International Journal of Business and Quality Research

https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

# Self-Efficacy In Entrepreneurship As A Mediator Between Industrial Work Practice And Entrepreneurship Education

**Sari Ayu Imaniyah[1] , Heri Pratikto[2], Ludi Wishnu Wardana[3]**

[1,2,3] Faculty of Economics and Business, Universitas Negeri Malang, Indonesia

Email Korespondensi : sari.ayu.2404158@students.um.ac.id, heri.pratikto.fe@um.ac.id, ludi.wishnu.fe@um.ac.id

**Abstract**

*This study aims to analyze the effect of the Double Track Program and entrepreneurship education on the entrepreneurial readiness of high school students in Sumenep Regency, with entrepreneurial self-efficacy as a mediator. The problem raised is the low level of entrepreneurial readiness despite participating in entrepreneurship programs. The research method used a quantitative approach with data collection through questionnaires on 238 student respondents and data analysis using SEM-PLS. The results of the analysis show that the Double Track Program and entrepreneurship education have a significant effect on entrepreneurial readiness, and entrepreneurial self-efficacy mediates this relationship. In conclusion, strengthening entrepreneurial self-efficacy is important to improve the effectiveness of the program and students' readiness for entrepreneurship.*

**Keywords: Double Track Program, Entrepreneurship Education, Entrepreneurial Self-Efficacy, Entrepreneurial Readiness**

## INTRODUCTION

The phenomenon of entrepreneurship has become a major focus in various parts of the world, especially in the context of economic growth and job creation. At the global level, entrepreneurship is considered a driver of innovation and competitiveness in various developed and developing countries. Developed and developing countries are striving to create ecosystems that support entrepreneurship by integrating entrepreneurship-related education and learning into school curricula (Udekwe & Iwu, 2024). This aims to prepare the younger generation to have the skills and mindset necessary to face the challenges of an increasingly competitive job market (Puriwat & Tripopsakul, 2020).



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

In Indonesia, this phenomenon is also evident in the increasing attention given to entrepreneurship as a solution to overcome unemployment and boost the local economy (Maydiantoro et al., 2021). Although many efforts have been made to improve the local economy, such as assisting the development of MSMEs and providing entrepreneurship courses, there are still many challenges that must be faced, one of which is the lack of knowledge and practical skills among school and university graduates (Okolie et al., 2020).

Unemployment is a problem and concern for countries that want to continue to develop. The International Monetary Fund (IMF) projects that the unemployment rate in Indonesia will rise to 5.0% in 2025 from 4.9% in the previous year (Hasudungan et al., 2023). This projection was also presented in the World Economic Outlook report released on April 22, 2025. Meanwhile, the unemployment rate based on education is highest among vocational high school (SMK) and senior high school (SMA) graduates compared to diploma and bachelor's degree graduates (BPS, 2025). Various factors can contribute to high unemployment among high school graduates, including a lack of understanding of the entrepreneurship education provided. Second, students lack the skills to start a business (Shofwan et al., 2023). Third, many students choose to work rather than start a new business, and this puts them at risk of becoming openly unemployed as they wait for job offers (Makwara et al., 2022).

One approach that is expected to improve entrepreneurial readiness is the Double Track Program, which integrates academic education with practical skills training (Pardo & Barac, 2020; Mahiroh, 2024). This program is designed to provide students with direct experience in the business world, so they can develop relevant skills and understand market dynamics (Hozairi et al., 2024). The goal of the double track program itself is to equip students with knowledge, skills, and an entrepreneurial spirit so that they can prepare graduates who are ready to work and start a business. However, challenges in implementing this program, such as a lack of support from industry and limited resources, often hinder its effectiveness, meaning that the double track program offered to students is not optimal and has not fully increased student readiness and participation in entrepreneurship.

Entrepreneurship education is one of the important factors that needs to be considered in fostering the intention and readiness to start a business. Entrepreneurship education as a learning process in the context of entrepreneurship has a more positive influence on recognizing opportunities to start a business through exploration and the utilization of new information and knowledge (Nurhayati & Machmud, 2019). With entrepreneurship education, it is hoped that students will be able to create their own business activities (Hasanudin et al., 2021). Although many schools have adopted an entrepreneurship curriculum, the learning provided is often still theoretical and lacks connection to real-world practice (Bell


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

& Bell, 2020). This can cause students to feel unprepared and unsure about starting a business and facing all the risks and challenges that lie ahead.

Entrepreneurial self-efficacy is a reflection of a person's belief in their ability to succeed in starting and running a business (Bachman et al., 2021). A student with high entrepreneurial self-efficacy will be more confident in taking risks, innovating, and facing challenges that will arise in the future (Awotunde & Westhuizen, 2021), so that students will find it easier to engage in entrepreneurial activities and start a business. In addition, entrepreneurial self-efficacy in students can help them seek business opportunities and cope with failure (Luo et al., 2022). However, the reality is that students tend to have low entrepreneurial self-efficacy, leading them to perceive entrepreneurship as a very risky and unstable choice. One of the factors contributing to this is the lack of relevant training in the school curriculum (Raduan, 2021). Therefore, a double track program is used to increase students' self-efficacy and readiness for entrepreneurship.

One widely known psychological theory that explains a person's intentions is the Theory of Planned Behavior (TPB). Ajzen (1991) proposed this concept and defined intention as "a person's readiness to perform a certain behavior." According to this definition, intention and readiness can be considered synonymous. Following TPB, entrepreneurial intention can be defined as the intention to start and engage in entrepreneurial behavior (Rakicevic et al., 2022), and also presents the efforts that a person will make to carry out that entrepreneurial behavior (Linan & Chen, 2009). Choosing a career as an entrepreneur does not come easily, but entrepreneurship requires careful consideration and careful planning, so planned behavior theory is a relevant theory for recognizing a person's intention and readiness (Rizqi et al., 2022). Additionally, readiness is aided by self-efficacy or students' confidence in entrepreneurship. The source used to examine the variables of entrepreneurial self-efficacy is social cognitive theory (SCT).

## LITERATURE REVIEW

### *Social Cognitive Theory (SCT)*

This social cognitive theory was developed by Albert Bandura in 1986 as an extension of the previous theory, namely Social Learning Theory (SLT) (Patiro et al., 2022). Bandura (2001) states that individuals learn from experience, observation, and social interaction. This theory emphasizes the role of interactions between individuals, the environment, and behavior in shaping self-efficacy and readiness for entrepreneurship (Ghouse et al., 2024). Self-efficacy, which is the belief in one's ability to succeed in a particular situation, has an influence on motivation, learning, and performance ( ), which are strong predictors of initiating action and intention (Rodríguez-Rey & Cantero-García, 2020). Social cognitive


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

theory can explain how experiences, observations through double track programs and entrepreneurship learning (Tantawy et al., 2021), as well as physiological conditions influence individuals' beliefs about their ability to succeed in entrepreneurial tasks and goals.

***Theory of Planned Behavior***

One widely recognized psychological theory that explains an individual's intentions before proceeding to the action stage is the Theory of Planned Behavior (TPB) (Rakicevic et al., 2022). According to this theory, intention and readiness can be considered synonymous, where readiness in this theory refers to the efforts that a person will make to carry out entrepreneurial behavior (Linen & Chen, 2009). This theory is a development of the previous theory, namely the Theory of Reasoned Action, which was developed by Icek Ajzen in 1985 (Ajzen 1991; Warkula & Pontoh, 2023). Choosing a career as an entrepreneur does not just happen, but entrepreneurship requires careful consideration and careful planning, so the theory of planned behavior is a relevant theory for recognizing a person's readiness (Rizqi et al., 2022). Previous research shows that TPB accounts for 27% and 39% of the variance in behavior and intention (Svotwa et al., 2022).

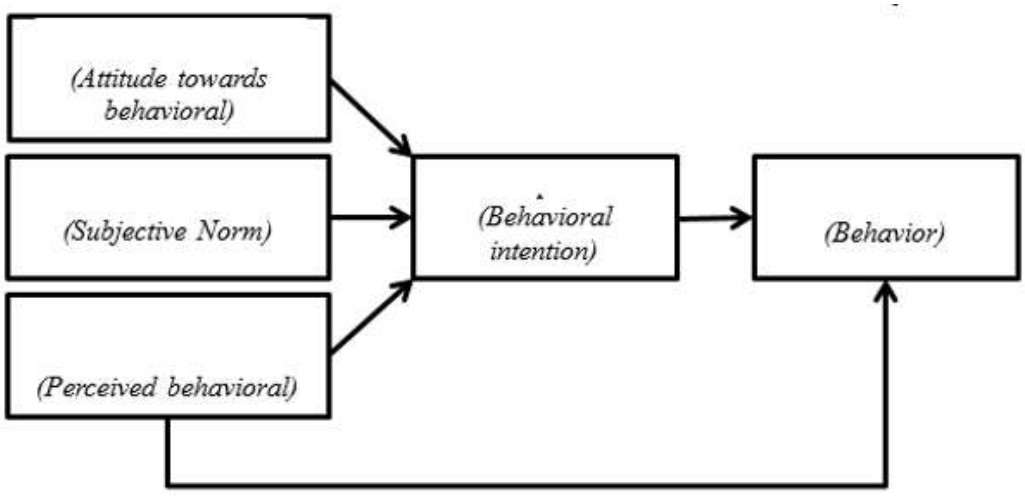



**Figure 1. Theory of Planned Behavior Concept**

***Double Track Program on Entrepreneurial Readiness***

The double track program, which has official regulations and began to be used by many schools in the 2020s, has been proven to significantly help increase students' entrepreneurial readiness through the integration of formal academic education with


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

vocational skills training as non-formal academics. Based on previous research conducted at SMA Negeri 1 Kalitidu Bojonegoro, this program contributed 49% to increasing students' interest and readiness for entrepreneurship (Dinaloni & Indrawati, 2021). This is because the double track program not only teaches technical skills but also equips students with knowledge of business management, marketing, and product development (Septian, 2024).

H1: Double Track Program on Entrepreneurial Readiness

***Entrepreneurship Education for Entrepreneurial Readiness***

Through entrepreneurship education, students gain relevant knowledge, experience, an understanding of the theory-reality gap, and skills in identifying entrepreneurial opportunities, thereby increasing their intention and readiness to start a business (Ramsgaard & Østergaard, 2018). Entrepreneurship education has a significant influence on entrepreneurial readiness, as evidenced by several recent studies. Through entrepreneurship education, students not only acquire basic knowledge about business concepts and practices, but are also trained to develop important skills such as creativity and the ability to take risks and face challenges in the future (Mahmudin, 2023).

H2: Entrepreneurship Education on Entrepreneurial Readiness

***Entrepreneurial Self-Efficacy on Entrepreneurial Readiness***

Starting a business presents a number of challenges and risks for entrepreneurs, so before starting a business, individuals make assessments about their ability to perform anticipated tasks based on how positively or negatively they feel about a particular task (Bandura, 1988). Bandura (1997) states that self-efficacy is a context-specific construct, which leads to more predictive levels of outcomes when the focus is on specific tasks. Therefore, this study argues that individuals who are enthusiastic about starting a new business (entrepreneurial spirit) will continue to seek ways to develop the skills and abilities needed to face the roles and challenges required to become an entrepreneur (ESE) and thus will be more motivated to engage in entrepreneurial actions (EI).

H3: Entrepreneurial Self-Efficacy on Entrepreneurial Readiness

***The Double Track Program on Entrepreneurial Self-Efficacy***

Many quantitative studies in high schools show that double track programs have a significant impact on students' entrepreneurial self-efficacy (Sakdiyah et al., 2024; Ilmi et al., 2024). To provide students with theoretical knowledge and direct experience in the field of entrepreneurship, this program combines job skills training with formal education ( ). The double track program provides students with practical skills in various fields such as


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

culinary arts, fashion, and technology, which are important for entrepreneurship. Acquiring these skills increases students' confidence in their ability to start and manage a business, thereby increasing their entrepreneurial self-efficacy (Mayudho et al., 2023).

H4: The Double Track Program on Entrepreneurial Self-Efficacy

***Entrepreneurship Education on Entrepreneurial Self-Efficacy***

Individuals who are self-oriented, independent, and confident in their ability to take certain risks are more interested in learning about entrepreneurial mechanisms and potential operational techniques (Vaitoonkiat and Charoensukmongkol, 2020). Entrepreneurial learning strategies depend on various factors, among which individual self-efficacy is an important antecedent (Hoang et al., 2020). Project-based learning, which is often applied in entrepreneurship learning, allows students to apply their skills in real-world settings. This experience is very important in fostering students' confidence and self-efficacy because it can provide them with achievements and the ability to do something (Alifiyah et al., 2022). Students can achieve initial success in basic entrepreneurial tasks with the help of effective entrepreneurship education (Bauman & Lucy, 2021). These achievements provide concrete evidence of their skills and boost their confidence to tackle increasingly difficult tasks in the future.

H5: Entrepreneurship Learning on Entrepreneurial Self-Efficacy

***Entrepreneurial Self-Efficacy as a Mediating Variable***

The entrepreneurial readiness developed in students participating in this double track program covers not only technical aspects but also the strengthening of entrepreneurial self-efficacy. High self-efficacy makes students more confident in facing entrepreneurial challenges, daring to take risks, and able to manage their businesses independently. Thus, the double track program not only improves technical skills but also strengthens psychological aspects that are very important in entrepreneurial readiness (Yuningsih, 2022). The double track program, which provides direct learning and training in various aspects of entrepreneurship, can shape students' attitudes and skills so that their entrepreneurial mindset ( ) enables them to design, manage, and market their businesses well (Valencia-Arias et al., 2022).

Entrepreneurship education, which is the integration of entrepreneurship education in the double track program, has been proven to increase students' entrepreneurial intent and readiness. This is partly due to direct experience through internships and practical skills training by directly practicing entrepreneurship so that students are open to forming new ideas and are more confident to start a more realistic business and are not afraid of the risks



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

that lie ahead (Magfiroh & Wahono, 2024). Entrepreneurship learning and self-efficacy are two important things in building and increasing students' readiness to start a business and career.

H6: Double Track Program on Entrepreneurial Readiness through Entrepreneurial Self-Efficacy

H7: Entrepreneurship Education on Entrepreneurial Readiness through Entrepreneurial Self-Efficacy.

## METHOD

This study uses a quantitative method, with data collected from participants using a standard questionnaire to see how they fit the theory. This is used to test hypotheses to support or refute the proposed relationship (Al Issa et al., 2025). The approach used is a descriptive explanatory approach.

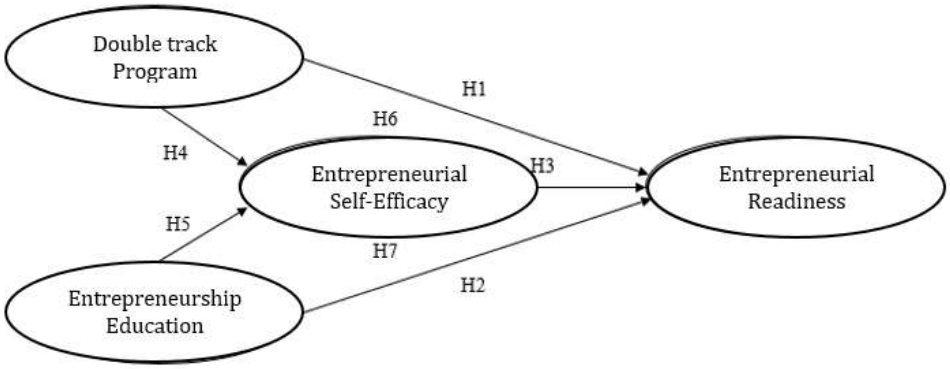



**Figure 2. Conceptual Framework**

This research was conducted in the province of East Java, specifically in the Madura region of Sumenep Regency. The subjects used were senior high schools (SMA) in the Sumenep Regency area that implemented a double track program in their schools. The population used in this study were 12th grade SMAN students with a double track program in the Sumenep Regency area. There are three schools that will be used in this study, namely SMAN 1 Gapura, SMAN 1 Bluto, and SMAN 1 Lenteng.

The sampling technique used in this study is non-probability sampling, which means that the sample used will not give equal opportunity to students who will be used as research samples. The type of sampling is Purposive Sampling, where the researcher selects individuals based on certain characteristics or qualities that have been determined in accordance with the research needs (Wang, 2024). Based on sample calculations using the


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Raosoft sample size calculator with a margin of error of 5%, the number of samples used in this study was 238 students.

The analysis was conducted using Smart PLS, a partial least squares (PLS)-based statistical method, a structural equation modeling (SEM) program. The PLS-SEM program was chosen to assess the two-stage analysis procedure by first examining the measurement model and then examining the structural model (Sabhwar & Bhatt, 2021). The reason for using PLS is that it is more robust, with fewer restrictions placed on unbiased sample size estimation. In addition, PLS is useful for identifying relationships and measuring research model constructs (Wood, 1989).

The collected data were analyzed using the partial least squares structural equation model (SEM-PLS) to estimate the constellation for multiple variables. We followed the SEM-PLS data analysis procedures by Chin & Marcoulides (1998) and Hair et al. (2021), which consist of (1) Out-of-model estimation; (2) In-model estimation; (3) Fit testing; and (4) Hypothesis estimation.

## RESULT AND DISCUSSION

### *Descriptive Statistical Analysis Based on Respondents*

The majority of respondents in this study were 17 years old, with a percentage of 54%. This age can be considered adolescence to adulthood. In addition, the gender in this study was dominated by males, with a frequency of 123 respondents out of 238. This was because . Continuing with the characteristics of the number of siblings of the respondents, 50% of respondents chose 2 siblings. The majority of the respondents' parents' highest level of education was high school/vocational school, with a percentage of 42%. Meanwhile, the majority of the respondents' parents' occupations were farmers.

The results of the analysis of the research findings show that the average variable has a high grand *mean* with a value of more than 3.40. This is because the respondents' answers to the statements provided *are* quite *relevant* to the current situation and practices.

### *SEM-PLS Analysis*

### *Outer Model Evaluation*

### *Validity Test*

Validity testing using convergent validity is assessed using outer loading (loading factors) with a recommended value of > 0.70 to be considered valid, but if the value found is > 0.50, it is acceptable due to instrument development (Hair et al., 2021). The second assessment can be seen through the Average Variance Extracted (AVE) value with a threshold that must be met of > 0.5.



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

If the AVE value found is less than 0.5, then there are many errors in the items than the variance explained by the construct (Hair et al., 2019). The third assessment is in the CR or Composite Reliability value with a requirement of > 0.7, which means that the indicators used as measures consistently measure the same construct.

**Table 1. Outer Model Estimation**

| Construct | Item | *Outer Loading* | α | CR | AVE |
|---|---|---|---|---|---|
| *Double Track* Program | PDT1 | 0.733 | 0.866 | 0.910 | 0.718 |
| | PDT2 | 0.860 | | | |
| | PDT3 | 0.903 | | | |
| | PDT4 | 0.882 | | | |
| Entrepreneurship Education | PK1 | 0.907 | 0.892 | 0.933 | 0.822 |
| | PK2 | 0.922 | | | |
| | PK3 | 0.891 | | | |
| Entrepreneurial Self-Efficacy | EDK1 | 0.910 | 0.938 | 0.956 | 0.843 |
| | EDK2 | 0.935 | | | |
| | EDK3 | 0.919 | | | |
| | EDK4 | 0.908 | | | |
| Entrepreneurial Readiness | KB1 | 0.883 | 0.882 | 0.927 | 0.809 |
| | KB2 | 0.917 | | | |
| | KB3 | 0.899 | | | |

Source: processed by researcher, 2025

Through the data processing results presented in Table 1, it is known that each indicator of each variable has met the validity requirements, namely an outer loading value > 0.70 with a value of 0.733 – 0.935. In addition, the AVE value found exceeds the requirement value of 0.5, thus meeting the validity requirements. After observing that all questionnaire items have met convergent validity, it means that the questionnaire items are consistent in measuring the variables used.

Next is the validity testing analysis using discriminant validity. Discriminant validity uses the Fornell-Larcker assessment.


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

**Table 2. *Fornell-Larscher Discriminant Validity* Results**

| Variable | Entrepreneurial Self-Efficacy | Entrepreneurial Readiness | Entrepreneurship Learning | *Double Track* Program |
|---|---|---|---|---|
| Entrepreneurial Self-Efficacy | 0.918 | | | |
| Entrepreneurial Readiness | 0.903 | 0.900 | | |
| Entrepreneurship Learning | 0.838 | 0.834 | 0.907 | |
| *Double Track* Program | 0.752 | 0.745 | 0.825 | 0.847 |

Source: processed by researcher, 2025

***Reliability Test***

Reliability testing was reported using two methods, namely composite reliability and Cronbach's alpha (Izah et al., 2023). Good reliability has a composite reliability (CR) value > 0.70, while for exploratory studies, the acceptable limit is 0.60–0.70 (Gebremedhin et al., 2022). If the value found is too high, such as 0.95, it could indicate redundancy, where some questionnaire items are too similar and measure exactly the same thing (Ramirez et al., 2025). Looking at the results of the SEM-PLS analysis in Table 4.1, it can be seen that the composite reliability and Cronbach's alpha found have met the requirements, which are more than 0.70 as determined.

***Inner Model Evaluation***

The next step after completing the outer model evaluation is the inner model evaluation, also known as the structural model evaluation.

The first step is to check for multicollinearity or collinearity by looking at the Variance Inflation Factor value, also known as VIF. The threshold value for assessment is that the VIF value must be < 5. Some more experienced and rigorous experts recommend that a VIF value of < 3.3 is more acceptable (Vishnoi et al., 2024). If the VIF value found is > 5, there is a serious collinearity problem.


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

**Table 3. *Collinearity* Test (VIF)**

| Variable | Entrepreneurial Self-Efficacy | Entrepreneurial Readiness | Entrepreneurship Learning | *Double Track* Program |
|---|---|---|---|---|
| Entrepreneurial Self-Efficacy | | 3,485 | | |
| Entrepreneurial Readiness | | | | |
| Entrepreneurship Education | 3,129 | 4,744 | | |
| *Double Track* Program | 3,129 | 3,255 | | |

Source: processed by researcher, 2025

Through the presentation of the collinearity test results, it was found that the VIF values obtained and reported were verified to be acceptable with results < 5. This means that the independent constructs in this study are truly independent and do not overlap excessively with other constructs, and there are no serious collinearity problems. The next step, after seeing that there were no problems in the collinearity test, was to evaluate the r-square of the endogenous construct's (Hair et al., 2021), namely entrepreneurial self-efficacy and entrepreneurial readiness.

**Table 4. *R-Square* Evaluation Results**

| Construct | *R-Square* |
|---|---|
| Entrepreneurial Self-Efficacy | 0.713 |
| Entrepreneurial Readiness | 0.836 |

Source: processed by researcher, 2025

Based on the results of the analysis of the coefficient of determination (R-Square) shown in Table 4.21, it can be seen that the entrepreneurial self-efficacy construct has an R Square value of 0.713. This indicates that the independent variables in the model are able to explain 71.3% of the variation in entrepreneurial self-efficacy, which means that the model is quite good at explaining the factors that influence the double track program and entrepreneurial learning as exogenous variables well and maximally because the value found is high.


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

In addition, the entrepreneurial readiness construct has an R-Square value of 0.836, which means that 83.6% of the variation in entrepreneurial readiness can be explained by the exogenous variables in the model, namely the double track program and entrepreneurial learning. This high R-Square value indicates that the model has a fairly good ability to explain the factors that influence entrepreneurial readiness.

The next step is to evaluate the F-square or effect size f2. This study uses a prerequisite test in the form of an effect/influence size test (f2) to determine the extent of the influence of the predictor latent variable (exogenous latent variable) on the structural model.

**Table 5. *F-Square* Evaluation Results**

| Variable | F2 | Results |
|---|---|---|
| Entrepreneurial Self-Efficacy > Entrepreneurial Readiness | 0.793 | Significant Influence |
| Entrepreneurship Education > Entrepreneurial Self-Efficacy | 0.516 | Significant Influence |
| Entrepreneurship Education > Entrepreneurial Readiness | 0.066 | Small Effect |
| *Double Track* Program > Entrepreneurial Self-Efficacy | 0.040 | Small Effect |
| *Double Track* Program > Entrepreneurial Readiness | 0.14 | Small Effect |

Source: processed by researcher, 2025

The results of the f-square value evaluation presented in Table 4.22 show that most of the influences between latent variables have a small effect.

Next, a process was carried out to measure the extent to which the model was able to accurately predict latent variables. Predictive relevance is measured by the $Q^2$ value obtained from the blindfolding procedure. If the $Q^2$ value is > 0 for each endogenous variable, then the model has good predictive relevance (Sharma et al., 2021). Conversely, if $Q^2 \leq 0$, the model is considered less capable of predicting the data. The interpretation or range of $Q^2$ values is categorized as follows.

$Q^2$ value $= 1 - (1 - R^2) \times (1 - R^2)$

$= 1 - (1- 0.713) \times (1 - 0.836)$

$= 1 - (0.287) \times (0.164)$



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

= 1 – 0.047
= 0.953

Based on the calculation results using the predictive relevance formula, the result is 0.953, which is close to 1. This explains that 95.3% of the structural model can explain the variation in the research data, while the other 4.7% is explained by factors outside the model. If the reported result is close to one, it is a good result.

Goodness of Fit is a model of goodness that is measured as a whole. Goodness of fit will assess the suitability of the model in terms of both the outer model and the inner model so that it can validate that the model can represent the relationship between variables in general (Shubaktiyasi, 2024). The GoF value ranges from 0 to 1 with the following interpretations: 0.1 (low GoF), 0.25 (medium GoF), and 0.36 (high GoF) (Almansoori et al., 2021).

**Table 6. *Goodness of Fit* (GoF) Evaluation**

| Variable | α | CR | AVE | Evaluation |
|---|---|---|---|---|
| ***Double Track* Program** | 0.866 | 0.910 | 0.718 | Fit |
| **Entrepreneurship Education** | 0.892 | 0.933 | 0.822 | Fit |
| **Entrepreneurial Self-Efficacy** | 0.938 | 0.956 | 0.843 | Fit |
| **Entrepreneurial Readiness** | 0.882 | 0.927 | 0.809 | Fit |

Source: processed by researcher, 2025

***Hypothesis Testing***

Significance testing was performed using the bootstrapping procedure in SmartPLS software to avoid data errors in research that may not be normal. The bootstrap procedure uses the entire original sample to perform resampling. The rule of thumb for the two-tailed significance value of the t- is as follows: t-value 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.58 (significance level = 1%). The following is an overview of the results of bootstrapping data processing using SmartPLS.


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

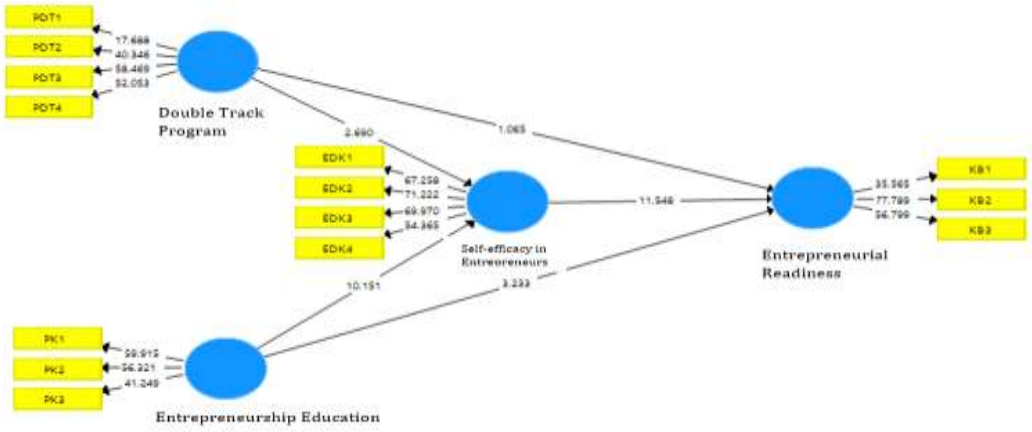



**Figure 3. *Bootstrapping* Hypothesis Evaluation Model**

**Table 7. Hypothesis Testing Results**

| | **Variable** | **Original Sample** | ***T-Statistic*** | ***P-Values*** | **Hypothesis** |
|---|---|---|---|---|---|
| Direct | | | | | |
| H1 | *Double Track* Program > Entrepreneurial Readiness | 0.051 | 1.065 | 0.287 | Rejected |
| H2 | Entrepreneurship Education > Entrepreneurial Readiness | 0.228 | 3.233 | 0.001 | Accepted |
| H3 | Entrepreneurial Self-Efficacy > Entrepreneurial Readiness | 0.673 | 11.548 | 0.000 | Accepted |
| H4 | *Double Track* Program > Self-Efficacy in Entrepreneurship | 0.190 | 2.69 | 0.007 | Accepted |
| H5 | Entrepreneurship Learning > Entrepreneurial Self-Efficacy | 0.681 | 10.151 | 0.000 | Accepted |
| Indirect | | | | | |



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

| | | | | | |
|---|---|---|---|---|---|
| H6 | *Double Track* Program > Self-Efficacy in Entrepreneurship > Readiness for Entrepreneurship | 0.128 | 2.575 | 0.01 | Accepted |
| H7 | Entrepreneurship Education > Entrepreneurial Self-Efficacy > Readiness for Entrepreneurship | 0.458 | 8.221 | 0.000 | Accepted |

Source: processed by researcher, 2025

***DISCUSSION***

Based on the results of descriptive analysis, it can be concluded that the four variables in this study show average values in the high category. The Double Track program in schools in the Sumenep region is widely participated in by students to improve their entrepreneurial skills and experience and prepare themselves to start new businesses. Meanwhile, entrepreneurship education, which is part of the entrepreneurship education provided by schools, can improve students' entrepreneurial knowledge and skills. In addition, the entrepreneurial self-efficacy of students at SMAN in the Sumenep region is in the high category. They are brave enough to try to start new businesses with their abilities and try new things with the risks they take. The entrepreneurial readiness of students in this study can be built through the skills, abilities, and knowledge they have as preparation for opening new businesses, so that they can face the risks and challenges that will arise in the future.

The first hypothesis, which was rejected or referred to as the null hypothesis (Ho), stated that there was no significant effect. One of the main reasons this hypothesis was rejected was because the double track program tended to focus more on mastering technical skills (hard skills) and neglected the development of an entrepreneurial mindset and competencies. Entrepreneurial readiness is more complex than simply being able to make products or provide services (Gupron et al., 2023). Even though a student has been equipped with skills and real experience, such as culinary skills, makeup skills, and graphic design skills, this does not automatically mean that the student has sufficient entrepreneurial readiness. Entrepreneurial readiness requires an innovative spirit, the ability to see market opportunities, the courage to take risks, negotiation skills, basic financial management, marketing strategies, and the mental toughness to face failure (Utami et al., 2025). If the


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

double track program only functions as a "skills course" without being integrated with solid business modules, then the program will only produce skilled workers, not entrepreneurs.

Entrepreneurship education, which has been mandatory in schools since 2013, provides a boost in fostering entrepreneurial readiness among students (Maharani & Nugraha, 2022). This second hypothesis has significant positive results between the entrepreneurship education that students receive in school and their readiness to start a new business that can be used after they graduate from school. The entrepreneurship education provided by SMAN Sumenep is a solution to overcome high school graduates who do not continue to the next level of education, so that they have extensive experience and knowledge as preparation for graduation so that there is no prolonged unemployment by starting a business. Through this entrepreneurship education, independence will grow within students, which is one of the characteristics of an entrepreneur, namely being able to be independent (Suciviana & Usman, 2021). With their independence, they realize the importance of being able to create job opportunities for themselves without relying on a diploma, which initially changed the mindset of students as job seekers to become civil servants or private employees to become entrepreneurs.

To increase entrepreneurial readiness, self-efficacy, which can be referred to as self-confidence, is an important psychological foundation that is one of the factors in a person's readiness to become an entrepreneur. The third hypothesis in this study was accepted, so it can be stated that students agree that their self-confidence can influence their readiness for entrepreneurship. Self-confidence in students serves to break down doubts within themselves so that they are more likely to dare to start new things and take risks. Students who have strong self-confidence will see challenges as learning opportunities and will not give up easily. If they fail, they will keep trying (Rizqi et al., 2022). This self-confidence develops through entrepreneurial learning experiences that provide students with opportunities for hands-on practice (Fang, 2025).

These findings are in line with previous relevant research. In their study, Darmanto & Yuliari (2018) stated that entrepreneurial self-efficacy is a strong predictor of entrepreneurial readiness. In addition, Memon et al. (2019) found a strong relationship between entrepreneurial self-efficacy and other components of entrepreneurial readiness, such as instrumental readiness, risk tendency, entrepreneurial knowledge, and entrepreneurial experience. Research with similar results is also found in the study by Adeniyi et al. (2022), which states that entrepreneurial self-efficacy can strongly predict each variance in entrepreneurial readiness. This implies that students' entrepreneurial skills in identifying opportunities or developing ideas contribute positively to their entrepreneurial readiness to start a business.


Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The double track program that has been implemented in SMAN in the Sumenep region has had a positive and significant impact on increasing students' entrepreneurial self-efficacy. The results of this fourth hypothesis were accepted, meaning that it had a significant effect. This double track program combines academic learning and entrepreneurial skills training that facilitates students to directly experience entrepreneurial practices through training and competency certification (Cholidah et al., 2024). Through these practical experiences, students are able to build confidence in running a business because they are accustomed to facing real challenges in the field. This high level of confidence is at the core of entrepreneurial self-efficacy, which encourages students' mental readiness to act as young entrepreneurs (Costin et al., 2022).

The fifth hypothesis found that entrepreneurship education has a significant effect on entrepreneurial self-efficacy. In the field conditions at SMAN in the Sumenep region, the entrepreneurship education implemented and provided to students at was not only theoretical, but also involved many practical activities such as product manufacturing, business simulations, and small business management practices. Teachers act as facilitators in providing consistent guidance and encouragement, enabling students to overcome the fears and doubts that typically arise among novice entrepreneurs (Platts & Wapples, 2023). Students who are confident in their abilities tend to be more motivated to take risks and seek innovative solutions when facing business problems (Ulfah & Syahrudin, 2024). They do not give up easily when faced with failure, because this confidence is an important mental asset in entrepreneurship. The role of teachers and a positive learning environment strengthens students' belief that they are capable of controlling the success of their business (Toding et al., 2023). This shapes a resilient and initiative-filled attitude, two key elements in running a successful business.

The double track program implemented in public high schools in the Sumenep region has a significant positive influence on increasing students' entrepreneurial self-efficacy, which in turn impacts their readiness to become entrepreneurs. This program integrates academic learning with intensive practical skills training, such as culinary arts, fashion design, and light vehicle engineering (Felani, 2024). Through direct experience and competency certification, students gain confidence in their ability to manage a business. This strong self-efficacy becomes the main psychological capital (Fang, 2025) for facing future entrepreneurial challenges, so that students are better prepared to start and manage a business independently after graduation. Learning in the double track program is carried out through a production-based practice approach and continuous training. Students are actively involved in the production and marketing processes of products, providing real-world experience in managing small businesses (Sucipto, 2023).



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The results of this seventh hypothesis were accepted as the values obtained met the significance requirements. The entrepreneurship learning applied at SMAN in the Sumenep region has a positive and significant effect on increasing students' confidence in starting a new business, with a learning model that is not only theoretical but also provides hands-on experience such as product manufacturing, business start-up simulations, digital marketing, and small-scale business management. Student activity in these activities encourages the formation of confidence in their own abilities to run a business, which is the essence of self-efficacy. Teachers, as facilitators, play an important role in providing encouragement and positive feedback so that students feel competent and confident. This high self-efficacy strengthens students' readiness to face the challenges of the business world after graduation (Permana et al., 2023).

## CONCLUSION AND SUGGESTION

Based on the findings, the study states that the Double Track Program cannot significantly improve students' entrepreneurial readiness, and that entrepreneurship education significantly improves the entrepreneurial readiness of high school students in Sumenep Regency, with entrepreneurial self-efficacy acting as a mediating variable that strengthens this effect. Developing self-efficacy is key to increasing students' interest and readiness to enter the world of entrepreneurship.

The research suggests the importance of improving entrepreneurial learning materials and methods to be more applicable and contextual, as well as strengthening the Double Track program support in schools. In addition, it is recommended that schools and mentors focus on developing students' confidence and practical skills to support their readiness to start their own businesses.

## REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

Alfiyah, N. H., Siska, A. I., & Kareja, N. (2022). Implementation of Entrepreneurship Education in the Double Track Program at Senior High Schools in Banyuwangi Regency. Undiksha Journal of Economic Education, 14(2), 230–236. https://doi.org/10.23887/jjpe.v14i2.52966

Awotunde, O. M., & Westhuizen, T. V. D. (2021). Entrepreneurial self-efficacy development: An effective intervention for sustainable student entrepreneurial intentions. International Journal of Innovation and Sustainable Development, 15(4), 475-495.

Bachmann, A. K., Maran, T., Furtner, M., Brem, A., & Welte, M. (2021). Improving



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

entrepreneurial self-efficacy and the attitude towards starting a business venture. Review of Managerial Science, 15, 1707-1727.

Bandura, A. (1988). Organizational applications of social cognitive theory. Australian Journal of Management, 13(2), 275-302.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. Annual review of psychology, 52(1), 1-26.

Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. Journal of Personality and Social Psychology, 76(2), 258.

Bauman, A., & Lucy, C. (2021). Enhancing entrepreneurial education: Developing competencies for success. The International Journal of Management Education, 19(1), 100293.

Bell, R., & Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. Journal of Small Business and Enterprise Development, 27(6), 987-1004.

Chin, W., & Marcoulides, G. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 295–236). Lawrence Erlbaum Associates, Inc.

Cholidah, R. N., Wiyono, B. B., & Sobri, A. Y. (2024). Evaluation of the Double Track Program in Improving Students' Entrepreneurship Skills at Public High Schools in Trenggalek Regency. Ideguru: Journal of Teachers' Scientific Works, 9(3), 1583-1589.

Coduras, A., Saiz-Alvarez, J. M., & Ruiz, J. (2016). Measuring readiness for entrepreneurship: An information tool proposal. Journal of Innovation & Knowledge, 1(2), 99–108. C

ostin, Y., O'Brien, M. P., & Hynes, B. (2022). Entrepreneurial education: Maker or breaker in developing students' entrepreneurial confidence, aptitude and self efficacy?. Industry and Higher Education, 36(3), 267-278.

Fang, H. L. (2025). Enhancing Student Learning Confidence and Career Readiness through Instructor Demonstration and Industry Collaboration: An Empirical Study of Hairdressing Education in Taiwan.

Felani, M. C. (2024). Implementation of the Double Track Program in Improving Entrepreneurial Competence at MUHAMMADIYAH High School in Kediri City (Doctoral dissertation, IAIN Kediri).

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook (p. 197). Springer Nature.

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

Data Analysis, 1(2), 107-123.

Hasanudin, M., Yuliana, K., Roihan, A., & Arribathi, A. H. (2021, February). Service Provider Information System in Technopreneurship Learning for MSMEs. In Journal of Physics: Conference Series (Vol. 1764, No. 1, p. 012120). IOP Publishing.

Hasudungan, A., Waskito, A. S. A., Banjaransari, A., Sanjaya, A., Ferlito, C., Pramudya, E. P., ... & Kadarusman, Y. B. (2023). Indonesia Economic and Business Outlook 2023. Prasetiya Mulya Publishing.

Hozairi, H., Asrori, M. Z., Wijaya, A. Y., & Baskoro, F. (2024). The Success of the Double Track Program in Creative Work, Creative Business, and Creative Employment for Senior High Schools (SMA).

Huang, L., Bai, X., Huang, L., Huang, Y., & Han, G. (2023). How does college students' entrepreneurial learning influence entrepreneurial intention: Evidence from China. Sustainability, 15(12), 9301.

Lin, C., Pan, Y., Yu, Y., Feng, L., & Chen, Z. (2024). The influence mechanism of the relationship between entrepreneurial learning and entrepreneurial intention.

Linan, F., & Chen, Y. W. (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

Luo, L., Guo, M., Huang, J., & Yang, J. (2022). Research on the effect of an entrepreneurial environment on college students' entrepreneurial self-efficacy: the mediating effect of entrepreneurial competence and moderating effect of entrepreneurial education. Sustainability, 14(11), 6744.

Mahiroh, A. L. (2024). Double Track Program Management in Improving Life Skills of Students at SMAN 1 Jenangan Ponorogo (Doctoral dissertation, IAIN Ponorogo).

Makwara, T., Sibanda, L., & Iwu, C. G. (2022). To what extent is entrepreneurship a sustainable career choice for the youth? A post-covid-19 descriptive analysis. In The Future of Entrepreneurship in Africa (pp. 59-79). Routledge.

Maydiantoro, A., Ridwan, R., Tusianah, R., Rachman, A., Kesuma, P., Isnainy, U. C. A. S., & Zainaro, M. A. (2021). Entrepreneurship in higher education curricula: Evidence from Indonesia. Psychology and Education, 58(3), 936-949.

Mayudho, I., Ulfatin, N., & Sunarni, S. (2023). Management of the Independent Double Track Program in Fostering the Entrepreneurial Spirit of Students. Journal of Administration and Managementhttps://doi.org/10.17977/um027v6i32023p214

Nurhayati, D., & Machmud, A. (2019). The influence of technopreneurial learning on technopreneurship intention students. Proceeding ISETH (International Summit on Science, Technology, and Humanity), 390-400.



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

Okolie, U. C., Igwe, P. A., Nwosu, H. E., Eneje, B. C., & Mlanga, S. (2020). Enhancing graduate employability: Why do higher education institutions have problems with teaching generic skills? Policy Futures in Education, 18(2), 294-313.

Omair, A. (2025). Sample size estimation and sampling techniques for selecting a representative sample. Journal of Health specialties, 2(4), 142.

O'Bryon, M. C. (2025). Short-Term Effects of Social-Emotional Learning on High School Students' Social-Emotional Competencies (Doctoral dissertation, The College of William and Mary).

Patiro, S. P. S., Budiyanti, H., & Hendarto, K. A. H. (2022). Panic-buying behavior during the Covid-19 Pandemic in Indonesia: A social cognitive theoretical model. Gadjah Mada International Journal of Business, 24(1), 25-55.

Permana, A. Y., Fitriani, F., & Aulia, T. (2023). Analysis of students' work readiness based on self-efficacy of vocational high school in the building information modeling technology era. Journal of Technical Education and Training, 15(1), 192-203.

Platts-Mills, E. T., & Wapples, E. (2023). Thinking Like Entrepreneurs: qLegal's Experience of Teaching Law Students to Have an Entrepreneurial Mindset. International Journal of Clinical Legal Education.

Puriwat, W., & Tripopsakul, S. (2020). Preparing for Industry 4.0--Will Youths Have Enough Essential Skills?: An Evidence from Thailand. International Journal of Instruction, 13(3), 89-104.

Raduan, N. A. (2021). The Structural Relationship Among Entrepreneurial Learning, Environmental Support, Self-Efficacy, Orientation, and the s Entrepreneurial Intention of Level 4 TVET Students in the Brunei Darussalam Qualification Framework (Doctoral dissertation, Seoul National University Graduate School).

Rakićević, Z., Rakićević, J., Labrović, J. A., & Ljamić-Ivanović, B. (2022). How entrepreneurial education and environment affect entrepreneurial readiness of STEM and business students? A longitudinal study. Engineering Economics, 33(4), 414-432.

Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. European Journal of Work and Organizational Psychology, 16(4), 353–385.

Rizqi, U. A., Pratikto, H., & Kusdiyanti, H. (2022). Entrepreneurship education and economic literacy mediated by entrepreneurial self-efficacy affect entrepreneurial intention. International Journal Of Humanities Education and Social Sciences (IJHESS), 2(1), 190-204.

Rodríguez-Rey, R., & Cantero-García, M. (2020). Albert Bandura: Impact on education of the



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

social cognitive theory of learning. Padres y Maestros/Journal of Parents and Teachers, (384), 72-76.

Shofwan, I., Sunardi, S., Gunarhadi, G., & Rahman, A. (2023). Entrepreneurship education: Encouraging entrepreneurial intentions for equality education students in Semarang. International Journal of Learning, Teaching and Educational Research, 22(6), 175-194.

Sucipto, S. (2023). Entrepreneurial Education as an Application of the Double Track Program at SMAN Jombang, East Java. Innovative: Journal of Social Science Research, 3(4), 4381-4393.

Toding, M., Mädamürk, K., Venesaar, U., & Malleus, E. (2023). Teachers' mindset and attitudes towards learners and learning environment to support students' entrepreneurial attitudes in universities. The International Journal of Management Education, 21(1), 100769.

Udekwe, E., & Iwu, C. G. (2024). The Nexus Between Digital Technology, Innovation, Entrepreneurship Education, and Entrepreneurial Intention and Entrepreneurial Motivation: A Systematic Literature Review. Education Sciences, 14(11), 1211.

Ulfah, M., & Syahrudin, H. (2024). The impact of self-confidence and creativity on entrepreneurial intentions: The mediating role of risk-taking. Journal of Economics, Education, and Entrepreneurship, 12(2), 327-346.



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.