Electronic Journal of Education, Social Economics and Technology
Vol. 5, No. 1, (2024), pp. 40-45
ISSN 2723-6250 (online)
DOI: https://doi.org/10.33122/ejeset.v5i1.318

SAINTIS publishing

Research Article

The Influence of Entrepreneur Education and Self Efficacy on Students' Entrepreneurial Behavior through Planned Behavior as an Intervening Variable

Alivia Maulidha Rachma*, Luqman Hakim & Jun Surjanti

Department of Economic Education, Universitas Negeri Surabaya, Surabaya, Jawa Timur, Indonesia, 60231
*Corresponding Author: alivia.21010@mhs.unesa.ac.id | Phone Number: +6281934785219

ABSTRACT

The importance of education as part of the process for individuals to find their identity in society. Education is considered the basis for direct transition to the labor market, besides it also plays an important role in creating and developing an entrepreneurial spirit so that Entrepreneurship education is carried out to encourage students in building business ideas and managing businesses. Students as representatives of the young generation of Indonesia can hone their experiences and be motivated to become entrepreneurs. This study was conducted to determine the Effect of Entrepreneur Education and Self Efficacy on Student Entrepreneurial Behavior Through Planned Behavior as an Intervening Variable using quantitative methods through the SPSS application. The population in this study was 320 students, but by using the Slovin formula as a guide, the researcher obtained a sample of 84 students. Entrepreneur education, Self efficacy, and Planned behavior possessed by students have been shown to have an effect on entrepreneurial behavior. Self efficacy has an effect on entrepreneurial behavior through planned behavior as an intervening variable with a significant and positive value.

Keywords: Entrepreneur Education; Self-efficacy; Students' Entrepreneurial Behavior; Planned Behavior

1. INTRODUCTION

Education plays a crucial role in helping individuals find their identity within society, particularly in an era of globalization where securing employment is becoming increasingly difficult. Proficiency in skills is essential for competing in the labor market, necessitating quality education as a foundation for the transition to the workforce. Therefore, the government must prioritize education to nurture talented individuals capable of contributing to development. According to data from the Central Statistics Agency (Badan Pusat Statistik, BPS), the number of unemployed in Indonesia reached 6.88 million in February 2020, an increase of 60 thousand people from the previous year. The Open Unemployment Rate (Tingkat Pengangguran Terbuka, TPT) slightly decreased from 5.01% to 4.99%. The high unemployment rate highlights entrepreneurship as a potential solution, as it can boost per capita income, consumer purchasing power, and the national economy. Levita Ginting from the Indonesian Franchise and Licensing Association (Perhimpunan Waralaba dan Lisensi Indonesia) emphasized that entrepreneurship generates new employment opportunities and enhances human productivity (Kompas, 2019). However, based on the Global Entrepreneurship Index 2019, Indonesia ranks 94th out of 137 countries, lagging behind other Southeast Asian countries such as Vietnam (87th), the Philippines (76th), Thailand (71st), Malaysia (58th), Brunei Darussalam (53rd), and Singapore (27th) (Republika, 2020). This data indicates a lack of entrepreneurial intention among the population. Entrepreneurship education plays a significant role in cultivating an entrepreneurial spirit among students, enabling them to develop business ideas and manage micro-enterprises within the campus environment. This is expected to hone their business experience and motivate them to become entrepreneurs, ultimately contributing to the national economy.

The lack of entrepreneurial interest among students is often attributed to limited capital and fear of taking risks.(Zimmerer et al., 2008) , asserts that entrepreneurial growth in a country is supported by the role of universities in providing entrepreneurship education. (Ranto, 2016) stated that universities are responsible for educating and providing entrepreneurial skills to their graduates and providing motivation to dare to choose entrepreneurship as their career. Therefore, as early as possible, students are equipped with life skills to become fundamental provisions in facing global competition. Students need to be equipped with life skills from an early age to compete globally. Nevertheless, many graduates still struggle to find employment, especially since the implementation of the ASEAN Economic Community (AEC) in December 2015, which established a free trade system among ASEAN member countries, intensifying job competition with the influx of foreign labor into Indonesia. Consequently, graduates are expected to create their own employment opportunities or engage in entrepreneurship to boost the national economy. (Karwati et al., 2024) define an

entrepreneur as an individual capable of transforming ideas into rapidly growing businesses. Meanwhile, (Ilahi, 2023) describes an entrepreneur as someone who builds, manages, and develops a business by creating added value and effectively managing risks by identifying business opportunities in their environment.

An entrepreneur is someone who engages in entrepreneurial activities. Quality graduates are crucial for developing enterprises capable of creating employment opportunities, equipped with entrepreneurial education obtained at universities. Higher education institutions are responsible for providing entrepreneurship education and motivation, fostering an entrepreneurial spirit among students. According to (Suharti & Sirine, 2011), this serves as an alternative solution to reduce unemployment by producing educated young entrepreneurs. Entrepreneurship education at universities not only imparts knowledge but also shapes students' attitudes and perspectives toward entrepreneurship. At Tarumanagara University, this education is a mandatory subject. (Hidayati, 2015) found that the decision to pursue entrepreneurship is influenced by internal factors such as achievement, motivation, self-efficacy, and entrepreneurial attitudes, as well as external factors like family, social, and educational environments. Self-efficacy, as defined by (Tony Wijaya, 2008), refers to an individual's belief in their entrepreneurial capabilities, which is essential for cultivating entrepreneurial intentions among students. In this study, the researcher wants to see the relationship between the variables Entrepreneur Education (X1) and Self Efficacy (X2) on Entrepreneurial Behavior (Y) through Planned Behavior (Z) as an Intervening Variable.

2. RESEARCH METHOD

The research method used in this study is quantitative with an associative design. The quantitative approach is a systematic, planned, and structured type of research from the initial stages until the research design is established. Quantitative research utilizes numerical data and exact sciences to test hypotheses (Waruwu, 2023). According to Sugiyono (2019), the quantitative research method is based on positivist philosophy and is used to study specific populations or samples. This study employs a descriptive approach to depict events factually and accurately. The quantitative method analyzes data from questionnaires using statistical techniques. Associative research aims to determine the influence or relationship between two or more variables and holds a higher level of analysis compared to descriptive and comparative research, as it can build theories that explain, predict, and control phenomena (Sugiono, 2014). The population in this study consists of 320 students who have completed the Entrepreneurship course. Using the Slovin formula: $n = N\ 1 + N\ (e)\ 2$. So that $n = 320\ 1 + 320\ (0.1)\ 2\ n = 320\ 4.48 = 83.7$. Based on the calculation above, the sample of this study was 84 people, In this study, the source used to obtain information is by distributing questionnaires to research samples. According to Sugiyono (2019), questionnaires is a data collection technique involving written questions posed to respondents. The data used in this study are primary and secondary data of a quantitative nature.

3. RESULTS AND DISCUSSION

3.1 RESULTS

3.1.1 Simultaneous Significance Test (F Statistic Test)

The F test is used to determine whether all independent variables simultaneously have an effect on the dependent variable. In this study, the F test is conducted using the F statistic, as shown in the following table:

Table 1. F Test Results

ANOVA		
Variable Relationship	Nila F	Sig.
Entrepreneur Education and Self Efficacy on Planned Behavior (Model 1)	40,979	0,000
Entrepreneur Education, Self Efficacy and Planned Behavior on Students' Entrepreneurial Behavior (Model 2)	64,403	0,000

Source: Processed primary data, 2025

In the **Table 1**, the F test for Model 1 yielded an F value of 40.979 with a significance level of 0.000. Since the significance value is smaller than α (0.05), the variables of Entrepreneurial Education and Self-Efficacy have a significant effect on the Planned Behavior variable. The F test for Model 2 obtained an F value of 64.403 with a significance level of 0.000. Since the significance value is also smaller than α (0.05), the variables of Entrepreneurial Education, Self-Efficacy, and Planned Behavior significantly affect the Entrepreneurial Behavior variable.

3.1.2 Individual Parameter Significance Test (t-Statistic Test)

The t-statistic test indicates the extent to which an independent variable can partially explain its dependent variable. Hypotheses 1 and 2 were tested using partial tests in Model 1, while Hypotheses 3 to 5 were tested using Model 2. An independent variable is considered to have a positive effect if the calculated t-value exceeds the t-table value, and this can also be confirmed by the significance value. A positive effect is confirmed if the significance value is smaller than α (0.05).

Table 2. Results of Hypothesis Testing (t-Test) Equation I

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	7.582	4.032		1.881	.063		
	Entrepreneur Education	.508	.115	.362	4.408	.000	.765	1.307
	Self Efficacy	.323	.068	.393	4.782	.000	.765	1.307

a. Dependent Variable: Planned Behavior

Source: Processed primary data, 2025

Table 3. Results of Hypothesis Testing (t-Test) Equation II

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4.151	3.195		1.299	.197		
	Entrepreneur Education	.149	.097	.109	1.530	.129	.652	1.533
	Self Efficacy	.126	.058	.156	2.172	.032	.636	1.574
	Planned Behavior	.615	.074	.629	8.335	.000	.577	1.732

a. Dependent Variabel: Entrepreneurial Behavior

Source: Processed primary data, 2025

The **Table 3**, shows that the t-values for the Entrepreneurial Education and Self-Efficacy variables are 4.408 and 4.782, respectively, both of which exceed the t-table value of 1.981 (α = 0.05). With a significance level of 0.000, which is smaller than α (0.05), Hypotheses H1 and H2 are accepted, indicating that Entrepreneurial Education and Self-Efficacy have a positive and significant effect on Planned Behavior. In contrast, the t-value for Entrepreneurial Education is 1.530, which is smaller than the t-table value of 1.981 (α = 0.05), with a significance level of 0.129 (> 0.05). This results in the rejection of Hypothesis H4, meaning Entrepreneurial Education does not significantly affect Entrepreneurial Behavior through Planned Behavior. Moreover, the t-values for Self-Efficacy and Planned Behavior are 2.172 and 8.335, respectively, both of which exceed the t-table value of 1.981 (α = 0.05). The significance levels for Self-Efficacy (0.032) and Planned Behavior (0.000) are both smaller than α (0.05). Thus, Hypotheses H5 and H3 are accepted, confirming that both Self-Efficacy and Planned Behavior positively and significantly affect Entrepreneurial Behavior.

3.1.3 Coefficient of Determination (R^2)

Table 4. Coefficient of Determination

Variable Relationship	*Adjusted R Square*
Entrepreneur Education and Self Efficacy on Planned Behavior (Equation I)	0,423
Entrepreneur Education, Self Efficacy and Planned Behavior on Students' Entrepreneurial Behavior (Equation II)	0,635

Source: Processed primary data, 2025

The coefficient of determination (R^2) measures the proportion of variance in the dependent variable explained by the independent variables. In the Model 1 summary table, the R^2 value is 0.423, indicating that the combined influence of X1 and X2 explains 42.3% of the variance in Y. The remaining 57.7% is explained by other variables not included in the study. In Model 2, the R^2 value is 0.635, showing that X1, X2, and Y account for 63.5% of the variance in Z, with the remaining 36.5% attributed to other unexamined variables.

3.1.4 Total Determination Coefficient (R^2)

Based on the determination coefficient values in the table, the error values for each dependent variable (Planned Behavior and Entrepreneurial Behavior) are calculated as follows:

$e1 = \sqrt{(1 - R12)} = \sqrt{(1 - 0{,}423)} = 0{,}577$

$e2 = \sqrt{(1 - R22)} = \sqrt{(1 - 0{,}635)} = 0{,}365$

The total determination coefficient is then computed using the formula:.

= 1 – P2e1 P2e2

= 1- (0,577)2 (0,365)2

= 1 – (0,33) (0,13)

= 0,957

This results in a total determination coefficient of 0.957, indicating that 95.7% of Entrepreneurial Behavior is explained by the variables Entrepreneurial Education, Self-Efficacy, and Planned Behavior, while the remaining 4.3% is explained by other unexamined variable.

3.1.5 Path Analysis

Intervening variables are those that mediate the relationship between independent and dependent variables. In this research model, Planned Behavior acts as an intervening variable, mediating the indirect effects of Entrepreneur Education and Self Efficacy on Entrepreneurial Behavior. The intervening effect was tested using path analysis, as outlined below:

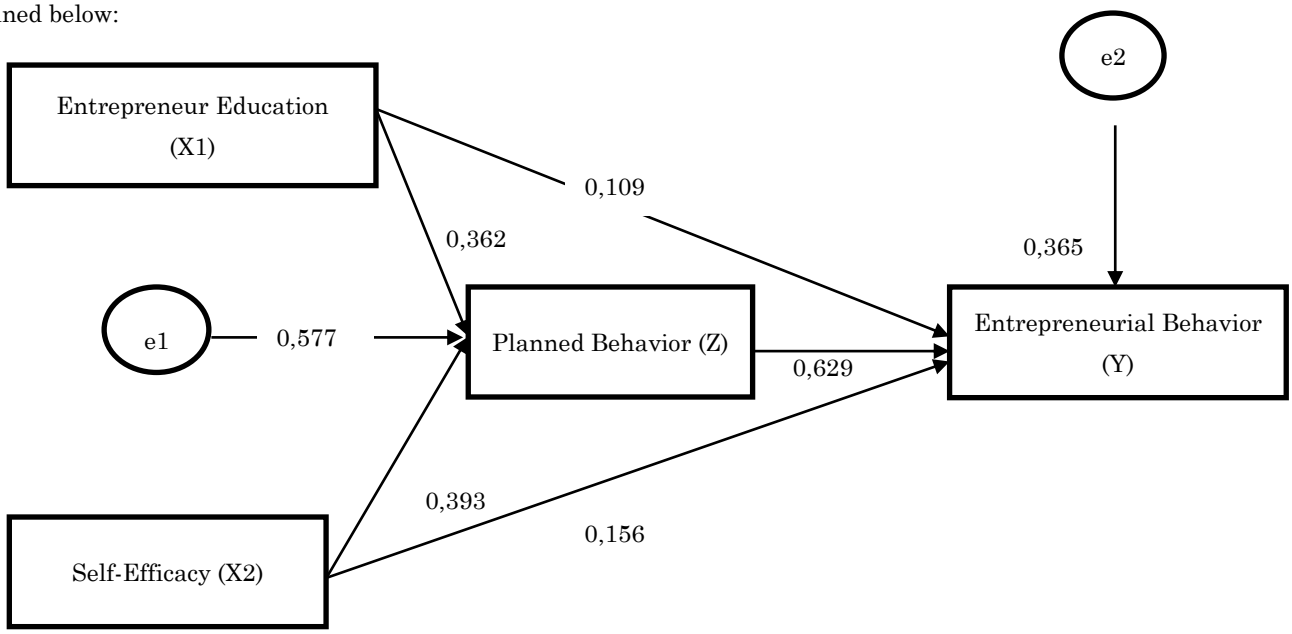

Figure 1. Path analysis

Based on the **Figure 1**, shown, it was found that Entrepreneur Education (X1) has a direct effect on Entrepreneurial Behavior (Y) of 0.109. Self Efficacy (X2) directly affects Entrepreneurial Behavior (Y) with a value of 0.156. Planned Behavior (Z) has the strongest direct effect on Entrepreneurial Behavior (Y) at 0.629. Furthermore, Entrepreneur Education (X1) indirectly influences Entrepreneurial Behavior (Y) through Planned Behavior (Z) with a value of 0.362, while Self Efficacy (X2) has an indirect effect on Entrepreneurial Behavior (Y) through Planned Behavior (Z) of 0.393.

3.2 DISCUSSION

3.2.3 The Influence of Entrepreneur Education on Entrepreneurial Behavior

The results of the study's hypothesis testing (H1) indicate that the regression coefficient for the influence of Entrepreneur Education on Entrepreneurial Behavior is 0.109. This suggests that an increase in Entrepreneur Education positively affects Entrepreneurial Behavior. The hypothesis test yielded a t-value of 4.408 with a significance level of 0.000, which is less than α (0.05), thereby confirming H1. Therefore, Entrepreneur Education has a positive and significant influence on Entrepreneurial Behavior. Enhanced entrepreneurship education improves students' entrepreneurial behavior by increasing their knowledge, awareness of market opportunities, and desire to establish their own businesses. These findings align with previous research by Falah & Marlena (2022) and (Cahyono, 2014), which demonstrated that entrepreneurship education positively influences entrepreneurial interest, a key factor in motivating individuals to pursue entrepreneurship.

3.2.4 The Influence of Self Efficacy on Entrepreneurial Behavior

Based on the results of the study, the analysis of hypothesis testing (H2) proves that the regression coefficient of the The hypothesis testing (H2) analysis shows that the regression coefficient for the effect of Self Efficacy on Entrepreneurial Behavior is 0.156. This indicates that an increase in Self Efficacy enhances its impact on Entrepreneurial Behavior. The hypothesis test resulted in a t-value of 4.782 with a significance level of 0.000, which is less than α (0.05), thus confirming H2. Therefore, Self Efficacy has a positive and significant effect on Entrepreneurial Behavior. Higher self-efficacy leads to

stronger entrepreneurial behavior among students. Students with high self-efficacy exhibit greater confidence in their ability to start and run a business, succeed in business ventures, and lead entrepreneurial activities. This mental maturity enables them to take risks, persevere, and possess other key entrepreneurial traits. These findings align with (Purbawati et al., 2024), who argue that entrepreneurial self-efficacy positively influences entrepreneurial intentions. Similarly, previous research indicates that self-efficacy significantly boosts entrepreneurial interest, as it reflects an individual's belief in their ability to achieve desired outcomes (Abdi et al., 2021).

3.2.5 The Influence of Planned Behavior on Entrepreneurial Behavior

The results of the study's hypothesis testing (H3) show that the regression coefficient for the influence of Planned Behavior on Entrepreneurial Behavior is 0.629. This indicates that an increase in Planned Behavior positively affects Entrepreneurial Behavior. The hypothesis testing produced a t-value of 8.335 with a significance level of 0.000, which is less than α (0.05), thus confirming H3. Therefore, Planned Behavior has a positive and significant influence on Entrepreneurial Behavior. The higher the level of planned behavior, the stronger the entrepreneurial behavior of students. Planned behavior fosters an entrepreneurial mindset, shapes students' attitudes toward entrepreneurship, enhances their perceptions of entrepreneurship, and strengthens their intention and control over entrepreneurial actions.

3.2.6 The Influence of Entrepreneur Education on Entrepreneurial Behavior Through Planned Behavior

The results of the study's hypothesis testing (H4) show that the regression coefficient for the influence of Entrepreneur Education on Entrepreneurial Behavior through Planned Behavior is 0.362. However, the hypothesis testing produced a t-value of 1.530 with a significance level of 0.129, which is greater than α (0.05). This indicates that H4 is rejected, meaning that Entrepreneur Education does not significantly influence Entrepreneurial Behavior through Planned Behavior as an intervening variable. The findings suggest that Planned Behavior does not mediate the relationship between Entrepreneur Education and Entrepreneurial Behavior. Several factors, such as limited capital, intense competition, and lack of innovation, may discourage students from pursuing entrepreneurship, leading to perceptions and behavioral control that are contrary to entrepreneurial intentions.

3.2.7 The Influence of Self Efficacy on Entrepreneurial Behavior Through Planned Behavior

The results of the study's hypothesis testing (H5) show that the regression coefficient for the influence of Self Efficacy on Entrepreneurial Behavior through Planned Behavior is 0.156. This indicates that higher Self Efficacy enhances its influence on Entrepreneurial Behavior via Planned Behavior. The hypothesis testing produced a t-value of 2.172 with a significance level of 0.032, which is less than α (0.05). This supports the acceptance of H5, meaning that Self Efficacy has a positive and significant impact on Entrepreneurial Behavior through Planned Behavior as an intervening variable. Higher self-confidence and mental maturity among students contribute to developing entrepreneurial perceptions and behavioral control, which in turn fosters entrepreneurial behavior. Students will become more diligent, courageous, and responsible individuals.

4 CONCLUSION

Based on the analysis results, the total coefficient of determination is 0.957, indicating that 95.7% of Entrepreneurial Behavior can be explained by the variables Entrepreneur Education, Self Efficacy, and Planned Behavior, while the remaining 4.3% is attributed to errors and other unexamined variables. This study proposed five hypotheses, and the findings revealed that Entrepreneur Education positively influences Entrepreneurial Behavior, demonstrating that better entrepreneurship education leads to higher entrepreneurial behavior among students (H1 accepted). Similarly, Self Efficacy positively affects Entrepreneurial Behavior, where higher self-efficacy corresponds to increased entrepreneurial behavior (H2 accepted). Furthermore, Planned Behavior also positively impacts Entrepreneurial Behavior, indicating that stronger planned behavior enhances entrepreneurial behavior (H3 accepted). However, Entrepreneur Education does not influence Entrepreneurial Behavior through Planned Behavior as an intervening variable, meaning Planned Behavior does not mediate the relationship between Entrepreneur Education and Entrepreneurial Behavior (H4 rejected). On the other hand, Self Efficacy significantly affects Entrepreneurial Behavior through Planned Behavior as an intervening variable, thereby strengthening the influence of self-efficacy on students' entrepreneurial behavior (H5 accepted).

RECOMMENDATIONS

Further research can examine other variables that can influence entrepreneurial behavior by using indicators from various recent expert opinions so that the results obtained are more recent. Apart from that, future researchers can use this research as a reference in researching different objects so that they get various results according to their needs.

ACKNOWLEDGEMENTS

The author would like to thank the supervisor of the Master of Economics Education Study Program, Surabaya State University and his colleagues for their assistance in completing this research.

AUTHOR'S CONTRIBUTIONS

All authors contribute actively in discussing the results and discussions of the research from the beginning to the final draft of the research manuscript.

CONFLICT OF INTEREST

The authors declare that they have no competing interests in any way in the production of this research.

REFERENCES

Abdi, A. N., Utami, C. W., & Vidyanata, D. (2021). Pengaruh Entrepreneurial Education, Personality dan Self- Efficacy Terhadap Minat Berwirausaha Universitas Ciputra, Surabaya Persentase wirausahawan di Asia Indonesia Thailand Malaysia Singapore keinginan atau minat dalam berwirausaha. Menurut Utami *(Jurnal Ekonomi Bisnis Dan Kewirausahaan (JEBIK)*, *10*(1), 23–35.

Cahyono, A. E. (2014). Pengaruh Pendidikan Kewirausahaan Melalui Variabel Intervening Teori Perilaku Terencana Terhadap Intensi Berwirausaha Mahasiswa Fakultas Keguruan dan Ilmu Pendidikan Universitas Jember. *Jurnal Ekonomi Pendidikan dan Kewirausahaan*, *2*(22 Jan), 1–17.

Falah, N., & Marlena, N. (2022). Pengaruh Pendidikan Kewirausahaan dan Pengalaman Prakerin Terhadap Minat Berwirausaha Siswa SMK. *Jurnal PTK Dan Pendidikan*, *8*(1). https://doi.org/10.18592/ptk.v8i1.6453

Hidayati, N. R. (2015). Pengaruh Pendidikan Kewirausahaan Terhadap Rencana Berwirausaha Mahasiswa Jurusan Ekonomiislam Iain Bengkulu. In *Skripsi*.

Ilahi, A. A. A. (2023). *Kewirausahaan* (Arifuddin (ed.); Vol. 6, Issue 1). Cv.Eureka Media Aksara.

Karwati, L., Qomariah, A. I., Ardani, L., & Nurani, S. S. (2024). *Kewirausahaan* (B. A. Laksono (ed.)). Bayfa Cendekia Indonesia.

Purbawati, C., Diana, N., & Afifuddin. (2024). Pengaruh Entrepreneurship Education dan Entrepreneurial Self-Efficacy Terhadap Entrepreneurial Intention dengan Dimoderasi oleh Gender (Studi Kasus Mahasiswa FEB Unisma Angkatan 2020). *E_Jurnal Ilmiah Riset Akuntansi Vol.*, *13*(01), 1–23.

Ranto, dwi wahyu pril. (2016). Membangun Perilaku Entrepreneur Pada Mahasiswa Melalui Entrepreneurship Education. *Jbma*, *3*(1), 79–86.

Sugiono. (2014). *Metode Penelitian Administrasi (Dilengkapi Dengan Metode R&D)*. Alfabeta.

Sugiyono. (2019). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&D Dan Penelitian Pendidikan)*. Alfabeta.

Suharti, L., & Sirine, H. (2011). Faktor-Faktor yang Berpengaruh Terhadap Niat Kewirausahaan (Entrepreneurial Intention). *Jurnal Manajemen Dan Kewirausahaan*, *13*(2). https://doi.org/10.9744/jmk.13.2.124-134

Tony Wijaya. (2008). Kajian Model Empiris Perilaku Berwirausaha UKM DIY dan Jawa Tengah. *Jurnal Manajemen Dan Kewirausahaan*, *10*(2), pp.93-104. http://puslit2.petra.ac.id/ejournal/index.php/man/article/view/17036

Waruwu, M. (2023). Pendekatan Penelitian Pendidikan: Metode Penelitian Kualitatif, Metode Penelitian Kuantitatif dan Metode Penelitian Kombinasi (Mixed Method). *Jurnal Pendidikan Tambusai*, *7*(1). https://doi.org/10.36706/jbti.v9i2.18333

Zimmerer, Wilson, T., & Scarborough. (2008). *Kewirausahaan dan Manajemen Usaha Kecil*. Salemba Empat.