



Entrepreneurship Education as A Business to Increase Students' Interest In Entrepreneurship In The Digital Era

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Abstract. The collapse of the economy in various countries was caused by the COVID-19 pandemic. Opportunities and challenges to rise from adversity are the main focus. The entrepreneurial sector is one of the main pillars in the revival of the national economy. The purpose of this study was to identify entrepreneurship education in higher education as an effort to increase students' interest in entrepreneurship in an effort to provide entrepreneurial skills. Data collection was carried out using instruments in the form of documentation, observation and giving questionnaires to students who had or are currently attending entrepreneurship lectures. Data analysis used multiple linear regression to determine its effect on the variables used. The preliminary study of this research shows the enthusiasm of students in taking entrepreneurship courses. This is influenced by the desire of students to have the expertise and skills to become an entrepreneur. In addition, the desire to have a business after becoming a graduate so as not to be confused with looking for work is the main reason for students. Especially with the COVID-19 pandemic which is not yet known when it will end, they are even more enthusiastic about the support of digital technology to make it easier for them to carry out business activities. Thus, it is hoped that the emergence of new entrepreneurs will have a good impact on economic growth and assist the government in opening up job opportunities and reducing unemployment. The results showed that entrepreneurship education had no effect on student entrepreneurship skills.

Keywords: entrepreneurship, covid-19 pandemic, digital technology.

1 Introduction

Entrepreneurship is one of the important factors in increasing economic growth and innovation for every country,[1]. One of the components of a country that can increase economic, social and technological development is through entrepreneurship or entrepreneurialism, [2]. Entrepreneurship is an activity that can help create jobs in improving people's welfare,[3]. Based on national entrepreneurship ratio data, Indonesia is at 3.47 percent, when compared to countries such as Singapore (8.76), Thailand (4.26), and Malaysia (4.74), Indonesia is still very low, [4]. This shows the need for efforts to increase national entrepreneurship.

In 2013 the Ministry of Education and Culture issued and piloted a new education curriculum known as the 2013 curriculum at the elementary, junior high and high school levels, [5]. There are new subject packages in the curriculum, namely crafts and entrepreneurship at the upper secondary level. The existence of crafts and entrepreneurship subjects is the basis for introducing entrepreneurship from an early age. Through entrepreneurship education at the secondary education level, it is expected to be a driving force in increasing new entrepreneurs. As is the case with research conducted by Johansen & Schanke, (2013), mentions that entrepreneurship education has been introduced in secondary schools as skills development. The concept of entrepreneurship education emphasizes the experience of entrepreneurial learning outcomes, which until now is still an interesting issue in research and practice as well as the learning process even though it has existed for decades,[7]. The purpose of entrepreneurship education is an effort to create new entrepreneurs and encourage the creation of successful businesses in entrepreneurial activities.

Currently, entrepreneurship is a national priority for the government and continues to make full efforts in line with the implementation of entrepreneurship in previous years. [9]. In line with this, there is a need to improve the quality of human resources in providing strengthening innovation and productivity, which has an impact on the benefits of the economic sector, [10], [11]. This refers to various factors that need to be known regarding the influence of entrepreneurial intentions which are described in a theoretical model for the development and implementation of effective policies,[12]. Higher education has a big role in increasing entrepreneurial intentions for students in order to grow young entrepreneurs who are honed through the learning process including, Entrepreneurship education, entrepreneurial skills and fostering an attitude as an entrepreneur. In the context of education, entrepreneurship will encourage students to have the courage to start a business based on creativity, be good at finding opportunities, work hard and have adaptive innovation. Student competencies will be honed by being involved in Entrepreneurship education so that they will have high value and competitiveness. In addition, entrepreneurial values can also be applied in everyday life by every student, whatever their career choice,[13].

The challenges faced by the younger generation in carrying out entrepreneurship are the massive and rapid technological advances that need to be responded to with skills development so as to improve the quality of human resources, [14]. One of the skills in entrepreneurship is a person's ability to make a decision and accept the risk of the decision made, the ability to identify a method in business and the ability to see an available opportunity[15]. Next, there are entrepreneurial skills that are also very important for entrepreneurs to have, namely entrepreneurial attitudes. Assessment of positive and negative attitudes in entrepreneurship is one of the important things, especially to achieve success in entrepreneurship and organizations,[16]. An entrepreneurial attitude has several aspects that can develop an individual's potential to be responsible for one's life, career and future. [17], [18]. An entrepreneur's positive attitude in viewing an opportunity will have an impact on entrepreneurial success and make someone believe that entrepreneurship is a process of self-development and not just for survival. [19].

This study aims to find out whether entrepreneurship education and entrepreneurship intentions can be a stimulus in improving entrepreneurship skills. In addition, the research provides an overview of students' readiness to become entrepreneurs during the pandemic and in the digital era as a provision for the future. Changes in perspective must be oriented as a job seeker but become a job creator. As well as Sarwoko, (2011) stated that entrepreneurship can be learned and mastered, and entrepreneurship can be a choice of work and career choices for college graduates, if indeed students have the intention and motivation to become an entrepreneur.

2 **Method**

This study uses a quantitative approach to cause and effect. Data were collected using documentation, observation and questionnaire instruments given to students who have taken or completed entrepreneurship education courses and then tabulated the data for the results.. Data analysis uses multiple linear regression to determine its effect on the tested variables and uses the Moderated Regression Analysis (MRA) test, MRA is a linear multiple application where the regression equation contains elements of interaction (multiplication of two or more independent variables)[21]. The next stage after the data is collected, the data is compiled, analyzed and synthesized to be concluded and presented in the form of a report. Hypothesis testing in data analysis using the IBM SPSS Statistic 26.0 analysis tool, 2020.

The population in this study were active students majoring in economic education at the State University of Semarang from 2018 to 2019.purposive sampling, meaning that the selection of subjects is based on certain objectives or characteristics related to the focus of this research problem or determining the sample by considering certain characteristics that are unique in a sample.[22]. The independent variables used in this study are entrepreneurship education and entrepreneurial intentions, while the dependent variable is entrepreneurship skills.

3 **Results and Discussion**

3.1 **Result**

Based on the table of description analysis results, the first variable, namely the entrepreneurial skills variable (Y), the minimum value obtained is 34 while the maximum value is 43. This shows that the relationship between the 2018 and 2019 economic education students at Semarang State University is 34 and 43. While the standard deviation is 2,084 which means that the deviation from the average value is quite small, and the average value is 38.04.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
Entrepreneurship education	100	32	50	40.54	4.142

Entrepreneurial intensity	100	28	50	39.18	4,774
Entrepreneurship skills	100	34	43	38.04	2,084
Valid N (listwise)	100				

Table 2. Reliability

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Entrepreneurship education	77.22	40,658	,391	,665
Entrepreneurial intensity	78.58	30.004	,491	,567
Entrepreneurship skills	79.72	52,123	,732	,467

Reliability can be accepted if it meets the predetermined indicators. Widiyanto (2010) said that the basis of decision making is reliable or not, if the value of Cronbach's alpha $> r$ table then the questionnaire is declared reliable, and if the value of Cronbach's alpha $< r$ table then the questionnaire is declared unreliable. Based on the table above, the four variables have reliable predicates. This is because more Cronbach's alpha value is more than 0.1966 (r table). Below is a table of research hypotheses

Table 3. Path Coefficients

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	21,683	1,596		13,587	,000
1 entrepreneurship education	,157	0.036	,313	4,376	,000
entrepreneurial intensity	,255	,031	,583	8.152	,000

a. Dependent Variable: entrepreneurial skills

Based on the table above, it is known that the significant value for the effect of entrepreneurship education on entrepreneurship skills is $0.00 < 0.05$ and the t count is $4.376 > t$ table 1.98472, so it can be concluded that the H1 hypothesis is accepted, which means that there is an influence of entrepreneurship education on entrepreneurial skills. While in hypothesis H2, the significant value is $0.000 < 0.05$ and the t count is $8.152 > t$ table 1.98472. So it can be concluded that the hypothesis is accepted which means that there is an influence of the intensity of entrepreneurship on entrepreneurial skills.

Table 4. Anova

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	236.632	2	118,316	59,401	,000b
	Residual	193.208	97	1,992		
	Total	429,840	99			

a. Dependent Variable: entrepreneurial skills
b. Predictors: (Constant), entrepreneurial intensity, entrepreneurship education

Based on the output above, it is known that the significant value for the effect of X1 and X2 simultaneously on Y is $0.000 < 0.05$ and the value of Fcount is $59.401 > F_{table} 3.09$. So it can be concluded that the hypothesis is accepted which means that there is an effect of X1 and X2 simultaneously on Y.

Table 5. Simultaneous Hypothesis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,742a	,551	,541	1,411

a. Predictors: (Constant), entrepreneurial intensity, entrepreneurship education
b. Dependent Variable: entrepreneurial skills

Based on the table above, it is known that the R square value is 0.551, this means that the effect of the X1 and X2 variables simultaneously on the Y variable is 55.1%.

3.2 Discussion

The influence of entrepreneurship education on entrepreneurial skills

The results of data analysis show that Entrepreneurship Education has an influence on entrepreneurial skills. This shows that entrepreneurship education has a significant positive effect on entrepreneurial skills. Entrepreneurship education is an entrepreneurial learning process that encourages creativity, adaptability and understanding in viewing socio-economic conditions,[23]. In line with findings in the field which show that entrepreneurship education provides students with direct learning experiences, namely the practice of becoming an entrepreneur. In addition, entrepreneurship education is also designed to foster entrepreneurs who have a high social base, strengthening society in obtaining long-term prospects, [24]. This research is also supported by research conducted by [25] who said that entrepreneurship education had a positive and significant effect on entrepreneurship skills. Another study which says that entrepreneurship education has a significant effect on the entrepreneurial skills of economic education students[26].

The influence of the intensity of entrepreneurship on entrepreneurial skills

The results of the study showed that there was an influence of entrepreneurial intention on entrepreneurial skills. This shows that high entrepreneurial intention will have an impact on increasing a person's skills. Students who have high entrepreneurial intention will act creatively and innovatively in seeing an entrepreneurial opportunity. Entrepreneurial intention can be the beginning of a career as an entrepreneur, [27]. Entrepreneurial intention is also referred to as one of the variables to determine a

person's behavior in entrepreneurship, [28]. The higher the intensity of student entrepreneurship, the more the student's entrepreneurial skills will increase.

The influence of entrepreneurship education and the entrepreneurship intention on entrepreneurial skills

The results of the study showed that there was a simultaneous or joint influence of entrepreneurship education and entrepreneurial intention on entrepreneurial skills. These results indicate that the role of both variables is very high in shaping a person's ability to be an entrepreneur. A person who has high knowledge and intention will be able to take the initiative and think creatively in carrying out entrepreneurial innovation. Entrepreneurship education and entrepreneurial intention will make someone independent and able to be an entrepreneur well through participation in learning, [29]. Entrepreneurship education provides a basis for business knowledge that can develop entrepreneurial skills that emphasize business values and ethics, [30]. Thus, entrepreneurial skills are very important for the younger generation in order to improve the quality of human resources so that they have high competitiveness.

4 Conclusion

This study has three hypotheses that have been tested and analyzed with predetermined methods, so that the following conclusions can be drawn.

1. There is an influence of entrepreneurship education on entrepreneurial skills based on the results of data analysis. This is because entrepreneurship education provides direct experience for students during the learning process so that they are interested and try to improve their entrepreneurial skills.
2. There is an influence of entrepreneurial intention on entrepreneurial skills. This is based on the results of testing and conditions in the field that students who have high entrepreneurial intentions will try to improve their creativity and innovation skills in doing entrepreneurship.
3. There is a simultaneous influence of entrepreneurship education, entrepreneurial intention on the entrepreneurial skills of UNNES economics education students in the 2018 and 2019 classes as evidenced by data analysis and findings in the field that students who receive entrepreneurship education accompanied by high entrepreneurial intentions will have high entrepreneurial skills, especially in creativity and innovation in seeing an existing opportunity.

References

1. E. Ruskovaara and T. Pihkala, "Entrepreneurship education in schools: Empirical evidence on the teacher's role," *J. Educ. Res.*, vol. 108, no. 3, pp. 236–249, 2015, doi: 10.1080/00220671.2013.878301.
2. S. Sahoo and R. K. Panda, "Exploring entrepreneurial orientation and intentions among technical university students: Role of contextual antecedents," *Educ. Train.*, vol. 61, no. 6, pp. 718–736, 2019, doi: 10.1108/ET-11-2018-0247.
3. Sari bida and R. Maryati, "Pengaruh Pendidikan Kewirausahaan, Kebutuhan Akan Prestasi dan Efikasi Diri Terhadap Intensi Berwirausaha Siswa SMA Muhammadiyah 1 Jakarta," *Ikraith-Ekonomika*, vol. 2, no. 1, pp. 22–31, 2019.
4. Liputan6.com, "Rasio Kewirausahaan Indonesia Baru 3,47 Persen, Tertinggal dari Malaysia dan Thailand," 2020. [Online]. Available: <https://www.liputan6.com/bisnis/read/4388954/rasio-kewirausahaan-indonesia-baru-347-persen-tertinggal-dari-malaysia-dan-thailand>
5. M. S. Kusmulyono, "Peran Pendidikan Kewirausahaan dan Dukungan Orangtua pada Siswa SMA," *Asian J. Entrep. Fam. Bus.*, vol. 01, no. 01, pp. 25–38, 2017, doi: 10.21632/ajefb.1.1.25-38.
6. V. Johansen and T. Schanke, "Entrepreneurship Education in Secondary Education and Training," *Scand. J. Educ. Res.*, vol. 57, no. 4, pp. 357–368, 2013, doi: 10.1080/00313831.2012.656280.
7. E. Ruskovaara, M. Hämäläinen, and T. Pihkala, "HEAD teachers managing entrepreneurship education - Empirical evidence from general education," *Teach. Teach. Educ.*, vol. 55, pp. 155–164, 2016, doi: 10.1016/j.tate.2016.01.004.
8. N. Brüne and E. Lutz, "The effect of entrepreneurship education in schools on entrepreneurial outcomes: a systematic review," *Manag. Rev. Q.*, vol. 70, no. 2, pp. 275–305, 2020, doi: 10.1007/s11301-019-00168-3.
9. A. Al Mamun, R. A. Muniady, M. A. H. Bin Ibrahim, and N. B. C. Nawi, "Effect of economic vulnerability on entrepreneurial competencies among Malaysian micro-entrepreneurs," *Asia Pacific J. Innov. Entrep.*, vol. 12, no. 2, pp. 222–237, 2018, doi: 10.1108/apjie-03-2018-0013.
10. W. W. Kirkley, "Cultivating entrepreneurial behaviour: entrepreneurship education in secondary schools," *Asia Pacific J. Innov. Entrep.*, vol. 11, no. 1, pp. 17–37, 2017, doi: 10.1108/apjie-04-2017-018.
11. C. Park, "A study on effect of entrepreneurship on entrepreneurial intention," *Asia Pacific J. Innov. Entrep.*, vol. 11, no. 2, pp. 159–170, 2017, doi: 10.1108/apjie-08-2017-024.
12. M. Farrukh, Y. Alzubi, I. A. Shahzad, A. Waheed, and N. Kanwal, "Entrepreneurial intentions," *Asia Pacific J. Innov. Entrep.*, vol. 12, no. 3, pp. 399–414, 2018, doi: 10.1108/apjie-01-2018-0004.
13. L. Aldianto, G. Anggadwita, and A. N. Umbara, "Entrepreneurship education program as value creation: Empirical findings of universities in Bandung, Indonesia," *J. Sci. Technol. Policy Manag.*, vol. 9, no. 3, pp. 296–309, 2018, doi: 10.1108/JSTPM-03-2018-0024.
14. N. Kunicina, I. Bilic, A. Zabasta, J. Caiko, and L. Ribickis, "Development of entrepreneurship skills for students creative thinking support in higher education," 2019 Int. Conf. Eng. Appl. ICEA 2019 - Proc., pp. 1–6, 2019, doi: 10.1109/CEAP.2019.8883450.

15. M. Sousa, "Entrepreneurship Skills Development in Higher Education Courses for Teams Leaders," *Adm. Sci.*, vol. 8, no. 2, p. 18, 2018, doi: 10.3390/admsci8020018.
16. V. Vamvaka, C. Stoforos, T. Palaskas, and C. Botsaris, "Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: dimensionality, structural relationships, and gender differences," *J. Innov. Entrep.*, vol. 9, no. 1, 2020, doi: 10.1186/s13731-020-0112-0.
17. H. Mopangga, "Faktor Determinan Minat Wirausaha Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Negeri Gorontalo," *Trikonomika*, vol. 13, no. 1, p. 78, 2014, doi: 10.23969/trikononika.v13i1.486.
18. M. P. Ajiwibawani, . H., and W. T. Subroto, "The Effect of Achievement Motivation, Adversity Quotient, and Entrepreneurship Experience on Students Entrepreneurship Attitude," *Int. J. Acad. Res. Bus. Soc. Sci.*, vol. 7, no. 9, pp. 441–450, 2017, doi: 10.6007/ijarbss/v7-i9/3339.
19. J. Yang, "The theory of planned behavior and prediction of entrepreneurial intention among Chinese undergraduates," *Soc. Behav. Pers.*, vol. 41, no. 3, pp. 367–376, 2013, doi: 10.2224/sbp.2013.41.3.367.
20. E. Sarwoko, "Kajian Empiris Entrepreneur Intention Mahasiswa," *J. Ekon. Bisnis*, vol. 16, no. 2, pp. 126–135, 2011.
21. L. Liana, "Penggunaan MRA dengan Spss untuk Menguji Pengaruh Variabel Moderating terhadap Hubungan antara Variabel Independen dan Variabel Dependen," *J. Teknol. Inf. Din.*, vol. XIV, no. 2, pp. 90–97, 2009.
22. Sugiyono, *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: ALFABETA CV, 2016.
23. P. Del Vecchio, G. Secundo, G. Mele, and G. Passiante, "Sustainable entrepreneurship education for circular economy: emerging perspectives in Europe," *Int. J. Entrep. Behav. Res.*, vol. 27, no. 8, pp. 2096–2124, 2021, doi: 10.1108/IJEBR-03-2021-0210.
24. M. Suguna et al., "Entrepreneurial education and its role in fostering sustainable communities," *Sci. Rep.*, vol. 14, no. 1, pp. 1–13, 2024, doi: 10.1038/s41598-024-57470-8.
25. D. A. Budy, "Pengaruh Pendidikan Kewirausahaan dan Motivasi Kewirausahaan Terhadap Keterampilan Berwirausaha Mahasiswa Universitas 17 Agustus 1945 Jakarta," *J. Bus. Entrep.*, vol. 1, no. 1, pp. 7–22, 2017.
26. H. I. S. Adi, "Pendidikan Kewirausahaan Dan Motivasi Berwirausaha Berpengaruh Terhadap Keterampilan Berwirausaha Mahasiswa Pendidikan Ekonomi 2016 UNIROW Tuban," *J. TeladanJurnal Ilmu Pendidik. dan Pembelajaran*, vol. 04, no. 02, pp. 107–118, 2019.
27. A. Alferaih, "Starting a New Business? Assessing University Students' Intentions towards Digital Entrepreneurship in Saudi Arabia," *Int. J. Inf. Manag. Data Insights*, vol. 2, no. 2, p. 100087, 2022, doi: 10.1016/j.jjimei.2022.100087.
28. J. J. Nájera-Sánchez, C. Pérez-Pérez, and T. González-Torres, Exploring the knowledge structure of entrepreneurship education and entrepreneurial intention, vol. 19, no. 2. Springer US, 2023. doi: 10.1007/s11365-022-00814-5.
29. H. P. Wang, B. Wang, W. Y. Lai, and N. Su, "The Effect of Entrepreneurship Education on Entrepreneurial Intention: Mediation of Entrepreneurial Self-Efficacy and Moderating Model of Psychological Capital," *Sustainability*, vol. 15, no. 3, 2023.
30. T. Mahmudin, "The Importance of Entrepreneurship Education in Preparing the Young Generation to Face Global Economic Challenges," *J. Contemp. Adm. Manag.*, vol. 1, no. 3, pp. 187–192, 2023, doi: 10.61100/adman.v1i3.78.

31. D. A. Budy, "Pengaruh Pendidikan Kewirausahaan dan Motivasi Kewirausahaan Terhadap Keterampilan Berwirausaha Mahasiswa Universitas 17 Agustus 1945 Jakarta," *J. Bus. Entrep.*, vol. 1, no. 1, pp. 7–22, 2017.
32. H. I. S. Adi, "Pendidikan Kewirausahaan Dan Motivasi Berwirausaha Berpengaruh Terhadap Keterampilan Berwirausaha Mahasiswa Pendidikan Ekonomi 2016 UNIROW Tuban," *J. TeladanJurnal Ilmu Pendidik. dan Pembelajaran*, vol. 04, no. 02, pp. 107–118, 2019.

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