

## Exploring Entrepreneurial Intentions among Vocational High School Graduates: The Impact of Entrepreneurial Knowledge and Attitude

Volume 6 Issue 2  
(August, 2024)  
e-ISSN 2716-5191  
doi: [10.30997/ijsr.v6i2.449](https://doi.org/10.30997/ijsr.v6i2.449)

Fita Hanan Maulida<sup>1</sup>, Leny Noviani<sup>1</sup>, Sudarno<sup>1</sup>

<sup>1</sup>Universitas Sebelas Maret, Indonesia

### ARTICLE INFO

#### Article history:

Received: 03-24-2024

Revised version received: 04-02-2024

Accepted: 05-17-2024

Available online: 08-05-2024

#### Keywords:

entrepreneurship; vocational high school; PLS-SEM.

#### How to Cite:

Maulida, F. H., Noviani, L., & Sudarno, S. (2024). Exploring Entrepreneurial Intentions among Vocational High School Graduates: The Impact of Entrepreneurial Knowledge and Attitude. *Indonesian Journal of Social Research (IJSR)*, 6(2), 77-91.  
<https://doi.org/10.30997/ijsr.v6i2.449>

#### Corresponding Author:

Fita Hanan Maulida

[fitahanan@student.uns.ac.id](mailto:fitahanan@student.uns.ac.id)

### ABSTRACT

This research addresses the significant issue of unemployment among vocational school graduates in Indonesia and the low level of entrepreneurship among them. While previous studies have predominantly focused on the entrepreneurial intentions of high school and university student samples, there is a need to be more understanding of the entrepreneurial intentions of vocational school graduates. Bridging the gap, this study explores the determinants of entrepreneurial intentions among vocational school graduates, particularly examining the roles of entrepreneurial knowledge and attitude toward entrepreneurship. Additionally, this research explores attitude toward entrepreneurship as a mediating variable. The study employs a survey method with data from 305 vocational school graduates in Indonesia as participants. Data analysis uses partial least squares structural equation modelling (PLS-SEM) with SmartPLS 4.0 software. The findings indicate that entrepreneurial Knowledge has a significant positive relationship with attitude toward entrepreneurship and entrepreneurial intention. Furthermore, this research finds that attitude toward entrepreneurship exhibits a complementary partial mediation effect between entrepreneurial Knowledge and entrepreneurial intention. The study also suggests that interest in entrepreneurship and professional experience can enhance the entrepreneurial intentions of vocational high school graduates. These insights offer valuable guidance for policymakers and educators in designing strategies to promote entrepreneurship among vocational school graduates, ultimately addressing unemployment challenges in Indonesia.



Available online at <https://iojs.unida.ac.id/index.php/IJSR/>  
Copyright (c) 2024 by Indonesian Journal of Social Research (IJSR)

## 1. Introduction

The unemployment rate indicates the workforce's ability to work full-time and contribute to the nation's economic development. In Indonesia, unemployment remains a challenging issue to mitigate. The unemployment rate in Indonesia ranks second highest in Southeast Asia at 5.32%, following Brunei Darussalam (Trading Economics, 2023). In all age groups, the 15-24 age group constitutes the highest percentage of unemployed individuals at 46.10% (BPS, 2023). This is attributed to Indonesia's population structure, which is predominantly youthful. Vocational High Schools are one of the government's approaches to meet the industry's demand for skilled labour. However, government initiatives to vocationalize education to produce more job-ready graduates have yet to improve productivity and reduce unemployment significantly. Unemployment rates among vocational high school graduates continue to rise compared to graduates from other educational levels (Bakrun et al., 2019). Factors contributing to this high unemployment rate among vocational high school graduates include the lack of competence matching industry needs, a disproportionate ratio of the workforce to available job opportunities, and graduates' preference for employment over entrepreneurship (Pratana & Margunani, 2019; Syam et al., 2021; Zhan et al., 2023).

Increasing the national entrepreneurship rate is one of the government's efforts to expand job opportunities and enhance economic growth quality (Republik Indonesia, 2022). According to Presidential Regulation No. 2 of 2022, one of the procedures for fostering prospective entrepreneurs is increasing the community's willingness to engage in entrepreneurship. The government targets education as a means to popularize entrepreneurship. At the school level, particularly in vocational high schools, the government, through the Directorate of Vocational High School, sets Objectives Key Results (OKR) aiming to enhance entrepreneurship among vocational high school graduates by providing funding for Creative Product and Entrepreneurship Development and Entrepreneurial Skills Education (Dirjen Pendidikan Vokasi, 2022). Beyond industrial skills, vocational high school graduates are expected to possess the mindset and intention for entrepreneurship.

Entrepreneurial intention guides individuals in achieving their goals through communication, commitment, organization, and other efforts (Bird, 1988). Entrepreneurial behavior is considered deliberate, making intention a crucial factor in entrepreneurial activities (Krueger Jr et al., 2000). According to the Theory of Planned Behavior (TPB) developed by (Ajzen, 2020), attitude consistently emerges as a significant factor in measuring an individual's entrepreneurial intention (Lortie & Castogiovanni, 2015). Those with a positive perception of entrepreneurial behavior tend to have higher entrepreneurial intentions (Esfandiar et al., 2019). Conversely, individuals' experiences and education can significantly influence their perception of entrepreneurial intention (Miralles et al., 2016). Knowledge of entrepreneurship enables individuals to identify and pursue entrepreneurial opportunities (Roxas, 2014a). Entrepreneurial knowledge acquired through experience and observing business behaviors indicates a solid and positive entrepreneurial inclination (Miralles et al., 2016; Shan & Lu, 2020; Yuan et al., 2019).

Entrepreneurship has become a rapidly evolving field of study. However, research on entrepreneurial intention often relies heavily on student samples, particularly at the secondary and tertiary education levels (Lortie & Castogiovanni, 2015). There needs to be more research on entrepreneurial intention among graduates, especially in Indonesia, where there's a high unemployment rate among vocational high school graduates. This research contributes novelty by investigating entrepreneurial intention among vocational high school graduates in Indonesia, a novel approach given the limited existing studies.

Our primary contribution is to shed light on the entrepreneurial intentions of vocational high school graduates in Indonesia, informing policymakers, educators, and stakeholders about potential avenues for fostering entrepreneurship and addressing the challenges associated with unemployment among this demographic. The study seeks to provide insights into the factors influencing their willingness to engage in entrepreneurial activities. This includes examining the role of entrepreneurial Knowledge and attitude toward entrepreneurship. Understanding these factors is essential for devising effective strategies to promote entrepreneurship among vocational high school graduates and mitigate the high unemployment rate.

## **1.1. Theoretical Review**

The theoretical framework for developing the concept in this research is based on the Entrepreneurial Intention Model proposed by Ajzen (1991) and later developed by (Liñán, 2004). This model identifies three key elements: entrepreneurial Knowledge, attitude toward entrepreneurship, and entrepreneurial intention.

### *1.1.1. Entrepreneurial Intention*

Planned behavior can be formed through intention (Ajzen, 1991; Bird, 1988; Liñán & Fayolle, 2015). In the Theory of Planned Behavior (TPB), intentions and behavior are strongly related when measured at the same level of specificity concerning action, target, context, and time frame (Fishbein & Ajzen, 2011). Meta-analysis indicates that intentions can accurately predict various behavioral tendencies among respondents (Ajzen, 2005), including entrepreneurial activities (Bird, 1988; Krueger & Carsrud, 1993). Entrepreneurial activities typically occur due to planning or can be described as intentionally planned behavior. While business ideas may originate from inspiration, sustained attention and intention are needed to realize them (Bird, 1988).

Several experts in previous research have elucidated the role of intention in shaping behavior. Ajzen (1991) explains that intentions are assumed to capture motivational factors influencing behavior and indicate how determined individuals are, how much effort they are willing to exert in planning, and thus their likelihood of performing the behavior. Bird (1988) argues that intention is a state of mind directing an individual's attention toward a specific goal. Intention represents actions to be performed in the future (Bandura, 1989). In entrepreneurship, intention is a crucial characteristic in forming an organization or initiating entrepreneurial behavior (Krueger & Carsrud, 1993).

### *1.1.2. Attitude Toward Entrepreneurship*

Attitudes toward a specific behavior impact behavior via intentions (Conner & Armitage, 1998). Their expectations and beliefs influence an individual's attitude about how their behavior will affect them personally (Krueger Jr et al., 2000). Attitude is an evaluative response to behavior, whether positive or negative. Attitudes can develop reasoning through an individual's beliefs about the attitude object. Each belief at a certain level in entrepreneurship can determine actual or entrepreneurial behavior. In empirical studies, attitude toward entrepreneurship (ATE) is a good predictor of influencing intention (Lortie & Castogiovanni, 2015). A study conducted by Doanh and Bernat (2019) demonstrates a strong and positive relationship between ATE and EI. The positive ATE individuals possess is a strong and persistent predictor of the intention to start a business (Kibler, 2013).

Thus, the following hypotheses were formulated:

H1: Attitudes toward entrepreneurship significantly influence the intention to become entrepreneurs among vocational high school graduates.

### 1.1.3. Entrepreneurial Knowledge

Individuals who possess ideas, information skills, experience, and Knowledge to be interested in entrepreneurship activities are crucial for the economy (Skrzeszewski, 2006). Boosting individuals' confidence and motivation to participate in entrepreneurship can be achieved by having Knowledge about entrepreneurship (Roxas, 2014). Entrepreneurial knowledge (EK) can be obtained through entrepreneurship programs and individual experiences (Cantù, 2017; Miralles et al., 2016). Knowledge can be defined as information that has been structured, interpreted, and internalized. Information has been placed in context and filtered through experience (Skrzeszewski, 2006). EK refers to information or the level of Knowledge about entrepreneurship (Johannisson, 1991). Miralles et al. (2016) describe EK as a result of acquired experiences and education. Roxas (2014) defines EK as a conceptual and analytical understanding of the multifunctional and multi-aspect entrepreneurial process. Successful entrepreneurs always show a high enthusiasm for learning (Shan & Lu, 2020). Learning influencing EK includes cognitive and experiential learning. Cognitive learning refers to learning through observation and imitation of others' behavior, while experiential learning involves accumulating Knowledge through direct experience and reflection (Politis & Gabrielsson, 2009; Shan & Lu, 2020).

Knowledge results from human capital investment, such as education and work experience (Unger et al., 2011). Liñán et al. (2011) identify that EK significantly influences the venture creation decision. With Knowledge related to entrepreneurship, one can understand the benefits and risks of entrepreneurship. In a study by Liao et al. (2022), the relationship between EK and ATE has a positive and significant influence. This indicates that individuals with knowledge of seizing opportunities have good or positive ATE.

Thus, the following hypotheses were formulated:

H2: Entrepreneurial Knowledge has a significant influence on the attitudes toward entrepreneurship among vocational high school graduates.

H3: Entrepreneurial Knowledge has a significant influence on the entrepreneurial intention among vocational high school graduates.

H4: Entrepreneurial Knowledge has a significant influence on the entrepreneurial intention among vocational high school graduates through attitudes toward entrepreneurship.

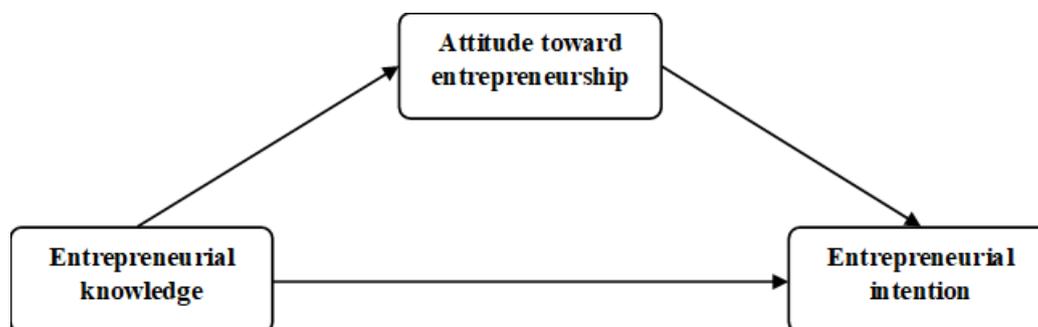


Figure 1 Conceptual framework

## 2. Methods

This study will utilize a population of vocational high school graduates from 2020-2023 who are in the early adulthood phase (18-24 years old) in Brebes Regency. An online survey was employed, and the total number of responses collected was 320. The survey was administered from January 9th to February 9th, 2024, utilizing convenience sampling. The values in the collected data were present; however, to reduce the risk of errors or inconsistency in respondents' answers to each statement item, standard deviation testing was conducted on each respondent's answers (Collier, 2020). Respondents with a standard deviation value below 0.25 were excluded because their survey responses had little to no variation. Out of 320 respondents, there were 15 data (4.6% of the sample) with a standard deviation below 0.25, resulting in 305 respondents being analysed (95.4%).

The demographic profile of the respondents is presented in Table 1. Out of the total 305 participants, the distribution between male and female respondents is quite balanced, with 44 percent and 56 percent, respectively. There is a predominance of respondents aged 18 to 20 years, likely due to the still intense relationship between the respondents and the school, leading to better response rates. Furthermore, 61 percent of vocational high school graduates in Brebes Regency have entered the workforce. In comparison, 16 percent have chosen to continue their studies, 4 percent have started their businesses, and 19 percent are still seeking employment.

Table 1 Participant's demographic profile

Characteristics	Category	% (N=305)
Gender	Man	44% (134)
	Woman	56% (171)
Age	18	29% (87)
	19	28% (86)
	20	23% (70)
	21	12% (36)
	22	8% (24)
	23	1% (2)
Occupation	Work	61% (185)
	Student	16% (50)
	Entrepreneur	4% (12)
	Unemployment	19% (58)

As measurement instruments, this study utilized multi-item scales modified from previous research. Most of the scales used in this study were adapted to fit the research context. The questionnaire employed a 7-point Likert scale. I evaluated entrepreneurial intention using 6 items and attitude toward entrepreneurship using 5 items, adapted from (Liñán & Chen, 2009). Moreover, entrepreneurial Knowledge consisted of 4 items adapted from Miralles et al. (2016). All statement items were translated into Bahasa Indonesia using the Back Translation Method with three translators and an expert in entrepreneurship research (Brislin, 1970). One translator assisted in translating the original statements into Indonesian (Bahasa), and another translator helped translate the revised statements back into English. Subsequently, the third

translator and the entrepreneurship expert compared the back-translated statements with the original statements and made any necessary adjustments. After adjustments, all statements were considered suitable for measuring the constructs.

The data analysis method utilized in this study is the partial least squares structural equation modelling (PLS-SEM) with SmartPLS 4.0 software developed by (Ringle & Sarstedt, 2016). Testing will be conducted following the recommended steps by Hair and Alamer (2022), which involve measurement model evaluation and structural model evaluation. Measurement model evaluation aims to assess the reliability and validity of the construct measures. In contrast, structural model evaluation determines the model's capability to explain and predict the target constructs. These steps are detailed in the Results and Discussion section.

### **3. Results and Discussion**

#### **3.1. Results**

##### *3.1.1. Measurement Model Evaluation*

The assessment of the measurement model involves examining outer loadings, internal consistency reliability, convergent validity, and discriminant validity criteria. First, we evaluated the outer loadings. Accepted outer loading values are above 0.70, but if they fall between 0.40 and 0.70, further analysis is needed to determine whether they affect internal consistency reliability or convergent validity to the extent that they deviate from the threshold (Hair & Alamer, 2022). In Table 2, almost all outer loading values indicate values within the safe range, except for ATE1 with 0.698 (<0.70). Retaining or removing ATE1 requires further analysis of internal consistency reliability and discriminant validity (Hair & Alamer, 2022). Secondly, this study evaluated internal consistency reliability using Cronbach's alpha (CA), reliability coefficient (CR<sub>a</sub>), and composite reliability (CR<sub>c</sub>). These measurements range between 0 and 1, with values between 0.70 and 0.95 considered satisfactory. As seen in Table 2, CA, CR<sub>a</sub>, and CR<sub>c</sub> values are within the threshold, thus establishing reliability. Thirdly, convergent validity was assessed using average variance extracted (AVE) values. Table 2 shows that the AVE values for EI (0.657), ATE (0.643), and EK (0.742) exceed the minimum threshold of 0.50. Therefore, the measures of all three constructs exhibit high levels of convergent validity.

The last step in measurement model evaluation was discriminant validity. The measurement model is presumed to exhibit discriminant validity, as indicated by the heterotrait-monotrait (HTMT) criteria, with a threshold below 0.90. Table 3 shows that the HTMT values are below 0.90, indicating that the HTMT criterion is established. All construct measures meet the recommended threshold, allowing for the retention of ATE1. Therefore, all measurements can be used and proceed to the structural model evaluation stage.

Table 2 Outer loading, reliability, convergent validity

Construct, item	Code	Outer loading	CA	CR <sub>a</sub>	CR <sub>c</sub>	AVE
<b>Entrepreneurial intention</b>			0.895	0.898	0.920	0.657
I am ready to do anything to be an entrepreneur	EI1	0.702				
My professional goal is to become an entrepreneur	EI2	0.792				
I will make every effort to start and run my firm	EI3	0.845				
I am determined to create a firm in the future	EI4	0.830				
I have very seriously thought of starting a firm	EI5	0.857				
I have the firm intention to start a firm someday	EI6	0.828				
<b>Attitude toward entrepreneurship</b>			0.859	0.864	0.900	0.643
Being an entrepreneur implies more advantages than disadvantages for me	ATE1	0.698				
A career as an entrepreneur is attractive to me	ATE2	0.866				
If I had the opportunity and resources, I would like to start a firm	ATE3	0.783				
Being an entrepreneur would entail great satisfaction for me	ATE4	0.854				
Among various options, I would rather be an entrepreneur	ATE5	0.798				
<b>Entrepreneurial Knowledge</b>			0.884	0.885	0.920	0.742
Thanks to my experience, I know how to start a viable business	EK1	0.848				
Thanks to my work/internship experience, I know well client's problems	EK2	0.877				
It is easy for me to identify business opportunities in my professional area	EK3	0.868				
Thanks to my Knowledge, I am comfortable at my work/internship as I know how the business works	EK4	0.851				

Table 3 Discriminant Validity-HTMT

	ATE	EI	EK
ATE			
EI	0.877		
EK	0.560	0.666	

### 3.1.2. Structural Model Evaluation

After assessing the measurement model, it is crucial to test the structural model. I am conducting the structural model test. The initial step is to check for multicollinearity among constructs using variance inflation factor (VIF) calculations. If collinearity is not an issue, the next step is to test the structural model, which illustrates the strength of relationships between latent variables. Once the significance of the relationships between variables is determined, it is essential to evaluate the explanatory and predictive power through  $R^2$ ,  $f^2$ , and PLSpredict. Collinearity issues arise when VIF values exceed 5 (Hair & Alamer, 2022). Based on the

collinearity testing results in Table 4, VIF values are below the threshold of <5, indicating that all estimated constructs are free from collinearity and can be used for structural model testing.

Table 4 Collinearity test

	ATE	EI	EK
ATE		1.374	
EI			
EK	1.000	1.374	

Table 5 Direct and indirect effect

	$\beta$	t-value	p-values	CI-LB	CI-UB	$f^2$	Decision
ATE -> EI	H1 0.630	15.152	0.000	0.546	0.708	0.864	Supported
EK -> ATE	H2 0.522	9.461	0.000	0.412	0.625	0.374	Supported
EK -> EI	H3 0.284	6.550	0.000	0.200	0.370	0.176	Supported
EK -> ATE -> EI	H4 0.329	8.355	0.000	0.254	0.408	-	Supported

Note. t value >1.96, p-value<0.05, two-tailed testing.  $\beta$ =path coefficient, SD=standard deviations, CI-LB=confident interval-lower bound, CI-UB=confident interval-upper bound.

Table 6 R<sup>2</sup> estimation

	R <sup>2</sup>	R <sup>2</sup> adjusted
ATE	0.272	0.270
EI	0.665	0.663

After addressing the collinearity issue, the next step is to assess the significance and relevance of the relationships in the structural model. In this stage, bootstrapping is conducted using 10,000 subsamples with a significance level of 5 percent. The significance level is based on Nitzl (2016), where the confidence interval (CI) value is not equal to zero. The results in Table 5 show that all direct and indirect relationships have confidence interval values that are not equal to zero, indicating that the relationships ATE-EI ( $\beta=0.630$ ,  $p<0.05$ ,  $CI\neq 0$ ), EK-ATE ( $\beta=0.522$ ,  $p<0.05$ ,  $CI\neq 0$ ), EK-EI ( $\beta=0.284$ ,  $p<0.05$ ,  $CI\neq 0$ ), and EK-ATE-EI ( $\beta=0.329$ ,  $p<0.05$ ,  $CI\neq 0$ ) are significant, thereby supporting H1, H2, H3, and H4. The direct and indirect effects results are significant and point in the same direction, indicating that ATE provides a complementary partial mediation effect on the relationship between EK and EI.

The next step is to assess the model's explanatory power through R<sup>2</sup> and  $f^2$ . The R<sup>2</sup> value depicts the variance explained in each endogenous construct and measures the model's predictive power (Hair & Alamer, 2022). As a general guideline, R<sup>2</sup> values of 0.67, 0.33, and 0.19 indicate a strong, moderate, and weak model, respectively. Based on the R<sup>2</sup> coefficient values in Table 6, EK can predict 27% of ATE variance with weak accuracy. Meanwhile, EK and ATE can predict 66% of the variance of EI, which is considered strong predictive power. The  $f^2$  value is obtained from removing a specific predictor construct that affects the R<sup>2</sup> of an endogenous construct (Hair et al., 2022). It has small, medium, and large effect categories if it has values of 0.02, 0.15, and 0.35, respectively (Cohen, 2013). It can be observed that the relationships ATE-EI ( $f^2=0.864$ ) and EK-ATE ( $f^2=0.374$ ) have large effect sizes. Meanwhile, EK-EI ( $f^2=0.176$ ) indicates a medium effect size.

Table 7 PLSpredict estimation

	Q <sup>2</sup> predict	PLS-SEM_RMSE	LM_RMSE	Δ
ATE1	0.192	1.282	1.293	-0,011
ATE2	0.129	1.234	1.246	-0,012
ATE3	0.171	0.983	0.995	-0,012
ATE4	0.182	1.129	1.140	-0,011
ATE5	0.154	1.206	1.199	0,007
EI1	0.225	1.252	1.270	-0,018
EI2	0.183	1.268	1.289	-0,021
EI3	0.269	1.019	1.029	-0,010
EI4	0.211	0.989	1.001	-0,012
EI5	0.321	1.041	1.047	-0,006
EI6	0.224	0.997	1.004	-0,007

Note. Δ=difference value between PLS-SEM\_RMSE and LM\_RMSE

Furthermore, this study applies PLSpredict to determine the predictive power of the proposed model. I R<sup>2</sup> indicates how well the model explains variation in the sample data, PLSpredict is proposed to enhance the reliability and accuracy of predictive modelling by evaluating the predictive performance of the model beyond the sample used (Shmueli, 2010). To interpret PLS prediction, comparisons must be made between RMSE values and a naïve benchmark (LM). Table 7 compares PLS-SEM RSME with LM RSME, revealing that one indicator (ATE5) has a higher PLS-SEM RSME value than LM RSME. According to guidelines formulated by Shmueli et al. (2019), if the minority (or the same number) of indicators in the PLS-SEM analysis yields higher prediction errors than the naïve LM benchmark, this indicates a medium predictive power.

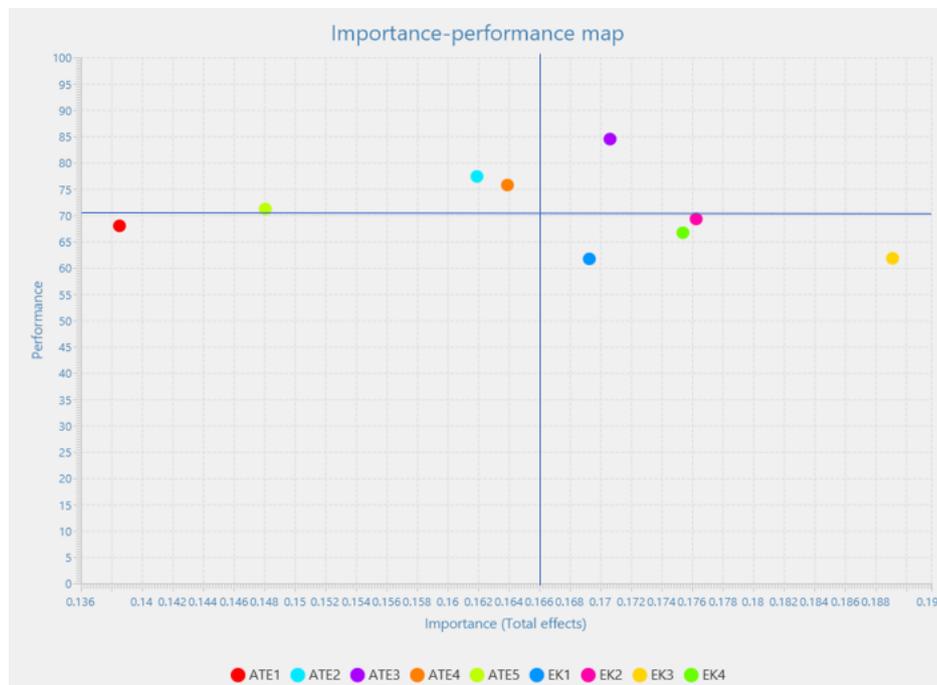


Figure 2 Important-Performance Map (IPMA) of Indicators

This study also includes a vital performance map (IPMA) for a more specific discussion. IMA compares the total effects, representing the importance of predictor constructs in shaping the target construct, with the average latent variable scores indicating their performance. The aim is to highlight predictor constructs that significantly influence the target construct but

perform poorly (Ringle & Sarstedt, 2016). Following the procedure outlined by Ringle and Sarstedt (2016), after computing the performance and importance values, an importance-performance map is created, and a middle line is drawn on the y-axis and x-axis, representing the average of their values. In this study, IPMA focuses on the predictor indicators (ATE and EK) against the target construct indicator (EI), as shown in Figure 2.

The map is divided into four quadrants. In Quadrant I, indicator ATE3 is located in a place of both high importance and performance levels and should be maintained. Quadrant II contains indicators ATE2, ATE4, and ATE5, which have good performance but importance levels below average (especially ATE5). Quadrant III includes ATE1, with slightly below-average performance and poor importance levels. Finally, in Quadrant IV, indicators EK1, EK2, EK3, and EK4 have performance levels below average but of good importance.

### 3.2. Discussion

This study was conducted in response to high unemployment rates and the tendency for low entrepreneurship rates among vocational high school graduates. Intention serves as a measure of an individual's desire to create a new business. This study examines entrepreneurial knowledge and attitude toward entrepreneurship as predictors used to determine the entrepreneurial intention of vocational high school graduates. Firstly, the research findings indicate that attitude toward entrepreneurship (ATE) significantly influences entrepreneurial intention (EI). These results align with several previous studies that have revealed similar outcomes (Doanh & Bernat, 2019; Entrialgo & Iglesias, 2016; Esfandiar et al., 2019; Liao et al., 2022; Malebana & Mothibi, 2023). ATE has the most significant impact on the proposed model, reinforcing the study conducted by Lortie and Castogiovanni (2015), which found that ATE is a consistent and effective variable in measuring EI.

These findings are further reflected in the performance and total effects of indicators used to measure EI (see Figure 2). Almost all indicators employed in the model demonstrate good performance and total effects (ATE3, ATE2, ATE4), with two indicators (ATE1 and ATE5) falling below average regarding total effects. The three indicators (ATE3, ATE2, ATE4) indicate their crucial importance and good performance in measuring EI. These results indicate that the interest of vocational school graduates in entrepreneurship appears promising, yet they still need to choose entrepreneurship as a career option. This hesitation may stem from perceiving security and workload as better in employment roles (Schjoedt & Shaver, 2007). The stability of salaries still makes employment an attractive career choice for many individuals (Failla et al., 2017).

Not only ATE but also entrepreneurial Knowledge (EK) has a significant positive influence on ATE (H2) and EI (H3). This finding differs from the study conducted by (Miralles et al., 2016). Although similar results were found regarding the EK-ATE relationship, the opposite was observed for the EK-EI relationship. For vocational high school graduates, having entrepreneurial experience and knowledge gives them a more favourable attitude about starting their businesses. These results also support the study conducted by Liñán et al. (2011), which found that personal-level variables, especially Knowledge, play a relevant role in EI.

Although they exhibit significant and positive relationships, the path coefficient values between EK and EI are the smallest ( $\beta=0.284$ ,  $f^2=0.176$ ) among other relationships. The EK indicators all demonstrate a good importance level but performance below the average (EK1, EK2, EK3, EK4). Improving the performance of these indicators becomes a priority to enhance the EI of vocational high school graduates. I have proven that EI can be focused on providing or creating more professional experiences through EK. Internships and enterprise training are considered the most efficient in promoting entrepreneurship among young adults (Pigozne et al., 2019). At the educational level, project-based learning and experiential

learning can aid students in acquiring entrepreneurial knowledge (Maulida et al., 2024; Noviani et al., 2022).

The study also measures the indirect relationship between EK and EI through ATE. The results indicate that ATE effectively mediates the relationship between EK and EI. These findings confirm previous studies with similar findings (Miralles et al., 2016; Saptono et al., 2019). Changes in an individual's attitude toward entrepreneurship can significantly influence their knowledge and entrepreneurial intention. By maintaining a positive attitude towards entrepreneurship, individuals are likely to continuously refine and utilize their knowledge to assist them in creating businesses.

#### 4. Conclusion

This study empirically investigates the relationship between entrepreneurial Knowledge, attitude toward entrepreneurship, and entrepreneurial intention. The findings reveal a positive and significant relationship between entrepreneurial Knowledge and attitude toward entrepreneurship, as well as between entrepreneurial Knowledge and entrepreneurial intention directly and indirectly through attitude toward entrepreneurship. Based on these findings, the government's role in promoting entrepreneurship can be enhanced by increasing knowledge and experience through educational institutions and partnerships. B. By providing professional and managerial experience, vocational high school graduates can identify business opportunities in their respective fields. Additionally, offering positive promotion about entrepreneurship, support, and ease of access to resources can enhance the efforts of vocational high school graduates to acquire Knowledge, thereby increasing their entrepreneurial intentions.

The limitations of this study include implementing the entrepreneurial intention model on a single group, namely graduates of public vocational high schools in one region, which may result in less accurate findings for generalization to all vocational high school graduates. Therefore, future research with a broader geographical scope and a more comprehensive range of respondent ages could be conducted to enhance generalizability. Furthermore, this study only incorporates Knowledge into the intention model. In future research, it is hoped that other personal-level variables such as family background, gender, and personality factors can be included as direct, indirect, or moderating variables in the entrepreneurship intention model. Government programs related to promoting entrepreneurship could be considered about entrepreneurial intentions. Subsequent research focusing on this aspect is expected to provide scientific insights into the effectiveness of these programs.

#### Acknowledgment

This work was supported by Program Beasiswa Pendidikan Indonesia Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, Balai Pembiayaan Pendidikan Tinggi (BPPT) and Lembaga Pengelola Dana Pendidikan (LPDP) Republik Indonesia.

#### References

- 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)
- Ajzen, I. (2005). *Attitudes, Personality And Behavior second.*, Buckingham.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>

- Bakrun, M., Khurniawan, A. W., Widjajanti, C., Razik, A. L., Adi, F. P., Majid, M. A., & Syafaa, A. R. (2019). *Vocational education policy white paper vol. 1 nomor 9 tahun 2019: Profil lulusan SMK terhadap tingkat penyerapan tenaga kerja di Indonesia tahun 2018-2019*.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. <https://doi.org/10.5465/amr.1988.4306970>
- BPS. (2023). Tabel Dinamis Subjek Tenaga Kerja: Tingkat Pengangguran Terbuka Berdasarkan Tingkat Pendidikan. Badan Pusat Statistik. <https://www.bps.go.id/subject/6/tenaga-kerja.html#subjekViewTab5>
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Cantù, C. (2017). Entrepreneurial knowledge spillovers: Discovering opportunities through understanding mediated spatial relationships. *Industrial Marketing Management*, 61, 30–42. <https://doi.org/10.1016/j.indmarman.2016.07.002>
- Collier, J. (2020). *Applied structural equation modeling using AMOS: Basic to advanced techniques*. Routledge. <https://doi.org/10.4324/9781003018414>
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. <https://doi.org/10.1111/j.1559-1816.1998.tb01685.x>
- Dirjen Pendidikan Vokasi. (2022). *Peraturan Direktur Jenderal Pendidikan Vokasi Nomor 34 Tahun 2022 Tentang Petunjuk Teknis Bantuan Pemerintah Program Pendidikan Kecakapan Wirausaha Tahun 2023*. Sekretariat Direktorat Jenderal Pendidikan Vokasi.
- Doanh, D. C., & Bernat, T. (2019). Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behavior. *Procedia Computer Science*, 159, 2447–2460. <https://doi.org/10.1016/j.procs.2019.09.420>
- Entrialgo, M., & Iglesias, V. (2016). The moderating role of entrepreneurship education on the antecedents of entrepreneurial intention. *International Entrepreneurship and Management Journal*, 12(4), 1209–1232. <https://doi.org/10.1007/s11365-016-0389-4>
- Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, 94, 172–182. <https://doi.org/10.1016/j.jbusres.2017.10.045>
- Failla, V., Melillo, F., & Reichstein, T. (2017). Entrepreneurship and employment stability—Job matching, labour market value, and personal commitment. *Journal of Business Venturing*, 32(2), 162–177. <https://doi.org/10.1016/j.jbusvent.2017.01.002>
- Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Psychology press. <https://doi.org/10.4324/9780203838020>
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>

- Johannisson, B. (1991). University training for entrepreneurship: Swedish approaches. *Entrepreneurship & Regional Development*, 3(1), 67–82. <https://doi.org/10.1080/08985629100000005>
- Kibler, E. (2013). Formation of entrepreneurial intentions in a regional context. *Entrepreneurship & Regional Development*, 25(3–4), 293–323. <https://doi.org/10.1080/08985626.2012.721008>
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/s0883-9026\(98\)00033-0](https://doi.org/10.1016/s0883-9026(98)00033-0)
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315–330. <https://doi.org/10.1080/08985629300000020>
- Liao, Y.-K., Nguyen, V. H. A., & Caputo, A. (2022). Unveiling the role of entrepreneurial Knowledge and cognition as antecedents of entrepreneurial intention: A meta-analytic study. *International Entrepreneurship and Management Journal*, 18(4), 1623–1652. <https://doi.org/10.1007/s11365-022-00803-8>
- Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3(1), 11–35.
- Liñán, F., & Chen, Y. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11, 907–933. <https://doi.org/10.1007/s11365-015-0356-5>
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7, 195–218. <https://doi.org/10.1007/s11365-010-0154-z>
- Lortie, J., & Castogiovanni, G. (2015). The theory of planned behavior in entrepreneurship research: What we know and future directions. *International Entrepreneurship and Management Journal*, 11, 935–957. <https://doi.org/10.1007/s11365-015-0358-3>
- Malebana, M. J., & Mothibi, N. H. (2023). Relationship between prior entrepreneurship exposure and entrepreneurial intention among secondary school learners in Gauteng, South Africa. *Journal of Innovation and Entrepreneurship*, 12(1), 43. <https://doi.org/10.1186/s13731-023-00309-9>
- Maulida, F. H., Noviani, L., & Sudarno, S. (2024). How Entrepreneurship Education Can Help Student Thrive in the Digital Age?: The Implications of Creative and Innovative Learning. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 10(1), 218. <https://doi.org/10.33394/jk.v10i1.10815>
- Miralles, F., Giones, F., & Riverola, C. (2016). Evaluating the impact of prior experience in entrepreneurial intention. *International Entrepreneurship and Management Journal*, 12, 791–813. <https://doi.org/10.1007/s11365-015-0365-4>

- Nitzl, C. (2016). The use of partial least squares structural equation modelling (PLS-SEM) in management accounting research: Directions for future theory development. *Journal of Accounting Literature*, 37(1), 19–35. <https://doi.org/10.1016/j.acclit.2016.09.003>
- Noviani, L., Wahida, A., & Umiatsih, S. T. (2022). STRATEGI IMPLEMENTASI PROYEK KEWIRAUSAHAAN DI SMA NEGERI 1 SUMBERLAWANG. *Jurnal Kewirausahaan dan Bisnis*, 27(1), 60. <https://doi.org/10.20961/jkb.v27i1.58934>
- Pigozne, T., Luka, I., & Surikova, S. (2019). Promoting Youth Entrepreneurship and Employability through Non-Formal and Informal Learning: The Latvia Case. *Center for Educational Policy Studies Journal*, 9(4), 129–150. <https://doi.org/10.26529/cepsj.303>
- Politis, D., & Gabrielsson, J. (2009). Entrepreneurs' attitudes towards failure: An experiential learning approach. *International Journal of Entrepreneurial Behavior & Research*, 15(4), 364–383. <https://doi.org/10.1108/13552550910967921>
- Pratana, N. K., & Margunani, M. (2019). Pengaruh sikap berwirausaha, norma subjektif dan pendidikan kewirausahaan terhadap intensi berwirausaha. *Economic Education Analysis Journal*, 8(2), 533–550.
- Republik Indonesia. (2022). Peraturan Presiden Republik Indonesia Nomor 2 Tahun 2022 tentang Pengembangan Kewirausahaan Nasional Tahun 2021 -2024. In *Lembaran Negara Republik Indonesia Tahun 2022 Nomor 3*. Kementerian Sekretariat Negara.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results. *Industrial Management & Data Systems*, 116(9), 1865–1886. <https://doi.org/10.1108/IMDS-10-2015-0449>
- Roxas, B. (2014). Effects of entrepreneurial Knowledge on entrepreneurial intentions: A longitudinal study of selected South-east Asian business students. *Journal of Education and Work*, 27(4), 432–453. <https://doi.org/10.1080/13639080.2012.760191>
- Saptono, A., Wibowo, A., Narmaditya, B. S., Kusumojanto, D. D., & Hermawati, M. (2019). Determinant Factors of Development Entrepreneurial Education: Lesson from Senior High School in Indonesia. *Universal Journal of Educational Research*, 7(12), 2837–2843. <https://doi.org/10.13189/ujer.2019.071234>
- Schjoedt, L., & Shaver, K. G. (2007). Deciding on an Entrepreneurial Career: A Test of the Pull and Push Hypotheses Using the Panel Study of Entrepreneurial Dynamics Data. *ENTREPRENEURSHIP THEORY and PRACTICE*. <https://doi.org/10.1111/j.1540-6520.2007.00197.x>
- Shan, B., & Lu, X. (2020). Founders social ties, learning and entrepreneurial knowledge acquisition in China. I *Guanxi in Contemporary Chinese Business* (pp. 101–121). Routledge. <https://doi.org/10.4324/9781003124856-8>
- Shmueli, G. (2010). The Explain or to Predict? *Statistical Science*, 25(3). <https://doi.org/10.1214/10-STS330>
- Skrzeszewski, S. (2006). *The knowledge entrepreneur*. S arecrow Press Lanham, MD. <https://doi.org/10.1086/523922>
- Syam, A., Rakib, M., Jufri, M., Utami, N. F., & Sudarmi, S. (2021). Entrepreneurship education, information literacy, and entrepreneurial interests: An empirical study. *Academy of Entrepreneurship Journal*, 27(1), 1–11.

Trading Economics. (2023). *Tingkat Pengangguran - Daftar Negara - Asia*. Tingkat Pengangguran-Asia. <https://id.tradingeconomics.com/country-list/unemployment-rate?continent=asia>

Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341–358. <https://doi.org/10.1016/j.jbusvent.2009.09.004>

Yuan, L., Qalati, S., Iqbal, S., Hussain, R., & Ali, S. (2019). Impact of prior work experience on entrepreneurial intention and theory of planned behaviour in the context of Pakistan. *J Entrep Organ Manag*, 8, 268.

Zhan, Q., Li, G., & Zhan, W. (2023). Measurement of the coupling coordination relationship between the structures of secondary vocational school programs and industries in China. *H manities and Social Sciences Communications*, 10(1), 1–10.