

14th ISCA 2024

Enhancing Entrepreneurial Readiness Through Digital Literacy in Vocational Education: A Quantitative Analysis

^{1*} Irfan Nur Oktawian^{1*}, Aldila Krisnaresanti^{2*}, Herman Sambodo³, Viviana Mayasari⁴

^{1*}Universitas Jenderal Soedirman, irfannuroktawian@gmail.com, Indonesia
²Universitas Jenderal Soedirman, aldila.krisnaresanti@unsoed.ac.id, Indonesia
³Universitas Jenderal Soedirman, herman.sambodo@unsoed.ac.id, Indonesia
⁴Universitas Jenderal Soedirman, viviana.mayasari@unsoed.ac.id, Indonesia
*corresponding author

ABSTRACT

This study aims to analyze the influence of digital literacy on the entrepreneurial readiness of 11thgrade students at Vocational High School 1 Purbalingga. This quantitative research involves a population of 495 11th-grade students from the 2023/2024 academic year, with a sample of 222 students selected through purposive sampling and proportional stratified random sampling techniques. Data collection was conducted using closed questionnaires, observation, and document studies. The results of the study indicate that digital literacy has a positive effect on entrepreneurial readiness. This research implies that Vocational High Schools can enhance learning by maximizing the use of digital media to improve students' entrepreneurial experience.

Keywords: digital literacy, entrepreneurial readiness, vocational high school.

1. Introduction

Unemployment is currently a major concern for all countries, especially for developing countries. The gap between the number of workers and available job vacancies is the reason why unemployment is difficult to overcome. Based on data from the Central Statistics Agency (BPS) in August 2023, Indonesia's Open Unemployment Rate (TPT) as of August 2023 was 5.32 percent (bps.go.id, 2023). In percentage terms, Indonesia's TPT is considered to have decreased year on year (YOY), especially in the last 4 years. Although it is considered to have decreased, the figure is still said to be large because it is still difficult for Indonesians to find work. Becoming an entrepreneur is one of the solutions so that unemployment can be overcome.

(Nugraheni, 2021). Now running an entrepreneurship is easier because it is supported by the rapid development of technology (Butar *et al.*, 2022). According to Yuliani (2018) entrepreneurial readiness is very important for every individual, especially vocational students. When they are equipped with preparations for entrepreneurship, both theory and practice, it will foster an entrepreneurial spirit. One of the vocational schools that strives to improve entrepreneurial readiness is Vocational High School 1 Purbalingga. This is evidenced by the business center of Vocational High School 1 Purbalingga graduates who become entrepreneurs is still very small. The following is data on alumni graduates in 2020, 2021, 2022:

te	Int		E	mployability i	in the World	of Business a	and Industr	ry		
luai ar		mom	W	ork	Not Yet	Working	Coll	ege	entrep	reneur
Graduate Year	Ап	Student Count	(%)	Student Count	(%)	Student Count	(%)	Student Count	(%)	
2020	491	231	47,05	0	0	245	49,90	15	3,05	
2021	96	56	58,33	7	7,29	30	31,25	3	3,13	
2022	332	44	13,25	249	75	35	10,54	4	1,20	
Aver	age									
(%	()		39,54		27,43		30,56		2,46	

Table 1. Graduate Data of Vocational High School 1 Purbalingga 2020-2022 Academic Year

Data Source : BKK Vocational High School 1 Purbalingga, 2023

Based on alumni tracking data in Table 1, of the four absorption in the business world and the industrial world (DUDI), the highest data on alumni who work in agencies or companies with an average of 39.54 percent of the three youngest batches. While the second highest rank is alumni who are studying with an average of 30.56 percent, and those who have not worked are 27.43 percent. Graduates of Vocational High School 1 Purbalingga who have become entrepreneurs are only 2.46 percent of the three youngest batches. This shows the lack of graduates who decide to start their own business. The results are reinforced by data on the entrepreneurial readiness of students from two classes, namely class XI PM 1 and XI PPLG 1. The pre-research questionnaire on entrepreneurial readiness is seen from personality, self-motivation, knowledge of entrepreneurship, skills in running a business (Mardiah & Fridayati, 2020). Table 2 explains the results of the pre-research questionnaire related to entrepreneurial readiness.

Table 2. Student Entrepreneurship Readiness Data
--

C		Readiness for Entrepreneurship				
Class	Amount	Amount Not Ready		Ready		
		Student Count	Percentage (%)	Student Count	Percentage (%)	
XI PM 1	36	17	47,22	19	52,78	
XI PPLG 1	36	23	61,89	13	38,11	
Average			54,56		45,44	

Data source: Primary data processed, 2023

Referring to Table 2, the results of the pre-questionnaire regarding entrepreneurial readiness showed that of the two classes that answered not ready with an average of 54.56 percent, 47.22 percent or 17 students from class XI PM 1 and 61.89 percent or 23 students from class XI PPLG 1. While with an average of 45.44 percent, 52.78 percent or 19 students from class XI PM 1 and 38.11 percent or 13 students from class XI PPLG 1 who answered ready. So it can be seen that most of the students in class XI of Vocational High School 1 Purbalingga are still not ready for entrepreneurship seen from both classes. The willingness and ability to prepare various things needed for entrepreneurship, both internally and externally, is known as entrepreneurial readiness (Jannah & Mardiyah, 2018). The entrepreneurial process requires the courage to take risks wisely in order to overcome obstacles to achieve the desired goal of success. One of the vocational schools that strives to improve entrepreneurial readiness is Vocational High School 1 Purbalingga.

Factors that influence entrepreneurial readiness in the form of internal and external factors. Internal factors that affect entrepreneurial readiness are digital literacy. Digital literacy is the ability to use technology and understanding of the internet (Ulfa & Suharsono, 2023). Good digital literacy skills can have a positive impact. Technological advances have made



economic development even more rapid. Various innovations have emerged as a result of the development of science and technology. The emergence of a creative economy and small entrepreneurs that can create employment opportunities for the community and more and more job vacancies of various kinds (Adha & Permatasari, 2021). Various digital tools can be used properly to access information via the internet, so that students can be more aggressive in finding opportunities in terms of entrepreneurial readiness. This is in line with the results of research from Ulfa & Suharsono (2023) suggests that digital literacy has a positive and significant effect on digital entrepreneurship readiness. Research from Anggresta *et al.* (2022) revealed that digital literacy has a positive effect on entrepreneurial readiness.

2. Literature Review

2.1 Entrepreneurial Readiness

According to Effendi (2017) readiness is the entire state of a person who may be prepared to give a response to situations and conditions. According to Mardiah et al. (2020) readiness is the state of a person who is able to perform a task or activity when they already have experience. Doing an action when you already have experience then someone already has readiness. Yuana & Yatin (2017) suggest that entrepreneurial readiness is a person's condition that appears either physically or mentally in a person with the aim of entrepreneurial activity. Fatimah et al. (2020) revealed that entrepreneurial readiness can be understood as a person's and expertise in carrying out entrepreneurial activities. A person needs to have desire. abilities such as being independent, taking risks, responsibility, initiative, discipline, having foresight, being able to develop ideas and innovations, having broad insight and having the courage to make decisions. Based on this opinion, it can be concluded that entrepreneurial readiness is the desire and expertise in preparing everything needed by a person for entrepreneurship based on a person's mentality, knowledge and emotions. According to Mardiah & Fridayati (2020) entrepreneurial readiness can be measured through several indicators, namely personality, motivation, entrepreneurial skills, and entrepreneurial knowledge.

2.2 Digital Literacy

The rapid development of technology has made the spread of information very broad. Good digital literacy skills will create high entrepreneurial opportunities. According to Ulfa & Suharsono (2023) the ability to use digital devices in everyday life is known as digital literacy. Giovanni & Komariah (2020) suggest that digital literacy is the expertise to apply and utilize data in any format from various platforms accessed by computers. If a student has digital literacy in using the internet and computers, it will be easier for students to find information about risks in entrepreneurship so that they can be avoided, plan a business, find a solution and determine the target of a business (Ulfa & Suharsono, 2023). Referring to the above opinion, it can be concluded that digital literacy is the ability and proficiency to use digital media effectively and efficiently for computer-based information exploration. According to Stefany *et al.* (2017) digital literacy has several indicators, namely information literacy, digital scholarship, learning skills, ICT literacy, privacy management, communication and collaboration, and media literacy.

3. Research Methodology

The research conducted is a quantitative study with a survey method that analyzes the influence of digital literacy on entrepreneur readiness. The population in this study were grade XI students of Vocational High School 1 Purbalingga in the 2023/2024 school year with a total of 495 students. The sampling technique in this study used purposive sampling and proportional stratified random sampling. The sampling method uses the Yamane formula with



an error rate of 5% so that a sample size of 222 students can be obtained. The data collection technique used a closed questionnaire with a Likert scale. Data analysis techniques using (1) Successive Interval Method (MSI) test for data quality test consisting of validity test and reliability test; (2) prerequisite test analysis, namely normality test, multicollinearity test, and heteroscedasticity test; and (3) hypothesis testing, namely multiple linear regression test, coefficient of determination R2, t test, and F test.

4. Results

4.1 Validity Test

The instrument can measure precisely and correctly and provide information that is relevant to the variable under study, so the instrument can be declared valid (Suliyanto, 2018: 233). Sugiyono (2019) states that the validity test uses 30 respondents. The significant level used in this study was 5 percent. then obtained an r table of 0.361. Each statement is considered valid if the rcount> rtable value or significance value < 5% or 0.05. It is known from 16 statements related to entrepreneurial readiness explaining that 14 statements are declared valid and 2 statements are declared invalid. Of the 19 statements related to digital literacy explained that 18 statements were declared valid and 1 statement was declared invalid.

4.2 Reliability Test

Table 3. Data Reliability Test							
Variabel	Alpha Cronbach	Standard Reliabel	Results				
Entrepreneurial Readiness	0,919	0,60	Reliabel				
Digital Literacy	0,878	0,60	Reliabel				

Data Source: Primary data processed, 2024

This research is declared reliable when each variable has a Cronnbach Alpha value> 0.60. The Alpha Cronbanch value of entrepreneurial readiness is 0.919 and digital literacy is 0.878, it can be concluded that the variables of entrepreneurial readiness and digital literacy are declared reliable and accurate.

4.3 Normality Test

The Kolmogrov Smirnov test is used to determine whether the research data is normal or abnormal. Research data is said to be normal if the unstandardized residual value> 0.05. The normality test results in this study amounted to 0.63> 0.05. Based on the results of the Kolmogrov Smirnov test, it can be concluded that the data in this study are normally distributed.

Table 4. Data Normality Test							
Num	Variabel	Sig. Value	Taraf Sig.	Result			
1	Unstandardized residual	0,063	0,05	Normal			

Data Source: Primary data processed, 2024

4.4 Multicollinearity Test

Multicollinearity test is used to test the relationship between independent variables. The results of the multicollinearity test in this study can be seen in Table 5.

Table 5. Data Multicollinearity Test						
VariabelToleranceVIPResult						
Digital Literacy	0,634	1,578	Multicollinearity free			



Sumber: Data primer diolah, 2024

Based on the multicollinearity test results in Table 5, the results show that the tolerance value is 0.634 > 0.01 and the VIF value is 1.578 < 10, it can be concluded that the regression model does not have multicollinearity symptoms.

4.5 Heteroscedasticity Test

The Glejser test is used in this study, the aim is to determine whether there are symptoms of heteroscedasticity. The heteroscedasticity test can be seen in table 6.

Table 6. Heteroscedasticity Test Results								
Variabel Significance <i>Alpha</i> Description								
Digital Literacy	0,05	No heter	symptoms oscedasticity	of				

Source: Primary data processed, 2024

Based on the results of the heteroscedasticity test in Table 6, it can be concluded that the digital literacy variable has a significance value of 0.106 > 0.05. So that this research variable can be stated that there are no symptoms of heteroscedasticity and each variable is declared constant.

4.6 Multiple Linear Regression Analysis

Table 7. Multiple Linear Regression Results							
Model	Unstandardize	ed Coefficients	Standarized				
	В	Std. Error	— Coefficients Beta				
Constanta	17,025	2,255					
Digital Literacy	0,127	0.040	0,186				

Source: Primary data processed, 2024

Regression Equation

Based on the table related to the results of multiple linear regression analysis, the following equation is obtained:

Y = 17,025 + 0,127LD + 0,05

- Constant value in Table 7 is 17.025, which means that entrepreneurial readiness is worth 17.025 if the variables of digital literacy equal to 0 (zero) or none.
- Digital literacy variable has a positive regression coefficient of 0.127, which means that there is a positive effect of digital literacy on entrepreneurial readiness. This shows that if students' digital literacy is good, then the more entrepreneurial readiness of students will increase.

4.7 Coefficient of Determination

Based on data processing through SPSS 26, the coefficient of determination is 0.515 so that it can be stated that entrepreneurial readiness can be explained by digital literacy variables by 51.5 percent and 48.5 percent explained by other variables not examined in this study.

Adjusted R Std. Error of the							
Model	R	R Square	Square	Estimate			
1	0,717ª	0,515	0,508	4,55842			

4.8 F Test

The F test is used to test whether the regression model is feasible in estimating the dependent variable and proceeding to further analysis. The research regression model is feasible to use in



this study because the Fcount> Ftabel value or 77.084> 2.65 and a significance value of 0.000 <0.05. The results of the F test calculation can be seen in Table 9.

Table 9. F Test Results							
Fhitung	Ftabel	Signifikansi	Alpha				
77,084	2,65	0,000	0,05				

Source: Primary data processed, 2024

4.9 t Test

The t test is used to determine the effect of the independent variable on the dependent variable. The error rate of the t test in this study is 0.05. The t test results can be seen in Table 10.

Table 10. t Test Results								
Variabel	t _{hitung}	t _{tabel}	Sig.	Result				
Literasi digital	3,139	1,651	0,002	Ha1 accepted				

Source: Primary data processed, 2024

Based on the t test analysis in Table 10, the digital literacy variable obtained the results of tcount 3.139 > t table 1.651 which can be concluded that Ha1 is accepted which means that there is a positive effect of digital literacy on entrepreneurial readiness.

5. Discussion

The results of this study prove that digital literacy has a positive effect on entrepreneurial readiness of class XI students of Vocational High School 1 Purbalingga. This is evidenced by the results of tcount 3.139> t table 1.651 and a significance value of 0.002 < 0.05. So it can be interpreted that the better the digital literacy skills, the better the entrepreneurial readiness. This research is in line with that conducted by Almi & Rahmi (2020) which states that digital literacy can have a positive effect on entrepreneurial readiness. Research from Ulfa & Suharsono (2023) states that digital literacy has a significant positive effect on entrepreneurial readiness. Anggresta et al. (2022) dan Almi & Rahmi (2020) suggest that there is a positive effect of digital literacy on entrepreneurial readiness. However, in research conducted by Usman et al. (2021) that digital literacy does not have a positive effect on entrepreneurial readiness, so there are different results in the study. Suryani & Chaniago (2023) emphasized that digital literacy skills can help students understand the complexity of the digital world and can benefit from technological advances while still upholding the rules of the internet.

6. Conclusion

Based on the results of the analysis and discussion in this study on the effect of digital literacy on entrepreneurial readiness of class XI students of Vocational High School 1 Purbalingga, it can be concluded that digital literacy has a positive effect on entrepreneurial readiness of class XI students of Vocational High School 1 Purbalingga. This shows that the better the level of digital literacy of students, the higher the level of entrepreneurial readiness of students.

References

- Adha, E., & Permatasari, C. L. (2021). The Role of Entrepreneurship Education in Fostering Student Entrepreneurship Readiness. Journal of Economic Education, 15(1), 60-71. https://doi.org/10.19184/jpe.v15i1.21158
- Almi, S. N., & Rahmi, E. (2020). The Effect of Digital Literacy on Entrepreneurial Readiness in the Digital Age of Students of the Faculty of Economics, State University of Padang. Ecogen Journal, 3(2), 242-249. https://doi.org/10.24036/jmpe.v3i2.8829



- Anggresta, V., Maya, S., & Septariani, D. (2022). The Effect of Digital Literacy and Entrepreneurship Courses on Entrepreneurship Readiness. Research and Development Journal of Education, 8(1), 153-159. https://doi.org/10.30998/rdje.v8i1.12090
- Butar, A., Tinambunan, L. H. R., & Pratiwi, M. O. (2022). The Effect of Entrepreneurial Readiness on Creative and Innovative Entrepreneurial Interest for the Young Generation. Proceedings of the National Seminar on Accounting UKMC, 1(1), 1-8. http://103.165.236.247/index.php/pnsoa/index
- Effendi. (2017). The Relationship between Student Learning Readiness and Physics Learning Outcomes of Class X Students of SMK Muhammadiyah 03 Sukaraja. Journal of Physics Education, 5(1), 15-24. https://doi.org/10.24127/jpf.v5i1.740
- Giovanni, F., & Komariah, N. (2020). The Relationship Between Digital Literacy and Learning Achievement of Students of State Senior High School 6 Bogor City. Libraria, 7(1), 147-162. https://doi.org/10.21043/libraria.v7i1.5827
- Jannah, A. F., & Mardiyah, S. U. K. (2018). The Effect of Entrepreneurship Education and Family Environment on Entrepreneurial Readiness of Xi Class Students of Office Administration Expertise Competency Smk Negeri 1 Yogyakarta. Transcommunication, 53(1), 497-506. http://www.tfd.org.tw/opencms/english/about/background.html%0Ahttp://dx.doi.org/10.1016/j.ci rp.2016.06.001%0Ahttp://dx.doi.org/10.1016/j.powtec.2016.12.055%0Ahttps://doi.org/10.1016/j. ijfatigue.2019.02.006%0Ahttps://doi.org/10.1016/j.matlet.2019.04.024%0A
- Mardiah, N., & Fridayati, L. (2020). Entrepreneurial Readiness of Students of the Department of Family Welfare Science, Faculty of Tourism and Hospitality Unp. Indonesian Journal of Education Research, 1(1), 8-14. pdfs.semanticscholar.org
- Mardiah, N., & Fridayati, L. (2020b). Entrepreneurial Readiness of Students of the Family Welfare Education Study Program Concentration of Catering at Padang State University. Kapita Selekta Geografi, 3(1), 29-33. http://ksgeo.ppj.unp.ac.id/index.php/ksgeo%0akesiapan
- Nugraheni, D. P. (2021). Vocational Education Based on Local Wisdom Solution to Overcome Unemployment in Indonesia. Journal of Systems, Information Technology, and Electronics Engineering, 1(1), 1-4. https://doi.org/10.31331/jsitee.v1i1
- Roza, A. D., Turyono, A., Lestari, E., Afani, E., Fitri, N. A., Solikhah, S., & Raharja, M. C. (2017). Optimizing the Management and Development of Slinga Park Dam Tourism Destination in Slinga Village, Purbalingga Regency. 2(1), 36-43. http://www.jp.feb.unsoed.ac.id/index.php
- Sugiyono. (2019). Qualitative Quantitative Research Methods. Alfabeta.
- Suliyanto. (2018). Business Research Methods (for Thesis, Thesis, & Dissertation. Andi Offset.
- Suryani, S., & Chaniago, H. (2023). Digital Literacy and Its Impact on Entrepreneurial Intentions: Studies on Vocational Students. International Journal Administration Business and Organization, 4(2), 16-22. https://doi.org/10.61242/ijabo.23.261
- Ulfa, S. M., & Suharsono, N. (2023a). The Effect of Digital Literacy and Prakerin on Digital Entrepreneurship Readiness Mediated by Entrepreneurial Attitudes in Vocational Students. Journal of Economic Education (JUPE), 11(3), 263-272. https://doi.org/10.26740/jupe.v11n3.p263-272
- Ulfa, S. M., & Suharsono, N. (2023b). The Effect of Digital Literacy and Prakerin on Digital Entrepreneurship Readiness Mediated by Entrepreneurial Attitudes of Vocational Students. Journal of Economic Education (JUPE), 11(3), 263-272. https://doi.org/10.26740/jupe.v11n3.p263-272
- Usman, A., Fadhil, A. A., & Haq, A. N. (2021). The Influence of Financial Knowledge and Digital Literacy on Entrepreneurial Readiness of Students of Commercial Administration Department of Politeknik Negeri Ujung pandang. Fields of Administrative Sciences, Accounting, Business, Management, and Humanities, 4 (2), 101-107. https://jurnal.poliupg.ac.id/index.php/
- Yuana, A. T., & Yatin. (2017). Entrepreneurship Readiness of 3rd Grade Students at SMK Negeri Yogyakarta in 2016/2017 Academic Year. Journal of Vocational Education in Mechanical Engineering Volume, 5(5), 365-372.
- Yuliani, A. T. (2018). Analysis of Factors Affecting Entrepreneurial Readiness. Journal of Economic Education (JUPE), 6(2), 121-124. https://ejournal.unesa.ac.id/index.php/jupe/article/view/24946