

BEYOND THE CLASSROOM : HOW ENTREPRENEURIAL EDUCATION AND CREATIVITY DRIVE STUDENT ENTREPRENEURIAL INTEREST THROUGH MOTIVATION AT MULAWARMAN UNIVERSITY

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Abstract

This study aims to examine and analyze the relationship between entrepreneurship education and creativity on students' entrepreneurial interest, with entrepreneurial motivation as a mediating variable. The background of this research is grounded in the importance of shaping young entrepreneurs' character in facing employment challenges and increasingly competitive economic growth. The study employed a quantitative approach using the Structural Equation Modeling method based on Partial Least Squares (SEM-PLS), processed through SmartPLS software. The sampling technique used was accidental sampling, and data were collected through an online questionnaire distributed to 100 active students of Mulawarman University who had completed an entrepreneurship course. The results show that creativity has a significant and positive influence on both entrepreneurial motivation and entrepreneurial interest, and entrepreneurial motivation is proven to be a strong determinant of students' interest in engaging in entrepreneurial activities. On the other hand, entrepreneurship education does not have a significant effect on either entrepreneurial motivation or interest. These findings imply that fostering entrepreneurial interest among students is more influenced by internal drive and individual creative capacity rather than formal delivery of entrepreneurship content. Therefore, a more practical, inspirational, and experience-based approach to entrepreneurship education is needed to effectively stimulate students' motivation and creativity.

Keywords: Entrepreneurship Education, Creativity, Entrepreneurial Motivation, Entrepreneurial Interest

INTRODUCTION

Entrepreneurship has become a critical focus for economic development, innovation, and job creation in the modern era. In Indonesia, however, the entrepreneurial rate remains relatively low at 3.57%, far behind neighboring countries such as Thailand (4.2%), Malaysia (4.7%), and Singapore (8.7%).

Table 1. Unemployment Rate Based on Educational Attainment (D4/S1/S2/S3 Graduates)

Year	Unemployment Rate (%)
2021	5.98%
2022	4.80%
2023	5.18%
2024	5.25%

Source: Central Bureau of Statistics, 2024

Despite Indonesia's large population and increasing number of university graduates, there remains a gap in entrepreneurial intention among young people, particularly Gen Z, who face difficulties securing jobs aligned with their qualifications. As reported by the Central Bureau of Statistics (2024), the unemployment rate stands at 5.25%, with Gen Z dominating this figure, raising concerns about the effectiveness of higher education in preparing students for the labor market. In response, entrepreneurship education has been integrated into various faculties, including Universitas Mulawarman, to equip students with the necessary skills, mindset, and confidence to pursue self-employment. However, institutional efforts alone do not always translate into entrepreneurial action, as internal factors such as low self-confidence and motivation may hinder students despite access to theoretical and practical resources. In this regard, creativity and entrepreneurial motivation play critical roles in shaping students' entrepreneurial interest. Creativity enables the identification of market opportunities and innovation, while motivation sustains persistence and resilience. Previous studies suggest that these internal factors can either directly influence entrepreneurial interest or mediate the impact of formal entrepreneurship education. Therefore, this study aims to examine the influence of entrepreneurship education and creativity on entrepreneurial interest, with entrepreneurial motivation as a mediating variable, using Universitas Mulawarman students as the research population. The findings are expected to offer strategic insights for developing entrepreneurship programs that not only inform but also inspire actionable outcomes.

LITERATURE REVIEW AND HYPOTHESES

Theoretical Framework

1. Theory of Planned Behavior (TPB), Developed by Ajzen (1991), the TPB posits that an individual's behavior is shaped by behavioral intentions, which are influenced by three key components: attitude, subjective norms, and perceived behavioral control. In the context of entrepreneurship:

- Entrepreneurship education, fosters a positive attitude toward entrepreneurial behavior.
 - Creativity, enhances perceived control by enabling individuals to think innovatively.
 - Entrepreneurial motivation, acts as a mediating factor, shaped by both attitudes and perceived control, to strengthen the intention (interest) to become an entrepreneur.
2. Maslow (1934) outlined five levels of human needs: physiological, safety, social, esteem, and self-actualization. Entrepreneurship education and creativity help fulfill these needs, leading individuals—particularly students—toward entrepreneurial interests and action

Conceptual Review

1. **Entrepreneurship Education**, Entrepreneurship education refers to a structured learning process aimed at equipping individuals with entrepreneurial knowledge, skills, and attitudes. According to Pamungkas (2018), it encompasses:
 - a) Curriculum that includes business planning, innovation, and risk management.
 - b) Quality of teaching staff, particularly those with practical experience.\
 - c) Learning facilities that support collaborative and experiential learning.
2. **Creativity**, Creativity is defined as the ability to generate original, valuable ideas and solutions. According to Frank E. Williams (2013), creativity in entrepreneurship is measured by:
 - a) Innovation: the ability to create and develop new ideas.
 - b) Courage: willingness to take risks and face uncertainty.
 - c) Flexibility: adaptability and openness to new perspectives.
3. **Entrepreneurial Motivation**, Entrepreneurial motivation is the internal drive to start and sustain a business, influenced by personal goals, needs, and aspirations. Hamzah (2008) outlines key indicators:
 - a) Desire for achievement
 - b) Future aspirations
 - c) Recognition and rewards
 - d) Challenges and interest in entrepreneurship

4. **Entrepreneurial Interest**, Entrepreneurial interest refers to an individual's tendency or desire to engage in entrepreneurial activities. According to Paramatasari (2016), it includes:
- a) Desire to start a business
 - b) Positive emotional response to entrepreneurship
 - c) Attention to entrepreneurial topics
 - d) Supportive environment
 - e) Relevant experience

Hypotheses Development

The following hypotheses are developed based on the theoretical and conceptual framework discussed above:

H1: Entrepreneurship education has a positive and significant effect on entrepreneurial motivation.

Entrepreneurship education provides not only theoretical knowledge but also experiential learning that enhances students' confidence and readiness to start a business. Rahayu & Kurniawan (2023) – Jurnal Paedagogy

H2: Creativity has a positive and significant effect on entrepreneurial motivation. Creative individuals are more confident in their ability to innovate and solve problems, which fosters a stronger drive to become entrepreneurs. Ramadhani (2021) – Journal of Business Innovation and Management

H3: Entrepreneurship education has a positive and significant effect on entrepreneurial interest.

Students who receive entrepreneurship education are more likely to see entrepreneurship as a viable career path, thereby increasing their interest in starting a business. Afyati, Sudarno, & Noviani (2023) – Jurnal Pendidikan Ekonomi (JUPE)

H4: Creativity has a positive and significant effect on entrepreneurial interest.

Creativity enables students to envision unique business ideas and solutions, making them more inclined to engage in entrepreneurial ventures. Fitriani (2021) – Journal of Entrepreneurship and Innovation

H5: Entrepreneurial motivation has a positive and significant effect on entrepreneurial interest.

Strong entrepreneurial motivation encourages students to transform intention into action, which increases their interest and likelihood to pursue entrepreneurship. Putra, A. R. (2022) – Journal of Applied Psychology and Human Resource Development

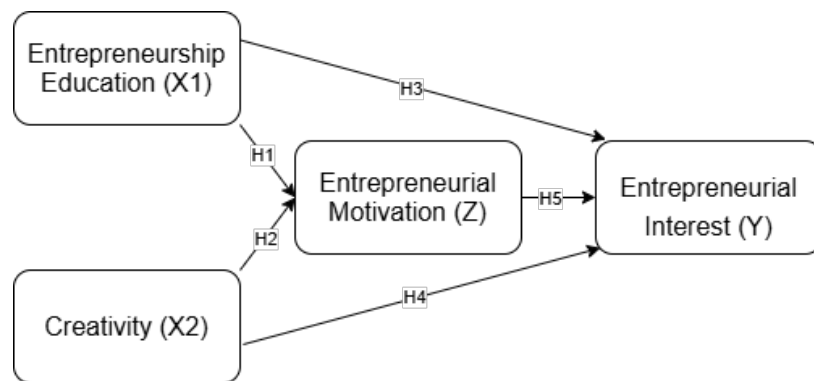


Fig. 1: Hypotheses

METHODOLOGY

This research employed a quantitative approach with a causal associative design to examine the influence of entrepreneurship education and creativity on entrepreneurial interest through entrepreneurial motivation. The population of this study was active undergraduate students of Universitas Mulawarman who had completed entrepreneurship courses. A total of 100 respondents were selected using accidental sampling, and data were collected through a structured online questionnaire using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

To analyze the data, the study used Structural Equation Modeling – Partial Least Square (SEM-PLS) with the SmartPLS software. The analysis included tests for outer model validity and reliability, including indicator loadings, composite reliability, and Average Variance Extracted (AVE). The inner model was evaluated through path coefficients, t-statistics, and R-square values to assess the direct and indirect effects between variables. The constructs measured in this study include: (X1) entrepreneurship education, (X2) creativity, (Z) entrepreneurial motivation, and (Y) entrepreneurial interest. Each construct was developed based on existing, validated theoretical indicators.

RESULTS AND DISCUSSION

RESULTS

Outer Model (Measurement Model) Evaluation

The outer model evaluates the relationship between observed indicators and their respective latent constructs to determine validity and reliability. The results indicate that all outer loadings exceeded the minimum threshold of 0.70, confirming good indicator reliability. Furthermore, Average Variance Extracted (AVE) values for all constructs were above 0.50, demonstrating convergent validity. This implies that more than half of the variance of the indicators is captured by the latent constructs they are supposed to measure.

Composite Reliability (CR) values were all greater than 0.70, suggesting high internal consistency among items. The reliability coefficients are as follows:

Table 2. Outer Model Test Result

Variable	Composite Reliability (CR)	Average Variance Extracted (AVE)	Explanation
Entrepreneurship Education (X1)	0.874	0.536	All indicators of Entrepreneurship Education exceed CR > 0.70 and AVE > 0.50 confirm construct reliability.
Creativity (X2)	0.892	0.541	Indicators reflect Creativity well. High CR and AVE indicate reliable and valid measurement.
Entrepreneurial Motivation (Z)	0.919	0.608	CR and AVE meet recommended thresholds, ensuring internal consistency and convergent validity.
Entrepreneurial Interest (Y)	0.886	0.587	Indicators strongly reflect Entrepreneurial Interest CR and AVE are within ideal criteria.

Inner Model (Structural Model) Evaluation

The R^2 value for Entrepreneurial Interest is 0.599, indicating that 59.9% of the variance in entrepreneurial interest can be explained by the predictors (entrepreneurship education, creativity, and entrepreneurial motivation). The R^2 for Entrepreneurial Motivation is 0.358, suggesting that 35.8% of the variation in motivation is accounted for by entrepreneurship education and creativity.

Furthermore, the Q^2 value is 0.743, which exceeds the 0.35 threshold, suggesting a strong predictive relevance for the model.

Table 3. Coefficient of Determination (R-Square)

Endogenous Variable	R-Square (R ²)	Interpretation
Entrepreneurial Motivation	0.358	35,8% of the variance in motivation is explained by entrepreneurship education and creativity.
Entrepreneurial Interest	0.599	59,9.% of the variance in interest is explained by education, creativity, and motivation.

Table 4. Predictive Relevance (Q-Square)

Q-Square (Q ²)	Interpretation
0.743	The model has strong predictive relevance, explaining 74.3% of the variance in endogenous constructs overall.

Hypothesis Testing

Using a significance threshold of $t > 1.96$, the hypotheses were tested as follows:

Table 5. Hypotheses and Result

Path	Path Coefficient (B)	T-Statistic	P-Value	Result	Explanation
Entrepreneurship Education → Entrepreneurial Motivation	0.061	0.630	< 0.05	Not Significant	The influence is statistically insignificant, suggesting that formal entrepreneurship education has limited motivational impact in this context.
Creativity → Entrepreneurial Motivation	0.545	5.027	< 0.001	Significant	Creativity significantly and positively influences motivation, indicating that creative skills enhance entrepreneurial drive.
Entrepreneurship Education → Entrepreneurial Interest	0.024	0.152	< 0.05	Not Significant	Education alone does not significantly stimulate students' entrepreneurial interest without additional internal factors.
Creativity → Entrepreneurial Interest	0.246	2.177	< 0.05	Significant	Creativity is positively and significantly associated with entrepreneurial interest, as it fosters innovation and market awareness.
Entrepreneurial Motivation → Entrepreneurial Interest	0.529	7.163	< 0.001	Significant	Motivation strongly influences interest, confirming its mediating role and its importance in

CONCLUSION AND RECOMMENDATION

a. The Non-Significant Role of Entrepreneurship Education

Contrary to expectations, entrepreneurship education showed no significant effect on either entrepreneurial motivation or entrepreneurial interest. This indicates that although formal education provides knowledge and theoretical frameworks, it may lack the experiential and inspirational components necessary to transform students' attitudes or drive them to take real entrepreneurial actions. This aligns with Maslow's Hierarchy of Needs, where merely providing safety and esteem through education is insufficient to reach self-actualization—the key level where entrepreneurial behavior flourishes. In the framework of the Theory of Planned Behavior (TPB), the weak effect of entrepreneurship education suggests an inadequacy in forming students' attitudes and perceived behavioral control regarding entrepreneurship. A potential explanation lies in the delivery methods of entrepreneurship curricula in many universities, which tend to be lecture-based, lacking real-world simulations, mentorship, and venture creation opportunities. Without tangible engagement, students may not internalize entrepreneurial values deeply enough to be motivated. This is consistent with research by Melinda et al. (2023) which highlights the need for transformational learning approaches to stimulate entrepreneurial interest.

b. The Significant Influence of Creativity

Creativity emerged as a key determinant influencing both entrepreneurial motivation and interest. The findings suggest that students who possess high levels of creativity are more likely to exhibit confidence in ideation, problem-solving, and risk-taking—qualities that directly translate into entrepreneurial actions. Creativity not only enables opportunity recognition but also nurtures innovation in product development, marketing strategies, and business models. Within the TPB framework, creativity contributes to a more favorable attitude toward behavior and enhances perceived control, leading to stronger entrepreneurial intentions. This finding is in line with Williams' (2013) dimensions of creativity, including flexibility, innovation, and courage, which are essential for dealing with uncertainty and competition in entrepreneurship. In the context of Maslow's theory, creativity may fulfill the need

for self-expression and self-actualization, reinforcing internal motivation to pursue entrepreneurial ventures. These results are echoed in previous studies (e.g., Fitriani, 2021; Isma et al., 2023), which emphasized that entrepreneurial intention grows significantly when individuals are able to harness and apply creative capacity to solve real-world problems.

c. Entrepreneurial Motivation as a Strong Mediator

Entrepreneurial motivation was found to be the strongest direct predictor of entrepreneurial interest. The high t-statistic value confirms the psychological importance of motivational constructs in forming entrepreneurial intentions. Motivation, in this study, encompasses a range of psychological drivers: the desire for autonomy, ambition to succeed, need for achievement, and willingness to face challenges. These results validate the role of motivation in both TPB and Maslow's theory—particularly in the actualization phase where individuals act on their aspirations. Motivation serves as the bridge between entrepreneurial capability (knowledge, creativity) and entrepreneurial behavior (interest and action). This supports the view of scholars like Putra (2022) and Wardani & Dewi (2021), who argue that internal drivers are often more decisive than external interventions in shaping entrepreneurial outcomes. In practice, universities may need to invest more in motivational development through mentorship programs, entrepreneurial role modeling, and success stories to inspire action.

Implications for Practice and Policy

These findings have practical implications for higher education institutions and policymakers. First, entrepreneurship education must evolve beyond lectures and business plans; it should incorporate experiential learning, business incubation, peer learning, and fail-safe environments where students can try, fail, and learn without severe penalties.

Second, programs aimed at enhancing student creativity—such as innovation challenges, design thinking workshops, and hackathons—should be integrated into entrepreneurship curricula to cultivate creative confidence.

Lastly, developing intrinsic motivation through personalized goal-setting, mentorship, and exposure to successful entrepreneurs can significantly improve students' entrepreneurial engagement.

Based on the data analysis using SEM-PLS, this study found that creativity has a positive and significant effect on entrepreneurial motivation and entrepreneurial interest.

Students with higher creativity tend to be more imaginative, confident, and resourceful in identifying and acting upon business opportunities. This confirms that creativity is not only a complementary asset but a fundamental component in the formation of entrepreneurial behavior. It allows students to view problems as opportunities and generate original ideas that can be transformed into business ventures. This result aligns with previous studies (Melinda et al., 2023; Isma et al., 2023) which suggest that creativity significantly contributes to an individual's readiness and willingness to engage in entrepreneurial activities.

The study also confirmed that entrepreneurial motivation significantly influences entrepreneurial interest. Motivation acts as a psychological driver that encourages students to commit to entrepreneurial pursuits despite challenges or uncertainties. Motivated students are more likely to take proactive steps toward building a business, such as conducting market research, planning strategies, or participating in entrepreneurship programs. This finding supports the theoretical foundation of Maslow's hierarchy, where the need for achievement and self-actualization can be strong motivators in one's decision to become self-employed. Entrepreneurial motivation, whether stemming from personal ambition, economic necessity, or self-fulfillment, plays a crucial role in strengthening the intention to become an entrepreneur.

However, in contrast to initial expectations, the study found that entrepreneurship education does not have a significant direct impact on either entrepreneurial motivation or entrepreneurial interest. This suggests that although entrepreneurship courses provide theoretical and technical knowledge, they may not be sufficient to influence students' desire to pursue business unless the learning experience is highly engaging, practical, and emotionally inspiring. This finding is consistent with several studies indicating that traditional education formats, which rely heavily on lectures and assessments, may fall short in fostering entrepreneurial intention if not combined with real-world applications, mentorship, and experiential learning. It highlights the gap between knowledge acquisition and action, emphasizing the need to redesign entrepreneurship education toward more immersive, project-based, and creativity-driven approaches.

Moreover, the study found that entrepreneurial motivation mediates the relationship between creativity and entrepreneurial interest, reinforcing the importance of internal psychological factors in translating creative ideas into entrepreneurial intention. Creative students tend to be more motivated to bring their ideas to life when they have a clear sense of purpose and confidence in their ability to succeed. This finding is in line with Ajzen's

Theory of Planned Behavior, which posits that attitudes (such as creativity), subjective norms, and perceived behavioral control (motivation) collectively determine one's intention to perform a behavior.

In the context of Mulawarman University, where programs such as entrepreneurship courses, student business incubators, and creativity development workshops are actively implemented, the findings of this study provide essential insights. While structural support exists, the real challenge lies in how to personalize and internalize entrepreneurial learning experiences so that students feel intrinsically driven and capable of launching their ventures. Without a strong sense of motivation and creative confidence, even well-designed educational programs may fail to ignite genuine entrepreneurial interest.

These findings offer valuable implications for universities and policymakers. First, entrepreneurship education must evolve beyond theory into practice—engaging students in simulations, real-world problem-solving, and mentorship. Second, creativity should be nurtured through interdisciplinary learning, design thinking, and digital platforms that encourage experimentation. Finally, motivation must be cultivated not just through grades or recognition, but through building a sense of agency, relevance, and purpose in entrepreneurship itself. With this approach, educational institutions can become catalysts for sustainable entrepreneurship among youth in Indonesia and beyond.

Recommendation

Based on the research findings and analysis, several recommendations can be put forward to enhance the effectiveness of entrepreneurship development among university students, particularly at Mulawarman University:

- a. First, entrepreneurship education programs need a transformative redesign. While the current curriculum provides foundational knowledge, the results show that it does not significantly affect students' motivation or interest in entrepreneurship. Therefore, it is crucial to shift from traditional, theory-heavy lectures to more engaging pedagogical methods. Universities should integrate experiential learning strategies, such as business simulations, entrepreneurial bootcamps, case-based learning, and direct exposure to startup ecosystems. Collaborative projects, internships with local entrepreneurs, and university-based business incubators can also help students bridge the gap between theory and practice.

- b. Second, given the significant influence of creativity on both entrepreneurial motivation and interest, institutions must intentionally cultivate students' creative thinking skills across disciplines. This can be done by embedding design thinking methodologies, innovation labs, and cross-faculty collaboration into coursework. Creative confidence should be nurtured through activities that allow for risk-taking, idea prototyping, and iterative problem-solving. Universities can also host competitions such as hackathons, innovation fairs, and startup weekends to stimulate creativity in a real-world context.
- c. Third, the study emphasizes that entrepreneurial motivation plays a crucial mediating role, highlighting the importance of psychological readiness and internal drive. As such, universities should create motivational ecosystems through the involvement of successful alumni entrepreneurs, motivational speakers, and ongoing mentorship. Role models and mentors can significantly influence students' aspirations by making entrepreneurship appear more attainable and personally relevant. Motivation should also be supported through personalized learning goals, reflective journals, and feedback mechanisms that encourage self-awareness and growth.
- d. Fourth, for policy-level support, faculties and higher education policymakers should collaborate to formulate institutional frameworks that support entrepreneurship not just as a subject, but as a campus-wide culture. Financial and administrative support should be made available for student-led business initiatives, including access to seed funding, co-working spaces, and structured mentorship programs. Entrepreneurship should be embedded in the university's mission as a core strategy for graduate employability and national economic development.
- e. Lastly, future research is encouraged to explore broader demographic and cultural variables, such as gender, socio-economic background, and digital literacy, which may influence entrepreneurial outcomes. Longitudinal studies tracking students' post-graduation entrepreneurial paths can also provide deeper insights into the lasting impact of creativity and motivation in shaping real entrepreneurial behavior.

By taking these recommendations into account, Mulawarman University—and other institutions across Indonesia—can play a transformative role in nurturing the next generation of innovative, motivated, and action-oriented entrepreneurs capable of contributing to national and regional economic growth.

REFERENCES

- Afiyati, N., Sudarno, & Noviani, R. (2023). The effect of entrepreneurship education on students' entrepreneurial interest. *Journal of Economic Education (JUPE)*, 11(2), 95–103.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Central Bureau of Statistics. (2024). Unemployment rate by education level 2021–2024. Jakarta: BPS-Statistics Indonesia.
- Fitriani, L. (2021). The role of creativity in fostering students' entrepreneurial interest. *Journal of Entrepreneurship and Innovation*, 4(1), 44–52.
- Hamzah, A. (2008). Entrepreneurial motivation in the context of higher education. Yogyakarta: Pustaka Pelajar.
- Isma, R., Mulyani, D., & Sari, P. (2023). Creativity and motivation in developing student entrepreneurial intention. *Journal of Applied Management Science*, 7(3), 113–121.
- Melinda, R., Wibowo, H., & Syafrudin, A. (2023). Transformational learning in entrepreneurship education: Bridging knowledge and action. *Journal of Educational Innovation*, 9(1), 34–45.
- Pamungkas, D. (2018). Components of entrepreneurship education in higher education. *Journal of Economic and Business Education*, 6(2), 77–85.
- Paramatasari, D. (2016). University students' entrepreneurial interest viewed from internal and external factors. *Journal of Economics and Entrepreneurship*, 16(1), 65–72.
- Putra, A. R. (2022). Entrepreneurial motivation as a predictor of students' entrepreneurial interest. *Journal of Applied Psychology and Human Resource Development*, 10(1), 22–30.
- Rahayu, T., & Kurniawan, D. (2023). The effect of entrepreneurship education on entrepreneurial motivation. *Journal of Paedagogy*, 12(1), 51–60.
- Ramadhani, F. (2021). Creativity as a determinant of students' entrepreneurial motivation. *Journal of Business Innovation and Management*, 3(2), 88–95.
- Wardani, S., & Dewi, L. (2021). The role of motivation in shaping students' entrepreneurial interest. *Journal of Applied Psychology*, 8(2), 129–138.
- Williams, F. E. (2013). Creativity assessment and development. New York: Trillium Press.