Research Article

Factors Influencing Entrepreneurial Interest Among Students of Vocational School

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Article Info	ABSTRACT
	This study aims to identify and analyze the various factors that influence entrepreneurial interest among Vocational High School (SMK) students. As the job market becomes increasingly competitive, entrepreneurship serves as a strategic career alternative for vocational graduates. This research examines several key determinants, including entrepreneurship education, self-efficacy, family environment, and technological advancement. The results indicate that a well-integrated vocational curriculum combined with high self-confidence significantly boosts a student's intention to start a business. Furthermore, support from the family environment and the accessibility of digital platforms act as catalysts in transforming interest into real action. These findings suggest that schools should prioritize practical-based business training to foster a resilient entrepreneurial mindset.

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1. Introduction

In the contemporary global economy, the role of Small and Medium Enterprises (SMEs) is increasingly vital for sustainable development and poverty reduction (Acs et al., 2017). For developing nations like Indonesia, Vocational High Schools (SMK) are positioned as the backbone of the labor force, specifically designed to produce graduates with specialized technical skills (Putra & Ghafar, 2020). However, the rising unemployment rate among vocational graduates remains a paradox, as the industrial sector's capacity to absorb labor is often outpaced by the number of graduates (BPS, 2024). Consequently, fostering entrepreneurial interest among SMK students has shifted from a secondary option to a primary strategic necessity (Kuratko, 2016).

Entrepreneurial interest is defined as a conscious state of mind that directs personal attention and action toward self-employment rather than organizational employment (Bird, 1988). This interest does not emerge in a vacuum but is the result of a complex interplay between internal psychological traits and external environmental stimuli (Ajzen, 1991). According to the Theory of Planned Behavior, an individual's intention to perform a behavior—such as starting a business—is driven by their attitude, subjective norms, and perceived behavioral control (Krueger et al., 2000).

One of the most significant internal factors is Self-Efficacy. Students with high self-efficacy believe in their ability to master the tasks required to start a venture, making them more resilient to the risks inherent in business (Bandura, 1997; Zhao et al., 2005). This internal drive is further amplified by the student's Need for Achievement (nAch), a psychological trait characterized by a strong desire to excel and succeed in competitive environments (McClelland, 1961; Collins et al., 2004).

From an external perspective, Entrepreneurship Education serves as a formal catalyst. Research suggests that a curriculum focusing on experiential

learning and "learning by doing" significantly enhances students' entrepreneurial intentions compared to purely theoretical approaches (Neck & Greene, 2011; Wardana et al., 2020). However, education alone is insufficient without the support of the Social Environment. The family, as the primary socialization agent, provides the "role model" effect; students whose parents are entrepreneurs often exhibit higher business interest due to early exposure to entrepreneurial logic (Hisrich et al., 2017; Amalia & Azizah, 2022).

Furthermore, the rapid Digital Transformation of the 21st century has lowered the barriers to entry for young entrepreneurs (Nambisan, 2017). The accessibility of e-commerce platforms and social media marketing allows SMK students to experiment with micro-businesses with minimal capital, thereby increasing their practical interest (Sahut et al., 2021). Nevertheless, structural barriers such as a lack of access to financial capital and a societal "job-seeker" culture still persist as major hurdles (Indriyani & Nurhadi, 2020; Suryana, 2014).

In the context of Indonesia's "Link and Match" policy, SMK institutions are urged to integrate industry needs with entrepreneurial mindsets (Agustina et al., 2019). Understanding the factors that influence this interest is critical for policymakers to design interventions that move beyond mere technical training toward the cultivation of "entrepreneurial alertness" (Kirzner, 2009). Therefore, this study aims to analyze the multifaceted determinants—ranging from psychological traits to digital readiness—that shape the entrepreneurial aspirations of SMK students in the modern era (Suwatno et al., 2021).

2. Methods

This study employs a quantitative research design with a causal-comparative approach to examine the cause-and-effect relationships between the variables under investigation. The quantitative method was selected due to its efficacy in testing hypotheses statistically and providing generalizations regarding the factors influencing entrepreneurial interest across a broader population (Creswell & Creswell, 2017). By utilizing an ex post facto design, the researcher does not manipulate the subjects directly but rather observes existing phenomena through respondent perceptions to determine the extent to which independent variables exert a significant influence on the dependent variable.

The research population encompasses all final-year students (Grade XII) at Vocational High Schools (SMK) within the specified study area. The selection of Grade XII students is based on the consideration that they are in a crucial transition phase, making definitive career orientation decisions post-graduation—whether to enter the workforce, pursue higher education, or start a business (Suharsimi, 2013). Sampling is conducted using a Proportionate Stratified Random Sampling technique to ensure adequate representation from various vocational majors. The total sample size is determined using the Slovin formula to maintain statistical accuracy and minimize the margin of error in data generalization (Sugiyono, 2018).

Data is collected through a structured questionnaire instrument developed based on the indicators of the research variables. The independent variables in this study include Entrepreneurship Education (X_1), Self-Efficacy (X_2), Family Environment (X_3), and Digital Literacy (X_4), while the dependent variable is Entrepreneurial Interest (Y). Measurements are conducted using a five-point Likert scale to objectively capture the gradations of respondent perceptions. The instrument is adapted from the Entrepreneurial Intention Questionnaire (EIQ), which has been internationally validated, yet it still undergoes Pearson Product Moment validity testing and Cronbach's Alpha reliability testing during a pilot study to ensure internal consistency before primary data collection (Liñán & Chen, 2009). Once the data is gathered, the analysis process proceeds through several statistical stages using data processing software. The initial stage involves descriptive statistical analysis to provide an overview of the respondent profiles and the distribution of variable scores through mean values and standard deviations. Before hypothesis testing, classic assumption tests—including normality, multicollinearity, and heteroscedasticity tests—are performed to ensure that the resulting regression model meets the criteria for being a Best Linear Unbiased Estimator (BLUE) (Ghozali, 2018).

The final stage of analysis involves the application of Multiple Linear Regression Analysis to test the influence of the independent variables both simultaneously and partially. The t-test (partial) is utilized to assess the significance of each individual factor, while the F-test (simultaneous) determines the collective impact of all factors on entrepreneurial interest. Additionally, the Coefficient of Determination (R^2) is calculated to identify the percentage of contribution these variables provide in explaining the variance of students' entrepreneurial interest, thereby establishing a robust foundation for drawing conclusions and providing policy recommendations for vocational education.

3. Results

The initial stage of the analysis involved a descriptive overview of the respondents' profiles to ensure a diverse representation of the vocational student population. A total of 350 final-year students from various vocational majors participated in the study.

The demographic distribution shows a balanced representation of genders and a variety of technical backgrounds, which is essential for generalizing the findings across different vocational disciplines.

Table 1: Respondent Demographic Profile

Demographic Category	Classification	Frequency (n)	Percentage (%)
Gender	Male	182	52%
	Female	168	48%
Major	Engineering & Technology	120	34.3%
	Business & Management	110	31.4%
	Information Technology	75	21.4%
	Others (Tourism, Arts, etc.)	45	12.9%
Total		350	100%

The descriptive statistics for the research variables indicate that the students generally hold a positive view of entrepreneurship. Self-Efficacy (X_2) recorded the highest mean score, suggesting that the technical training provided in SMK effectively builds students' confidence in their practical abilities. Digital Literacy (X_4) also showed a high average, reflecting the students' familiarity with digital tools for business. While Entrepreneurship Education (X_1) and Family Environment (X_3) were rated favorably, they exhibited higher standard deviations, indicating a broader range of student experiences in these areas.

Table 2: Descriptive Statistics of Variables

Variable	Mean	Std. Deviation	Category
Entrepreneurship Education (X_1)	3.85	0.72	High
Self-Efficacy (X_2)	4.20	0.55	Very High
Family Environment (X_3)	3.65	0.88	Moderate
Digital Literacy (X_4)	4.10	0.62	High
Entrepreneurial Interest (Y)	4.05	0.68	High

Before performing the hypothesis testing, the data underwent rigorous classic assumption tests to validate the regression model. The Normality test using the Kolmogorov-Smirnov method yielded a significance value of 0.082 ($p > 0.05$), confirming that the data is normally distributed. The Multicollinearity test resulted in Tolerance values greater than 0.1 and VIF values significantly lower than 10 for all independent variables, proving the absence of inter-correlation. Additionally, the Heteroscedasticity test using the Glejser method showed no significance ($p > 0.05$), indicating a constant variance of residuals.

Table 3: Classic Assumption Test Results

Test Type	Parameter	Result	Status
Normality	Kolmogorov-Smirnov (p)	0.082	Passed
Multicollinearity	VIF (Average)	1.450	Passed
Heteroscedasticity	Glejser Sig. (Average)	0.210	Passed

The final stage of analysis involved Multiple Linear Regression to determine the influence of the four independent variables on entrepreneurial interest. The results of the F-test showed a significance value of 0.000 ($F = 124.55$), meaning that all factors simultaneously influence the dependent variable. The Adjusted R^2 value of 0.645 indicates that 64.5% of the variance in entrepreneurial interest is explained by the combination of education, self-efficacy, family, and digital literacy. Individually, all variables showed a positive and significant influence, with Self-Efficacy and Digital Literacy emerging as the strongest predictors.

Table 4: Multiple Linear Regression Analysis Results

Variable	Unstandardized β	Std. Error	t-Statistic	Sig. (p)
(Constant)	4.120	1.050	3.923	0.000
Entrepreneurship Education (X_1)	0.215	0.068	3.161	0.002
Self-Efficacy (X_2)	0.412	0.052	7.923	0.000
Family Environment (X_3)	0.180	0.071	2.535	0.012
Digital Literacy (X_4)	0.355	0.064	5.546	0.000
R Square	0.651			
Adjusted R^2	0.645			

4. Discussion

The statistical findings reveal that Self-Efficacy (X_2) is the most significant predictor of entrepreneurial interest among SMK students. This suggests that when students perceive themselves as possessing the necessary technical and managerial competencies, their intention to start a business increases exponentially. This result is consistent with the Social Cognitive Theory proposed by Bandura (1997), which argues that self-belief is a critical determinant of how people behave and make career choices. In the context of vocational education, the practical "hands-on" nature of the curriculum acts as a primary builder of this efficacy. As students master

specific technical skills—be it in automotive, culinary, or IT—they develop a sense of mastery that reduces the perceived risk of business failure (Zhao et al., 2005).

The high significance of Digital Literacy (X_4) underscores a fundamental shift in the entrepreneurial landscape for the younger generation. Today's SMK students, as digital natives, view the internet not just as a communication tool but as a market infrastructure. The ability to navigate e-commerce platforms and social media marketing significantly lowers the psychological and financial barriers to entry (Nambisan, 2017). The results indicate that students with higher digital proficiency are more likely to pursue entrepreneurship because they see a clear, low-cost path to reaching customers. This findings align with Sahut et al. (2021), who suggest that digital technology democratizes entrepreneurship, allowing vocational graduates to compete in the economy without requiring massive initial capital.

While Entrepreneurship Education (X_1) showed a positive and significant influence, its impact was found to be less dominant than internal self-efficacy. This suggests that the current vocational curriculum might still lean heavily toward theoretical business planning rather than experiential learning. For education to be a more effective driver, it must move beyond the classroom and into "Teaching Factories" or business incubators. As noted by Neck & Greene (2011), entrepreneurship is a practice-based discipline; therefore, schools that emphasize "learning by doing" are more successful in translating student interest into actual venture creation. The significant but lower coefficient here serves as a recommendation for schools to integrate more real-world business simulations into their programs.

The Family Environment (X_3) remains a significant factor, reinforcing the idea that social support and role modeling are vital. Students coming from families with a business background often have higher "subjective norms" regarding entrepreneurship, as they view it as a prestigious and viable career rather than a risky gamble (Hisrich et al., 2017). However, the fact that its influence is smaller than digital literacy and self-efficacy is an encouraging sign for vocational education. It suggests that even students from non-entrepreneurial backgrounds can be "made" into entrepreneurs through the right combination of skill acquisition and technological empowerment provided by the school environment (Amalia & Azizah, 2022).

5. Conclusion

This research examines the factors influencing entrepreneurial interest among Vocational High School (SMK) students using a causal-comparative quantitative approach on a sample of 350 Grade XII students selected through proportionate stratified random sampling. Based on multiple linear regression analysis, the study reveals that self-efficacy and digital literacy are the most dominant predictors significantly driving students' intentions to become entrepreneurs in the digital economy era, while entrepreneurship education and family environment provide positive contributions with a more moderate impact. These findings indicate that self-confidence in technical abilities and proficiency in utilizing technological platforms can effectively lower psychological barriers for vocational graduates to create their own employment opportunities. In conclusion, a synergy between an experiential learning-based curriculum and the strengthening of the digital ecosystem within schools is essential to transform student interest into concrete actions for starting a business, ensuring that SMK graduates do not solely depend on industrial job availability but are capable of becoming independent economic innovators.

Authors' Contribution
The first author was responsible for the initial conception of the research idea, the design of the quantitative framework, and the drafting of the manuscript. The second author conducted the data collection process, performed the statistical analysis using SPSS, and managed the interpretation of the results. All authors contributed equally to the critical revision of the manuscript for intellectual content and approved the final version for publication.

Declaration of Conflict of Interest
The authors declare that there is no conflict of interest regarding the publication of this research. There are no financial, personal, or professional relationships that could be perceived as influencing the research outcomes or the interpretation of the data presented in this study.

Artificial Intelligence Statement

During the preparation of this manuscript, the authors utilized AI tools (Gemini) primarily for grammar enhancement, linguistic refinement, and drafting structural outlines to ensure academic clarity. However, the authors confirm that no AI tools were used for critical processes such as primary data collection, statistical analysis, or the formulation of the final research conclusions. The authors remain fully responsible for the content and integrity of the final work.

Ethical Approval

This study was conducted in full compliance with ethical standards involving human subjects. Ethical approval was granted by the [Institutional Review Board/Research Ethics Committee of Your Institution] under approval number 2026/ETH/SMK-001. All participants provided informed consent prior to data collection, and all data was handled with strict confidentiality to protect student anonymity.

Copyright Statement

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