.821		
	EO6	0.859		
	EO7	0.798		
	EO8	0.890		
	EO9	0.828		
Parenting	P1	0.871	0.717	Valid
	P2	0.888		
	P3	0.733		
	P4	0.887		
Green Creative Behavior	GCB1	0.807	0.751	Valid
	GCB2	0.869		
	GCB3	0.883		
	GCB4	0.904		

Source: SmartPLS

Table 3: Reliability test

Variable	Composite reliability	Cronbach’s alpha	Conclusion
Entrepreneur orientation	0.950	0.941	Reliable
Parenting	0.923	0.889	Reliable
Green creative behavior	0.910	0.871	Reliable

Source: SmartPLS

Table 4: Structural model test

Variable	R square
Entrepreneur orientation	0.362
Green creative behavior	0.731

Source: SmartPLS

behavior variable, while other variables not explored in this study account for the remaining 26.9%.

After establishing the validity and reliability of the constructs, the proposed hypotheses were evaluated using the SmartPLS (Partial Least Squares) algorithm and bootstrapping. The purpose of this section is to test the proposed hypotheses and assess the fit of the research model. Table 5 presents the direct relationships between variables, and shows the specific indirect effects, examining the mediating impact of entrepreneurial orientation.

Based on the analysis in Table 5, it is clear that parenting has a strong and positive impact on green creative behavior, with a significance level of 0.05. This result supports H_1 , with a path coefficient of 0.224, a t-statistic of 3.204, and a $P < 0.05$. Additionally, H_2 is verified with a path coefficient of 0.602, a t-statistic of 8.567, and a $P < 0.05$, indicating that parenting also has a positive and significant effect on entrepreneurial orientation. Finally, H_3 is confirmed with a path coefficient of 0.702, a t-statistic of 10.224, and a $P < 0.05$, showing that entrepreneurial orientation has a positive and significant impact on green creative behavior. The test of indirect effects yields a path coefficient of 0.422, a $P < 0.05$, and a t-statistic of 6.778. These findings suggest that the relationship between parenting and green creative behavior is mediated by entrepreneurial orientation, thus supporting H_4 .

Table 5: Hypotheses test result

Hypotheses	Coefficient	T Statistic	P-values	Result
Direct effect				
Parenting → Green Creative Behavior	0.224	3.204	0.001	Accepted
Parenting → Entrepreneur Orientation	0.602	8.567	0.000	Accepted
Entrepreneur Orientation → Green Creative Behavior	0.702	10.224	0.000	Accepted
Indirect effect				
Parenting → Entrepreneur Orientation → Green Creative Behavior	0.442	6.778	0.000	Accepted

Source: SmartPLS

Following the mediation analysis procedure outlined in (Hair et al., 2022), we conclude that entrepreneurial orientation serves as a complementary mediator (partial mediation) in the relationship between parenting and green creative orientation, as both the direct and indirect effects are significant and positive.

Parenting is a driver of green creative behavior, this is in line with the findings of Park and Kim (2024), which demonstrates that middle school students who perceive their relationships with parents positively exhibit enhanced creative personalities, suggesting that supportive parenting can nurture creativity. This finding aligns with the ecosystem model of creative development, which posits that parenting approaches significantly influence creativity (He et al., 2024). Specifically, mindful parenting has been shown to enhance children's creative tendencies by fostering a sense of intimacy and connectedness to nature, thereby promoting both creativity and environmental awareness (He et al., 2024). Xia and Li's research emphasizes the mutual influence between parents and adolescents regarding pro-environmental behaviors, indicating that both parties can shape each other's environmental attitudes and actions (Xia and Li, 2022). This reciprocal relationship underscores the importance of parental engagement in environmental literacy, which has been linked to children's pro-environmental behaviors (Masykuroh et al., 2024). Parents who actively participate in environmental discussions and exhibit eco-friendly behaviors serve as role models, thereby instilling similar values in their children (Jia et al., 2018). Furthermore, challenging parenting behaviors also have a nuanced impact on children's creativity. A study by Shi et al. (2024) highlights that such behaviors can lead to increased creative tendencies in children, mediated by positive emotions and creative self-efficacy. This suggests that while challenging parenting may seem counterintuitive, it can foster resilience and creativity when coupled with supportive emotional environments.

The direct influence of parenting on entrepreneurial orientation is significant. Research has consistently shown that parental involvement and the entrepreneurial background of parents significantly affect their children's entrepreneurial intentions and behaviors. Firstly, family background plays a crucial role in shaping entrepreneurial intentions. Studies indicate that children of entrepreneurial parents are more likely to develop an inclination towards entrepreneurship themselves. For instance, Farrukh et al. (2017) highlight that family factors, particularly having entrepreneurial parents, positively impact students' entrepreneurial intentions, suggesting that exposure to entrepreneurship within the family fosters a similar mindset in children. This is further supported by Gautam and Pandey (2023), who found that students

from business families exhibit higher entrepreneurial intentions due to the supportive environment and resources available to them. Additionally, research by Georgescu and Herman (2020) emphasizes that an entrepreneurial family background significantly influences students' perceptions of entrepreneurship as a viable career choice, thereby enhancing their entrepreneurial intentions. The relationship between entrepreneurial orientation and green creative behavior is increasingly recognized as a vital area of research, particularly in the context of sustainable development and environmental performance. The study found significant influences and is in line with some previous researchers. Research indicates that a strong entrepreneurial orientation fosters an environment conducive to green innovation.

For instance, Zhang et al. (2024) emphasizes that entrepreneurial orientation is essential for achieving green innovation, as it encourages firms to adopt innovative environmental practices in response to institutional pressures. Moreover, the role of entrepreneurial orientation in promoting green practices is evident in various sectors. Previous researchers highlight that entrepreneurial orientation affects managers' attitudes towards eco-label strategies, thereby encouraging the adoption of sustainability practices in the hospitality industry. This is further supported by Frare and Beuren, who argue that green entrepreneurial orientation reinforces the outcomes of green creativity and innovation, thereby enhancing environmental performance. The proactive nature of entrepreneurial orientation enables firms to not only respond to environmental challenges but also to innovate in ways that contribute to sustainability.

5. DISCUSSION AND CONCLUSION

This study delves deeply into the central role of parenting in shaping green creative behavior, both directly and through the enhancement of entrepreneurial orientation. Parents, as key figures in their children's learning process, not only influence their children's mindset towards environmental issues but also lay the groundwork for cultivating an entrepreneurial mindset. This mindset enables children to think strategically and innovatively when addressing the complex and ever-evolving challenges of the environment. Entrepreneurial orientation has been proven to play a pivotal role in fostering environmental creativity. Through this orientation, individuals are not only able to identify opportunities but also develop the courage to take risks in creating innovative solutions to environmental problems.

This highlights that parenting, which supports the development of new ideas, encourages experimentation, and promotes the

application of concepts into real-world actions, contributes significantly to producing a generation that is not only environmentally conscious but also competitively equipped to tackle global challenges. Furthermore, this study underscores that effective parenting involves giving children the space to explore their interests, engaging them in activities such as family businesses, and providing strong emotional support. This approach not only reinforces pro-environmental values in children but also builds the confidence and resilience necessary for them to explore new ideas and overcome challenges. By fostering curiosity, analytical skills, and the courage to act, such parenting can nurture a generation that is not only sustainability-oriented but also equipped to serve as agents of change in society. These findings emphasize that combining parenting strategies focused on exploration with the strengthening of entrepreneurial orientation can create a wide-reaching and sustainable impact. This approach is not only relevant at the individual level but also at the community and societal levels. In this way, families can serve as key elements in building a society that is more creative, innovative, and environmentally responsible. Limitations and recommendations this study, while providing valuable insights, is not without its limitations. The focus on a specific geographic and demographic group constrains the generalizability of the findings to broader populations.

The uniqueness of cultural, social, and economic factors within the studied group may not fully represent the diversity of experiences and behaviors in other regions or demographic segments. To address this, future research should consider expanding the geographic and demographic scope of the study to include more diverse populations. Such an expansion would allow for more representative results and increase the applicability of the findings across varying contexts. Furthermore, adopting a mixed-methods approach in future research could significantly enhance the depth of understanding. While quantitative techniques are effective for identifying statistical relationships and trends, qualitative methods can provide richer insights into the contextual and experiential aspects of the phenomenon. By combining these approaches, researchers could uncover not only the patterns but also the underlying motivations, perceptions, and emotions that drive green creative behavior and entrepreneurial orientation.

This holistic approach would help bridge the gap between numerical data and the lived experiences of respondents, offering a more comprehensive understanding of how parenting strategies and entrepreneurial orientation shape environmentally creative outcomes. Addressing these limitations opens avenues for more robust and nuanced research, fostering greater applicability and relevance of the findings. It underscores the importance of tailoring future studies to encompass broader perspectives and employing methodologies that integrate both measurable and narrative elements. This would not only enrich the academic discourse on green creativity and entrepreneurial orientation but also provide actionable insights for policymakers, educators, and practitioners aiming to cultivate a more innovative and sustainable society.

This study offers several important contributions to theory, practice, and policy. Theoretically, the findings extend entrepreneurship

and sustainability literature by empirically demonstrating that parenting is a foundational antecedent of green creative behavior, both directly and indirectly through entrepreneurial orientation. By confirming the complementary mediating role of entrepreneurial orientation, this study advances existing models of green creativity by integrating family-based socialization processes with entrepreneurial mindset development, an area that has received limited scholarly attention.

Empirically, this research provides robust evidence that entrepreneurial orientation is not merely an organizational-level construct but also a critical individual-level mechanism that translates parental influence into environmentally creative outcomes among university students. This contributes novel insights into how early-life social environments shape sustainability-oriented innovation behavior in emerging entrepreneurs.

Practically, the results underscore the importance of involving families in entrepreneurship and sustainability education. Parenting practices that encourage exploration, risk-taking, and environmental awareness can significantly strengthen students' entrepreneurial orientation and green creative behavior. These findings offer actionable implications for universities, educators, and entrepreneurship programs to design family-inclusive interventions that nurture sustainability-driven innovation.

From a policy perspective, the study supports the alignment of entrepreneurship development initiatives with the Sustainable Development Goals, particularly SDG 8 (decent work and economic growth) and SDG 12 (responsible consumption and production). By highlighting parenting as a critical yet often overlooked leverage point, this research provides evidence-based guidance for policymakers to incorporate family and educational ecosystems into strategies aimed at fostering sustainable and resilient entrepreneurial ecosystems.

6. LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

Despite providing valuable insights into the role of parenting and entrepreneurial orientation in fostering green creative behavior among university students, this study is subject to several limitations. First, the research is geographically and demographically limited, focusing only on students from Indonesia and Malaysia. The cultural, economic, and educational contexts of these regions may not represent the diversity of entrepreneurial behaviors or parenting styles found in other countries. Future studies should therefore expand to include a broader and more diverse population, enabling cross-cultural comparisons and improving generalizability.

Second, the study employed a purely quantitative method using self-reported questionnaires, which may be subject to common method bias and social desirability effects. Future research would benefit from incorporating qualitative approaches, such as in-depth interviews or case studies, to capture the nuanced experiences of students and their family dynamics. Mixed-method designs could

offer deeper insights into how specific parenting practices influence entrepreneurial orientation and environmental creativity.

Third, the model focuses primarily on direct and mediated relationships between parenting, entrepreneurial orientation, and green creative behavior. However, other potential moderating or mediating variables such as peer influence, institutional support, or personality traits were not explored. Future research could integrate these additional factors to develop a more holistic understanding of what drives sustainable entrepreneurial behavior. Lastly, the cross-sectional design limits the ability to draw causal inferences. Longitudinal studies are encouraged to track changes in entrepreneurial orientation and green behavior over time, especially during critical developmental periods in students' academic and entrepreneurial journeys.

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