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The Effect of Entrepreneurship Education on Entrepreneurial Action Through Entrepreneurial Innovation and Entrepreneurial Self-Efficacy in Malang City Vocational Students

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A B S T R A C T

The purpose of this study is to analyze the impact of entrepreneurship on student entrepreneurship. This study uses a quantitative approach using hypothetical test measurement methods. The sample for this study consisted of 251 SMK classes XI and XII from Malan city. Data analysis was performed using the SEM-PLS method (structural equation modeling for partial least squares modeling). The results of this study show that entrepreneurship has a significant positive impact on student entrepreneurial innovation. Furthermore, entrepreneurship has a significant positive effect on entrepreneurial self-efficacy. Furthermore, entrepreneurship does not have a major negative impact on entrepreneurial measures. Entrepreneurial innovation has a significant positive impact on entrepreneurial measures. Entrepreneurs' self-efficacy also has a significant positive effect on entrepreneurial measures. This study also successfully tested the role of entrepreneurial innovation mediators and the self-efficacy of the relationship between entrepreneurship and entrepreneurial measures against professional students in Malan. The impact of this study will help improve professional educational institutions, improve education programs for entrepreneurship, and ensure that education programs align with market needs and current business world goals.

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INTRODUCTION

Entrepreneurship education is a very important topic for promoting entrepreneurial measures for students (Versteeg, 2022). Entrepreneurship encourages students to enable specific skills in entrepreneurial measurement (De Sousa et al., 2022). Student skills include the ability to identify opportunities, the development of innovative ideas, and strong trust in business realization (Walmsley & Wraae, 2022). However, Indonesia's unemployment rate is still very high at 8.4 million (Rendra erdkhadifa, 2022). The increase in unemployment and poverty rates in Indonesia are caused by several indicators, including: B. Lack of skills, lack of innovation, lack of trust, lack of management skills, limited marketing, and lack of business capital. According to the Indonesian Education Statistics Centre, students who graduate from SMK have the highest unemployment rate in Indonesia (Badan Pusat Statistics, 2023). Open Unemployment (TPT) for SMK Alumni in 2023 reached 9.45%, higher than all levels of education in Indonesia (Badan Pusat Statistics, 2023). The same goes for SMK students in Malan city, with unemployment rising every year. Based on data from the Central Statistics Bureau (BPS) of SMK Alumni, Malan City (2023), the number of unemployed people is high, i.33.72% and high school (SMA) alumni are 10.21%. SMK alumni are the highest open unemployment alumni at all education levels.

Based on the above topics, the researchers observed 10 SMKs in the Marang city area. 10 SMSK provides answers that students' independence in entrepreneurship management is only 5% to 30%. According to Ismi Laeli Fitri as a teacher of SMK PGRI 2 painting, Cece Setiani, a student SMK Muhammadiyah 2 painting who practices entrepreneurship, added that about 5% of students have begun selling the production of logos with AI (artificial intelligence) in their online shop. In the meantime, most SMK students are not brave enough to run the company independently, as they fear losses and do not have the capital to open the company. Innovation is the ability to develop and adapt products according to the times (Yaskun et al., 2023). In the meantime, self-efficacy is the trust that students have the ability to realize entrepreneurial behavior (Elnedi & Geith, 2021). This follows the theory of planned behavior (TPB), and strong training in entrepreneurship encourages students to take on higher entrepreneurial behavior (Abdullahi et al., 2021). TPB helps explain the role of innovation and self-efficacy as a bridge from the impact entrepreneurship has on entrepreneurial measures. TPB explains this phenomenon as a psychological approach in the impact of professional students' behaviors as entrepreneurs (Barba-Sãnchezetal., 2022). The variables tested refer only to correlations between entrepreneurship, self-efficacy, and entrepreneurial intentions such as research (Putri, S.K.G., M.A. B & Widiyanti, 2023) (Atmono et al., 2023) and (Febyanti et al., 2022). During the study, the relationship between entrepreneurial variables, entrepreneurial behavior, innovation, and entrepreneurial self-efficacy will be examined as new research. Furthermore, this study offers the role of entrepreneurship shaping to increase the measure of student entrepreneurs in the middle of an effective community environment. Entrepreneurship education encourages students to make time-

appropriate entrepreneurial changes. Students need to use innovative skills to enable access to comprehensive business skills and flexibility. Furthermore, students are confident in the creation of companies through their ability to promote the skills, products and services learned in schools and to participate innovatively in developed countries. Entrepreneurship education plays a role in strengthening students to address challenges and pursue entrepreneurial efforts with high trust.

To answer the novelties provided in this study, researchers conducted this study to answer the effects of innovation, self-efficacy on students, the effects of entrepreneurship on entrepreneurship, the effects of self-efficacy on entrepreneurship and entrepreneurship on entrepreneurship, and the effects of innovation and self-efficacy on entrepreneurship in entrepreneurship. The effectiveness of this study may contribute to this. First, research indicators help to promote improvements in skills in entrepreneurial measurement for professional students and develop effective entrepreneurial programs to develop political decisions. Second, the results of this study will help to refine education programs for entrepreneurship and contribute to professional educational institutions to ensure that education programs are consistent with market needs and the world goals of today's entrepreneurs.

LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship education serves as a dynamic learning journey that empowers students to not only launch but also independently oversee their own businesses (Walmsley & Wraae, 2022). This form of education fosters self-assurance, sharpens critical thinking, and encourages proactive behavior in turning business ideas into reality. Furthermore, it equips learners with the tools to brainstorm innovative concepts, establish startups, bring products to market, and embrace the uncertainties and risks tied to entrepreneurship (Mota et al., 2019). As Vanessa Ratten and Paul Jones (2020) point out, there are two core motivations behind the significance of entrepreneurship education: it imparts hands-on skills while cultivating a forward-thinking mindset. The ultimate goal is to nurture students' attitudes, actions, values, and aspirations, guiding them toward entrepreneurial success (Hasan et al., 2024). By engaging in this educational process, students are molded into capable individuals who can confidently take charge of their business ventures.

Entrepreneurial Innovation

The advancement of digital innovation in the business world plays a crucial role in navigating an ever-evolving and dynamic environment (Bernardus et al., 2022). This form of innovation represents a vital skill that entrepreneurs must cultivate to adapt and refine their products in line with contemporary demands (Ghezzi & Cavallo, 2020). By leveraging digital innovation, entrepreneurs can address challenges and uncover business opportunities that align with customer expectations (Rahayu & Ulumiyah, 2021). Peter F. Drucker (2022) highlighted that the core of innovation lies in the capacity to generate novel and distinct ideas through creative thinking and

actionable strategies, ultimately leading to new business prospects. For students, innovation serves as a tool to harness change and transform it into a platform for entrepreneurial success (Zhu et al., 2023). Moreover, fostering innovation can sharpen students' ability to recognize and seize emerging business opportunities (Rahayu et al., 2023).

Entrepreneurial Self-Efficacy

Self-efficacy refers to an individual's belief in their capability to successfully perform a specific task at a desired level of competence (Welsh et al., 2016). It is considered a critical factor in enhancing students' entrepreneurial actions (Kakouris et al., 2024). This belief plays a pivotal role in shaping students' ability to identify and execute viable business ideas. According to De Noble (2017), self-efficacy encompasses six key dimensions: creating new products and market opportunities, fostering an innovative environment, building relationships with investors, setting core business objectives, overcoming unforeseen challenges, and developing essential human resources. These dimensions highlight the significance of self-efficacy in entrepreneurship, as it contributes to setting higher business goals, strengthening commitment, achieving greater income potential, and promoting broader job creation (Durac & Moga, 2023).

Entrepreneurial Action

Entrepreneurial action refers to the process by which individuals identify business opportunities, develop innovative ideas, and manage operations to ensure the smooth functioning of their ventures (Ripollés & Blesa, 2023). Students who engage in entrepreneurial activities tend to demonstrate strong performance, as they take proactive steps and actively contribute to the growth of their businesses (Maziriri et al., 2023). These students often take the initiative to market products and services that align with the needs of their local customer base (Ciampi et al., 2021). Research conducted by Marzanna Katarzyna Witek-Hajduk et al. (2022) in Poland highlights that micro, small, and medium enterprises (MSMEs) can achieve rapid capital recovery—typically within one to three years—due to their resilience and determination in pursuing entrepreneurial endeavors.

METHODOLOGY

This study adopts a quantitative research design, utilizing SEM-PLS (Structural Equation Modeling with Partial Least Squares) to explore how entrepreneurship education (X) influences entrepreneurial action (Y), with entrepreneurial innovation (Z1) and entrepreneurial self-efficacy (Z2) acting as mediating factors (see Figure 1). A notable strength of SEM-PLS lies in its ability to maximize the explained variance of dependent variables while effectively estimating data based on the constructs of the measurement model (Hair et al., 2019).

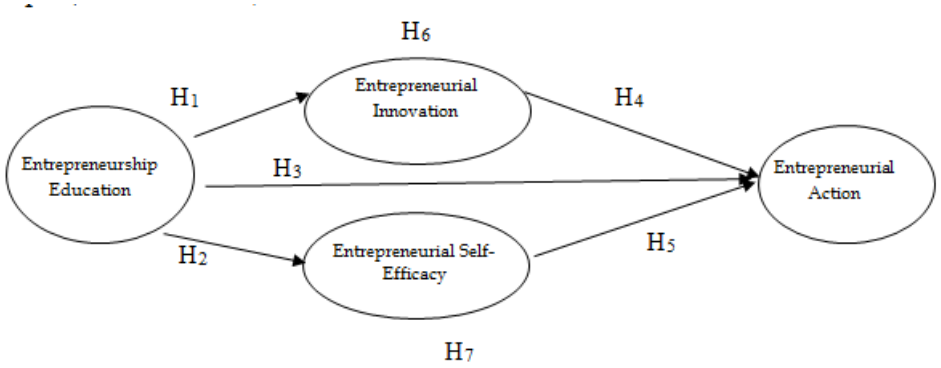

Figure 1. Research Framework Design

Respondents and Data Collection Techniques

This study involved students from vocational schools located in Malang City, with ten schools selected as the research sites. A total of 251 respondents participated in the study. The respondents were chosen based on specific criteria: they had completed full entrepreneurship education courses, which included both theoretical and practical components. Data collection for this research took place between September and November 2024. The study focused on four key variables: entrepreneurship education (X), entrepreneurial innovation (Z1), entrepreneurial self-efficacy (Z2), and entrepreneurial action (Y).

The demographic breakdown of the respondents revealed that the majority were female, with 203 participants (80.6%), while male participants accounted for 48 individuals (19.4%). These findings suggest that the study primarily explores and analyzes entrepreneurial actions among female students, offering insights into their unique perspectives and experiences in entrepreneurship.

Instrument Development and Data Analysis

The research instruments were designed by drawing on tools from previous studies and conducting an extensive review of relevant literature. The questionnaire was translated from English into Indonesian and refined to align with the local context, ensuring its suitability for the Indonesian environment. To measure entrepreneurship education, three items were adapted from Adeel et al. (2023), Ballesteros-Sola and Magomedova (2023), and Oulhou and Ibourk (2023). Entrepreneurial innovation was assessed using four items sourced from Ibarra-Vazquez et al. (2023) and Sreenivasan and Suresh (2023). For entrepreneurial self-efficacy, three items were derived from Mei et al. (2020) and Vuorio et al. (2023). Finally, entrepreneurial action was evaluated through three items adapted from Kong et al. (2020) and González-López et al. (2021). Participants were asked to respond to each statement using a 5-point Likert scale, with options ranging from 1 (strongly disagree) to 5 (strongly agree). To analyze the data, this study utilized Smart PLS 3.0, applying partial least squares structural equation modeling (PLS-SEM) to explore the relationships between the variables.

RESEARCH RESULT

External Model Evaluation

The external model of Partial Least Squares (PLS) is assessed to ensure the reliability of the measurement instrument. A model is considered reliable when it meets specific criteria, such as Composite Reliability (CR) and Cronbach's Alpha values exceeding 0.05 (Hair et al., 2019). In this study, the CR values for each construct ranged from 0.884 to 0.917, indicating strong reliability. Additionally, convergent validity is confirmed when the Average Variance Extracted (AVE) exceeds 0.50 (Hair et al., 2019). This study achieved convergent validity, as all items surpassed the 0.50 threshold, with AVE values for the constructs ranging between 0.525 and 0.582. Discriminant and convergent validity were further evaluated using cross-loading factors. The cross-loading values for all variables—entrepreneurship education (X), entrepreneurial innovation (Z1), entrepreneurial self-efficacy (Z2), and entrepreneurial action—ranged from 0.845 to 0.897, all exceeding the recommended threshold of 0.70, thus confirming discriminant validity.

Hypothesis Testing Results

The hypotheses in this study were tested using Structural Equation Modeling with Partial Least Squares (SEM-PLS). To assess the significance of the results, the researchers generated 251 bootstrap samples to calculate all t-statistics. As shown in Table 2, six out of the seven hypotheses were supported, with t-values ranging from 3.590 to 25.821, all of which exceeded the critical threshold of 1.96. However, one hypothesis was not supported, as its t-value was 0.517, which fell below the required threshold of 1.96.

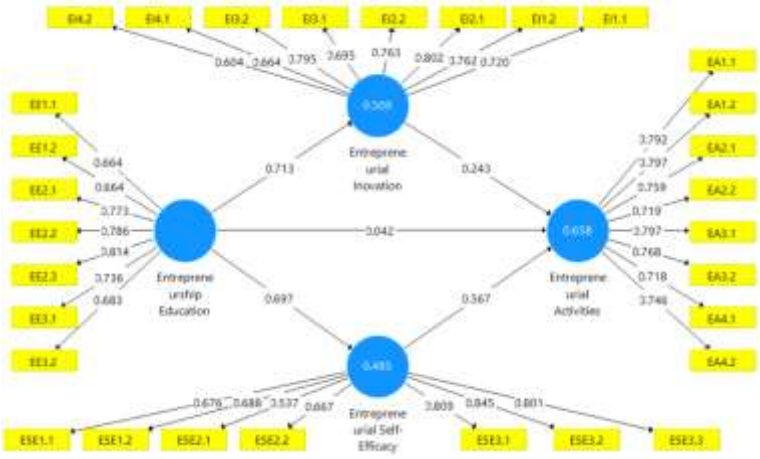

Figure 2. SEM-PLS Calculation Results

This study employs the R-Square (R^2) model to evaluate the predictive accuracy of the proposed framework. The coefficient of determination is utilized to assess the precision of predictions and to quantify the extent to which exogenous variables influence endogenous variables. When the model accounts for 100% of the data and the obtained value approaches 1, it indicates that the model effectively explains the variance in the endogenous variables (Fisher et al., 1995). Below are the results of the coefficient of determination derived from data analysis conducted using SmartPLS.

Table 2. R-Square Analysis Results

Variables	*R-Square*
Entrepreneurial Action	0.658
Entrepreneurial Innovation	0.509
Entrepreneurial Self-efficacy	0.485

Source: data processed by researcher, 2024

For each variable, the R-Square (R^2) value for the entrepreneurial action variable (Y) was calculated at 0.659. This indicates that 65.0% of the variance in entrepreneurial action can be explained by the entrepreneurship education variable (X), the entrepreneurial innovation variable (Z1), and the entrepreneurial self-efficacy variable (Z2). The remaining 35.0% is attributed to other factors outside the scope of this study. Similarly, the R-Square value for the entrepreneurial innovation variable (Z1) was found to be 0.509, suggesting that 50.9% of its variance is influenced by the entrepreneurship education variable (X), with the remaining 49.1% being influenced by external variables. For the entrepreneurial self-efficacy variable (Z2), the R-Square value was 0.485, meaning that 48.5% of its variance is explained by the entrepreneurship education variable (X), while the remaining 51.5% is influenced by other factors not included in the study. In general, a higher R-Square value reflects a stronger ability of the independent variables to explain the dependent variable, thereby enhancing the robustness of the structural equation model.

Tabel 3. Outer Model Estimation

Construct	Item	Outer Loading	α	CR	AVE
Entrepreneurship Education (EE)	EE1.1	0.664	0.856	0.890	0.538
	EE1.2	0.664			
	EE2.1	0.773			
	EE2.2	0.786			
	EE2.3	0.814			
	EE3.1	0.736			
	EE3.2	0.683			
Entrepreneurial Innovation (EI)	IE1.1	0.720	0.873	0.900	0.531
	IE1.2	0.762			
	IE2.1	0.802			
	IE2.2	0.763			
	IE3.1	0.695			
	IE3.2	0.795			
	IE4.1	0.664			
	IE4.2	0.604			
Entrepreneurial Self-Efficacy (ESE)	ESE1.1	0.676	0.845	0.884	0.525
	ESE1.2	0.688			
	ESE2.1	0.537			
	ESE2.2	0.667			

	ESE3.1	0.809			
	ESE3.2	0.845			
	ESE3.3	0.801			
Entrepreneurial Action (EA)	EA1.1	0.792	0.897	0.917	0.582
	EA1.2	0.797			
	EA2.1	0.759			
	EA2.2	0.719			
	EA3.1	0.797			
	EA3.2	0.768			
	EA4.1	0.718			
	EA4.2	0.746			

Source: data processed by researcher, 2024

The results of discriminant validity help determine the extent to which one construct correlates with other constructs and how effectively the items represent their respective constructs (Hair et al., 2017). According to Rasoolimanesh (2022), discriminant validity can be established using the Fornell-Larcker criterion, which requires that the square root of the Average Variance Extracted (AVE) for each construct be greater than its correlation with other constructs in the model (Fornell & Larcker, 1981). Alternatively, discriminant validity can also be assessed using the cross-loading method, where the outer loading of each item on its associated construct must exceed its loading on other constructs. The table below presents the discriminant validity results based on the SmartPLS analysis.

Table 4. Discriminant Validity

Variable	Entrepreneurship Education (X)	Entrepreneurial Innovation (Z1)	Entrepreneurial Self-Efficacy (Z2)	Entrepreneurial Action (Y)
Entrepreneurship Education (X)	0.733			
Entrepreneurial Innovation (Z1)	0.713	0.729		
Entrepreneurial Self-Efficacy (Z2)	0.697	0.831	0.725	
Entrepreneurial Action (Y)	0.610	0.744	0.798	0.763

Source: data processed by researcher, 2024

Based on Table 4, the discriminant validity results aligned with the Fornell-Larcker criteria indicate that the variables of entrepreneurship education (X), entrepreneurial innovation (Z1), entrepreneurial self-efficacy (Z2), and entrepreneurial action (Y) satisfy the required discriminant validity standards. Hypotheses 1, 2, 3, 4, 5, 6, and 7 were tested using both direct and indirect effects. A hypothesis is supported if the t-statistic value exceeds 1.96 and the p-value is less than 0.05, indicating a significant direct effect between the variables under investigation (Hair et al., 2019). This analysis utilizes path coefficients to assess the relationships. The results of the hypothesis tests are summarized in Table 5 below.

Table 5. Direct Effect Test

	Variables	Original Sampel	T-*Statistics*	P-*Values*	Description
H_1	Entrepreneurship Education > Entrepreneurial Innovation	0.713	25.883	0.000	Accepted
H_2	Entrepreneurship Education > Entrepreneurial Self-efficacy	0.697	20.401	0.000	Accepted
H_3	Entrepreneurship Education > Entrepreneurial Action	0.042	0.494	0.612	Rejected
H_4	Entrepreneurial Innovation > Entrepreneurial Action	0.243	3.593	0.000	Accepted
H_5	Entrepreneurial Self-Efficacy > Entrepreneurial Action	0.567	6.135	0.000	Accepted
H_6	Entrepreneurship Education > Entrepreneurial Innovation > Entrepreneurial Action	0.567	6.164	0.000	Accepted
H_7	Entrepreneurship Education > Entrepreneurial Self-efficacy > Entrepreneurial Action	0.173	3.610	0.000	Accepted

Source: data processed by researcher, 2024

DISCUSSION

Entrepreneurship education has a positive impact on entrepreneurial innovation, as evidenced by an initial sample value of 0.713, a p-value of 0.000 (which is less than 0.005), and a t-statistic of 26.584 (exceeding the threshold of 1.96). This suggests that students perceive entrepreneurship education as a key factor in fostering new innovations in entrepreneurial activities. For instance, the statement "school has taught many things about starting a business" received the highest average score of 4.095 compared to other items. This outcome can be attributed to the focus of entrepreneurship education in vocational high schools (SMK) in Malang City, which emphasizes skill development, such as identifying business opportunities, creating business plans, and fostering teamwork. Previous studies by Wei et al. (2019) have also highlighted that entrepreneurship education enhances students' ability to innovate. Similarly, research by Pham et al. (2023) underscores that innovation plays a critical role in entrepreneurship by enabling the creation of products or services that are more aligned with market needs and gain wider public recognition. Entrepreneurship education significantly influences the entrepreneurial self-efficacy of vocational students in Malang City, with an initial sample value of 0.691, a p-value of 0.000 (less than 0.005), and a t-statistic of 20.474 (greater than 1.96). The findings indicate that entrepreneurship education in SMKs has evolved beyond theoretical learning, producing tangible effects on students' entrepreneurial character and capabilities. Students demonstrate independence and creativity when engaging in tasks such as product planning, design development, prototype creation, production strategy formulation, and establishing quality standards. These outcomes align with the research by Matos et al. (2020), which highlights that entrepreneurship education equips students with skills like business planning, participation in

business simulations, negotiation experience, and the ability to identify and create business opportunities. Additionally, Pertiwi and Khafid (2021) found that entrepreneurship education strengthens students' personalities and boosts their self-confidence. The impact of entrepreneurship education on entrepreneurial self-efficacy can be linked to Ajzen's (1980) Theory of Planned Behavior. This theory helps explain how students' self-efficacy translates into entrepreneurial behavior (Newman et al., 2019). Self-efficacy refers to students' confidence in their ability to independently undertake entrepreneurial actions (Li et al., 2024). The findings of this study suggest that through entrepreneurship education, students gain skills such as planning, simulation, development, and innovation in creating products and services. These competencies form a solid foundation for enhancing students' self-efficacy, enabling them to independently pursue entrepreneurial endeavors (Shah et al., 2020).

However, entrepreneurship education does not significantly or positively influence students' entrepreneurial actions, as indicated by a t-statistic value of 0.507 (less than 1.96), a p-value of 0.612 (greater than 0.005), and an original sample value of 0.042. This suggests that key components of entrepreneurship education, such as fostering optimism, leadership, opportunity recognition, and strategic thinking, may not be effectively translating into entrepreneurial action. These results contrast with previous studies that found a significant positive effect of entrepreneurship education on entrepreneurial action. For instance, Ndofirepi (2020) highlighted that entrepreneurship education raises awareness among students and strengthens their ability to engage in entrepreneurial action within educational settings. Similarly, Boldureanu et al. (2020) demonstrated that students perceive entrepreneurship education as a tool to facilitate entrepreneurial action.

Entrepreneurial innovation significantly and positively influences entrepreneurial action, as indicated by a t-statistic value of 3.568 (exceeding 1.96), an original sample value of 0.246, and a p-value of 0.000 (below 0.005). Researchers employed four key indicators—new ideas, business opportunities, creativity, and visionary thinking—to assess how entrepreneurial innovation impacts entrepreneurial action. These indicators were found to effectively foster innovation, which in turn strengthens students' ability to engage in entrepreneurial activities. Similarly, Fang et al. (2022) found that entrepreneurial innovation is critical in drawing customer interest to the products or services created by students. Innovation also encourages students to participate in essential tasks such as communicating with customers, conducting market research, ensuring product or service quality, and promoting their offerings (Fang et al., 2022). Ciampi et al. (2021) further noted that innovation can drive students toward achieving exceptional entrepreneurial performance. By nurturing novel and competitive innovations, students are motivated to develop a strong enthusiasm for entrepreneurial endeavors.

Entrepreneurial self-efficacy also has a significant and positive effect on entrepreneurial action, with a t-statistic value of 6.207 (greater than 1.96), an

original sample value of 0.567, and a p-value of 0.000 (less than 0.005). These results highlight the vital role of entrepreneurial self-efficacy in encouraging vocational students to pursue entrepreneurial ventures. This conclusion is supported by the highest-rated statement: "the teacher motivated me to start a business," underscoring the critical influence teachers have in boosting students' confidence to take entrepreneurial steps. Previous studies, including those by Gregori et al. (2024), have similarly demonstrated that entrepreneurial self-efficacy has a significant and positive impact on entrepreneurial action. Garaika and Margahana (2019) further elaborated that young entrepreneurs who are confident in completing tasks, exhibit strong intellectual capabilities, and display high motivation tend to possess greater self-efficacy, which directly enhances their capacity to engage in entrepreneurial activities. The findings of this study contribute to Ajzen's (1980) Theory of Planned Behavior, which posits that self-efficacy plays a critical role in shaping individual behavior to achieve entrepreneurial action (Anjum et al., 2021). Self-efficacy encompasses two key dimensions: self-efficiency and self-control. Self-efficiency refers to students' skills in executing actions, while self-control reflects their belief in their ability to carry out entrepreneurial activities (Liu et al., 2019). Thus, the practical skills developed through entrepreneurial training, combined with the motivation provided by teachers, can enhance students' self-efficacy and enable them to engage in entrepreneurial actions.

Entrepreneurship education has a significant and positive influence on entrepreneurial action, mediated by entrepreneurial innovation, as evidenced by an original sample value of 0.176, a t-statistic of 3.578 (greater than 1.97), and a p-value of 0.000 (below the 0.05 threshold). This indicates that entrepreneurial innovation acts as a mediator between entrepreneurship education and students' entrepreneurial actions. Innovation helps students recognize the value of entrepreneurship education in managing a business, such as identifying opportunities and generating novel business ideas. Earlier research by Kohli et al. (2020) highlights that innovation is a crucial component of entrepreneurship education, enabling students to understand how to manage risks in business. Innovation also equips students with fresh ideas to address business challenges, empowering them to engage in entrepreneurial behavior effectively (Gupta et al., 2023). Additionally, Kazak et al. (2023) found that entrepreneurial innovation enhances service efficiency for customers, which motivates students to pursue entrepreneurial endeavors independently. Entrepreneurship education also exerts a significant and positive impact on entrepreneurial action through entrepreneurial self-efficacy, with an original sample value of 0.395, a t-statistic of 6.248 (greater than 1.97), and a p-value of 0.000 (below the 0.05 threshold). These results suggest that students who receive entrepreneurship education are more likely to develop high levels of self-confidence, which encourages them to take bold steps in starting and managing businesses. According to Lang and Liu (2019), entrepreneurial self-efficacy serves as a mediating factor in translating entrepreneurship education into entrepreneurial action among students. Self-efficacy enhances students' capacity to execute entrepreneurial actions and achieve specific goals (Fan et al., 2024). Junaidi et al.

(2023b) further emphasized that self-efficacy fosters resilience, enabling students to persevere and try again after encountering business failures.

CONCLUSIONS AND RECOMMENDATIONS

The study found that entrepreneurship education really helps students come up with innovative ideas and boosts their belief in their own ability to succeed (self-efficacy). However, it doesn't directly lead to students taking actual entrepreneurial actions, like starting a business. On the flip side, being innovative and having high self-efficacy do play a big role in pushing students to take those entrepreneurial steps. The study also confirmed that innovation and self-efficacy act as bridges between entrepreneurship education and students actually doing something entrepreneurial.

These findings are pretty important for improving entrepreneurship programs at vocational schools in Malang City. It turns out that just teaching entrepreneurship isn't enough to get students to start businesses on their own. That means schools need to do more to help students put what they've learned into practice. Things like mentorship programs, hands-on coaching, and opportunities to try out their ideas could make a big difference. By giving students more chances to experiment, learn from experience, and build confidence, schools can better prepare them to take the leap into entrepreneurship.

ADVANCED RESEARCH

Future researchers can analyze the factors that influence entrepreneurial actions with other variables such as digital technology such as e-commerce in accordance with the development of the business world now.

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