

Role of entrepreneurship education in developing students' entrepreneurial mindset

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Abstrak

Penelitian ini bertujuan untuk mengetahui peran pendidikan membangun mindset berwirausaha siswa kelas XII Manajemen Perkantoran SMK Negeri 6 Surakarta. Penelitian kuantitatif korelasional dengan populasi siswa kelas XII Manajemen Perkantoran SMK Negeri 6 Surakarta tahun pelajaran 2023/2024 dengan jumlah sampel 85 responden. Penelitian ini diambil menggunakan teknik cluster random sampling. Metode pengumpulan data menggunakan kuesioner atau angket. Teknik analisis data menggunakan teknik analisis regresi linier berganda dengan bantuan program kerja IBM SPSS 25. Dari hasil penelitian dapat disimpulkan bahwa terdapat pengaruh positif dan signifikan pendidikan kewirausahaan terhadap mindset berwirausaha (nilai t_{hitung} 10,453 > t_{tabel} 1,98932), Kontribusi pendidikan kewirausahaan sebesar 56.8%, sedangkan 43,2% dipengaruhi oleh faktor lain yang tidak termasuk dalam penelitian.

Kata kunci: kewirausahaan; mindset; pendidikan

Abstract

This study aims to investigate the role of entrepreneurship education in developing entrepreneurial mindset among Grade XII Office Management students at SMK Negeri 6 Surakarta. This correlational quantitative research involved a population of Grade XII Office Management students at SMK Negeri 6 Surakarta for the 2023/2024 academic year, with a sample of 85 respondents selected using cluster random sampling technique. Data collection employed questionnaire methods, and data analysis utilized multiple linear regression techniques with IBM SPSS 25. Results demonstrate a positive and significant effect of entrepreneurship education on entrepreneurial mindset (t -calculated 10.453 > t -table 1.98932, $p < 0.001$). The contribution of entrepreneurship education accounts for 56.8% of variance in entrepreneurial mindset, while 43.2% is influenced by other factors not included in this study. These findings suggest that well-structured entrepreneurship education programs can effectively foster entrepreneurial thinking patterns among vocational students, contributing to the development of future entrepreneurs who can create employment opportunities and reduce unemployment rates.

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Introduction

Unemployment represents a critical component of national economic health. Declining economic growth rates contribute to increased unemployment levels, which escalate when the labor force cannot be adequately absorbed into the job market. Educational attainment significantly influences unemployment rates. Supriyanto (2016) argues that obtaining employment requires education and skills from job seekers competing in labor markets capable of absorbing workers. However, when examined from educational perspective, open unemployment rates remain dominated by Vocational High School (SMK) graduates. This occurs due to human resources exceeding available job opportunities, while the mindset for creating employment opportunities remains remarkably low among educated populations.

According to Yanti et al. (2014), addressing unemployment challenges requires fostering entrepreneurial development. This necessitates forming human resources with entrepreneurial spirit and mindset. Generally, society perceives entrepreneurship as inherited traits requiring financial freedom, risk-taking abilities, and substantial capital for success. These prevalent societal mindsets require redirection toward more positive frameworks, encouraging broader entrepreneurial participation that creates employment opportunities for others, thereby reducing existing unemployment problems. Therefore, mindset formation requires individual awareness development through systematic strategies.

Entrepreneurial mindset represents thinking patterns possessed by entrepreneurs characterized by innovative and creative thinking accompanied by intelligent opportunity recognition. Beginning with desires manifested in business actions practiced in the field, naturally involving innovative breakthroughs that generate profits (Lewenussa & Suaidy, 2019). Entrepreneurial mindset formation can be influenced by internal and external factors, starting from internal entrepreneurship education factors and external factors representing activities related to entrepreneurship.

According to Carol Dweck (as cited in Rosmiati et al., 2022), mindset is categorized into two types: fixed mindset and growth mindset. Fixed mindset represents views that individual abilities cannot change, with characteristics determined from the beginning. Fixed mindset characteristics include lack of confidence, giving up when facing problems, excessive comfort zone preference avoiding challenges, rejection of criticism and suggestions from others, and feeling threatened by others' success. Conversely, growth mindset represents views that abilities can be developed through effort and habits, generally enabling modification or development of personal characteristics with full conviction. Growth mindset characteristics include confidence, perseverance in facing problems, courage to accept opportunities and challenges, willingness to receive criticism and suggestions from others, and using others' success as motivational learning.

Entrepreneurial mindset represents entrepreneurial-oriented thinking frameworks, preferring to navigate uncertainty rather than avoiding it, viewing situations more simply than others, and willingness to make risky decisions.

Entrepreneurship education plays crucial roles in forming entrepreneurial mindset or entrepreneurial thinking patterns. According to Tessema (2012), entrepreneurship education represents learning processes conducted to acquire knowledge about entrepreneurship. Meanwhile, Iyortsuun (2020) defines entrepreneurship education as knowledge, skills, and attitudes impacting entrepreneurial character and behavior. Entrepreneurship education provides theoretical foundations for business concepts and behaviors (Wardana et al., 2020). Entrepreneurship education not only provides knowledge and skills regarding entrepreneurial concepts but forms attitudes, behaviors,

and thinking patterns (mindset) of entrepreneurs. According to Ahmed et al. (2020), entrepreneurship education represents one driver helping human resources learn more about starting businesses or entrepreneurship, while enhancing individual skills when starting businesses and building business management skills, creating human resources capable of becoming better entrepreneurs. Entrepreneurship education aims to develop human resources capable of creating employment opportunities for others.

Indonesia has several school categories including madrasah aliyah, senior high schools, and schools specialized in specific fields preparing graduates for immediate employment, commonly called vocational high schools. The expectation is that after graduation, students obtain employment with skills provided in subjects, particularly entrepreneurship, to realize jobs that can open new employment opportunities for job seekers, hopefully reducing high unemployment in Indonesia.

Among several vocational high schools in Surakarta, SMK Negeri 6 Surakarta represents a school with several specialized programs including Accounting, Office Management, Marketing, Travel Business, Multimedia, Broadcasting, and Software Engineering. SMK Negeri 6 Surakarta has long been recognized as an entrepreneurship-based school with school activities supporting students in running businesses. This research aims to determine the role of entrepreneurship education in building mindset among Grade XII Office Management students at SMK Negeri 6 Surakarta.

Research Methods

This research was conducted at SMK Negeri 6 Surakarta, located at Jl. Adi Sucipto No. 38, Kerten, Laweyan District, Surakarta City, Central Java. The research period spanned 5 months from September to December 2024, from proposal preparation to thesis report completion. Research permits were approved by the principal of SMK Negeri 6 Surakarta and the Regional Education Office Branch VII.

This research employed quantitative methods with correlational approaches, as this approach can determine the role of entrepreneurship education in building student mindset. The population used in this research consisted of Grade XII students at SMK Negeri 6 Surakarta, totaling 107 students, while the sample comprised 85 students obtained through Slovin formula calculations, as detailed in Table 1.

Table 1
Sample Selection

Class/Major	Population	Sample Calculation	Sample Size
XII Office Management 1	35	$\frac{35}{107} \times 85$	27
XII Office Management 2	36	$\frac{36}{107} \times 85$	29
XII Office Management 3	36	$\frac{36}{107} \times 85$	29
Jumlah			85

Source: Data processed by researcher (2024)

The sample selection process detailed in Table 1 demonstrates proportional representation across all Grade XII Office Management classes, ensuring balanced participation from each class while maintaining statistical validity for the research findings.

Research instruments utilized questionnaires with cluster random sampling techniques for sample selection, while data collection employed direct face-to-face methods with respondents and internet-based methods using electronic devices with Grade XII Office Management students through Google Forms containing 6 statement items. Likert scales used in this research employed 1-4 interval scoring: strongly agree, agree, disagree, and strongly disagree. Variables measured were broken down into variable indicators subsequently used as benchmarks for measuring instrument

items in statement form. According to Sugiyono (2022), Likert scales are used to reference individual attitudes and perceptions regarding social phenomena. Using Likert scales, each variable can be measured through assessment indicators and subsequently used as items in data compilation.

Instrument validation techniques employed validity and reliability tests using Karl Pearson product moment correlation formulas and Cronbach's Alpha. Normality tests in this research used One-Sample Kolmogorov-Smirnov methods. Data analysis employed t-tests, F-tests, determination coefficient analysis, effective and relative contributions, and multiple linear regression. All data processing and analysis stages were conducted using IBM SPSS 25.

According to Falah and Marlina (2022), three indicators are used to assess entrepreneurship education: (1) Educational programs fostering entrepreneurial interest, meaning students have undertaken entrepreneurship learning in schools to encourage participation in business activities through entrepreneurship practice and business programs, increasing students' willingness to become entrepreneurs; (2) Entrepreneurial knowledge and insights, where students who have pursued entrepreneurship education learn everything about entrepreneurship, including entrepreneurial activities, entrepreneurship benefits, and challenges faced when conducting entrepreneurial activities, resulting in students becoming very interested and wanting to become entrepreneurs; and (3) Awareness of business opportunities, where students can see entrepreneurial opportunities and become aware of entrepreneurship importance.

Results and Discussion

Research Results

Normality tests were conducted to determine whether independent and dependent variables are normally distributed in regression equations. Normality tests used in this research employed one-sample Kolmogorov-Smirnov tests processed using SPSS version 25 with 5% error rates. Data normality can be determined by examining significance values. If significance values > 0.05 , data are declared normally distributed.

Table 2
Normality Test Results

Asymp. Sig. (2-tailed)	.200 ^{c,d}
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Source: Primary data processed by researcher (2024)

Table 2 shows normality test results with significance values of $0.200 > 0.05$, indicating that collected data are normally distributed. Linearity tests aim to determine relationships between independent variables (X) and dependent variables (Y). This research employed Test for Linearity with SPSS 25 assistance. Data are declared linear when Sig. Deviation from Linearity > 0.05 .

Table 3
Linearity Test Results for X_1 toward Y

Variable	Sig Linierity	Sig. Deviation From Linierity	Description
Entrepreneurship Education	0,000	0,340	Linier

Source: Primary data processed by researcher (2024)

Based on Table 3, linearity values are $0.000 < 0.05$ and Deviation from Linearity values are $0.340 > 0.05$. These data indicate good linear relationships between entrepreneurship education variables (X_1) and entrepreneurial mindset variables (Y).

T-tests were used to determine whether independent variables influence dependent variables partially. Testing employed SPSS 25 programs, comparing t-calculated $>$ t-table with 0.05 significance levels.

Table 4
T-Test Results

Model	$t_{\text{calculated}}$	Significance Value	Description
Entrepreneurship Education	10,453	0,000	Signifikan

Dependent Variable: Entrepreneurial Mindset

Source: Primary data processed by researcher (2024)

Based on Table 4, significance values for entrepreneurship education (X_1) effects on entrepreneurial mindset (Y) are $0.000 < 0.05$, and t-calculated values are $10.453 > t\text{-table } 1.98932$. Therefore, H_0 is rejected and H_1 is accepted, indicating that entrepreneurship education (X_1) influences entrepreneurial mindset (Y).

Linear regression analysis determines independent variable effects on dependent variables. Regression calculations in this research employed SPSS 25 assistance, with results presented in Table 5.

Table 5
Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
(Constant)	11,821	1,272		9,296	,000
Entrepreneurship Education	,687	,066	,754	10.453	,000

Source: Primary data processed by researcher (2024)

Based on Table 5: (1) Constant values of 11.821 indicate that when Entrepreneurship Education (X_1) values equal 0, entrepreneurial mindset (Y) will be at 11.821; (2) Entrepreneurship education coefficient values (X_1) are 0.687, meaning average increases or decreases in entrepreneurial mindset for each entrepreneurship education unit are estimated at 0.687.

Determination coefficients determine independent variable influences or contributions to dependent variables based on R Square values. Determination coefficient results in this research are presented in Table 6.

Table 6
Coefficient of Determination

R	R Square	Adjusted R Square	Std. Error of the Estimate
0,754 ^a	0,568	0,563	1,176

Source: Primary data processed by researcher (2024)

From Table 6, R Square (R^2) values are 0.568, indicating that entrepreneurship education (X_1) influences entrepreneurial mindset (Y) by 56.8%, while 43.2% is influenced by other variables not explained in this research.

Discussion

Based on research analysis results, entrepreneurship education demonstrates positive

influences on entrepreneurial mindset among SMK Negeri 6 Surakarta students. This is evidenced using SPSS 25, where t-calculated values exceed t-table values ($t\text{-calculated } 10.453 > t\text{-table } 1.98932$) and significance values of $0.000 < 0.05$. Based on these results, H_0 is rejected and H_1 is accepted. Therefore, positive and significant influences exist between entrepreneurship education and entrepreneurial mindset.

Individual entrepreneurial mindset can emerge and develop when they possess deep understanding of entrepreneurship. This understanding encompasses knowledge about business management, risk comprehension, and opportunity identification. This research aligns with previous findings by Ni and Ye (2018), Nisa and Murniawaty (2020), and Rachmawati et al. (2022), stating that entrepreneurship education plays important roles in building entrepreneurial thinking patterns.

Linear regression analysis results show entrepreneurship education regression coefficient values of 0.687, meaning each one-unit increase in entrepreneurship education will increase entrepreneurial mindset by 0.687 units. Therefore, better entrepreneurship education received by students results in more positive entrepreneurial thinking patterns they possess. This is supported by Kumar et al. (2023) research stating that structured entrepreneurship education can enhance students' creative thinking abilities, and Zhang et al. (2023) highlighting the importance of experience-based learning in developing entrepreneurial mindset.

The findings presented in Tables 2 through 6 collectively demonstrate the robust relationship between entrepreneurship education and entrepreneurial mindset development. The normality and linearity tests confirm the statistical validity of the analysis, while the regression results provide strong evidence for the positive impact of entrepreneurship education on student mindset formation.

Conclusion

There is a positive and significant influence of entrepreneurship education on entrepreneurial mindset among Grade XII Office Management students at SMK Negeri 6 Surakarta. This is evidenced by t-test calculation results showing $t\text{-calculated } 10.453 > t\text{-table } 1.98932$ with significance values $0.000 < 0.05$, leading to H_0 rejection and H_1 acceptance. This proves that entrepreneurship education builds entrepreneurial mindset among Grade XII Office Management students at SMK Negeri 6 Surakarta, aligning with Machali's (2012) opinion that entrepreneurship education represents efforts to enhance student potential and form independent, creative, risk-taking, innovative, honest, disciplined, hardworking, leadership-oriented, responsible characters capable of seizing opportunities. The sample used in this research was also limited; therefore, future researchers are expected to reveal other factors influencing entrepreneurial mindset and increase the number of samples to be studied. The study's findings, as demonstrated through the comprehensive analysis presented in Tables 1-6, provide strong evidence for the effectiveness of entrepreneurship education programs in developing entrepreneurial thinking patterns among vocational students. Future research should consider expanding the scope to include multiple vocational schools, longitudinal studies to track mindset development over time, and qualitative components to better understand the mechanisms through which entrepreneurship education influences student thinking patterns. Additionally, investigating the specific components of entrepreneurship education that most effectively contribute to mindset development would provide valuable insights for curriculum designers and educators.

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