

## Does entrepreneurial knowledge influence vocational students' intention? Lessons from Indonesia

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### ABSTRACT

**Objective:** The study attempts to extend the current understanding of entrepreneurship education by engaging the entrepreneurial mindset, knowledge, and the intention to be an entrepreneur. The second purpose is to highlight through testing the moderating role of entrepreneurial knowledge on the relationship between entrepreneurial education and students' intention to be entrepreneurs.

**Research Design & Methods:** The approach utilised in this study was a quantitative research design using a survey model. The participants of this study were recruited from vocational students in Jakarta who enrolled in the entrepreneurial education course. Furthermore, the data were analysed using exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modelling (SEM).

**Findings:** Entrepreneurship education impacts three variables, including entrepreneurial mind-set, knowledge, and intention. Entrepreneurial knowledge influences students' intention to be entrepreneurs; however, it has an insignificant impact on entrepreneurial mindset.

**Implications & Recommendations:** Entrepreneurship education in Indonesia should be further developed due to its essential role in education young entrepreneurs, for instance, through curriculum revitalisation.

**Contribution & Value Added:** Notwithstanding the relatively limited sample, this work offers valuable insights into the important role of entrepreneurship education and vocational students' intention to be entrepreneurs in Indonesia.

**Article type:** research article

**Keywords:** entrepreneurial education; entrepreneurial knowledge; entrepreneurial mindset; entrepreneurial intention; vocational school

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## INTRODUCTION

Over the past decade, the majority of scholars in both developed and developing countries claimed that entrepreneurial education plays a crucial role in motivating entrepreneurs (Jena, 2020; Li & Wu, 2019; Fayolle & Gailly, 2015). Moreover, scholars also agree that entrepreneurial education does not only engage students' knowledge, mindset, attitude, and self-efficacy but also develops students' intention and skills to start a business (Kim & Park, 2019; Barba-Sánchez & Atienza-Sahuquillo, 2018; Souitaris, Zerbinati, & Al-Laham, 2007; Zhang, Duysters, & Cloodt, 2014). Furthermore, some countries propose entrepreneurial education as an effective strategy to enlarge the number of entrepreneurs, particularly through formal education (Nasrullah, Khan & Khan, 2016; do Paco *et al.*, 2013; Fayolle, 2006).

In Indonesia, the government has sought to increase the number of entrepreneurs by amending entrepreneurial education in all level education (Sendouwa, 2019; Hani & Putri, 2012; Utami, 2017; Utomo *et al.*, 2019). In higher education, the policymaker focuses on the revitalisation of vocational school curriculum as an attempt to motivate students to become entrepreneurs (Saptono & Wibowo, 2018; Wibowo, Saptono, & Suparno, 2018). According to the Ministry of National Education (2012), entrepreneurial education in vocational school is intended to motivate students to become young entrepreneurs instead of middle-level skilled workers.

Unfortunately, the reinvigorated curriculum of entrepreneurial education in the vocational school is not adequate yet. In fact, the unemployment rate in Indonesia is dominated by vocational school graduates (BPS, 2019). In more detail, BPS (2019) notes that the unemployment rate in August 2019 amounted to 7.05 million, dominated by vocational school graduates by approximately 10.42%. This is due to vocational school graduates insufficiently creating their own businesses along with enrolling to work in accordance with the demand of the workforce. This readiness shows that the quality of vocational graduates still must be improved, especially their independence and reasoning.

Furthermore, Husnaini (2017) argues that the upward trend in the unemployment rate is affected by the ineffectiveness of entrepreneurial education in vocational schools. Similarly, Jabeen, Faisal, and Katsioloudes (2017) indicate that entrepreneurial education in the school provides inadequate knowledge and mindset to start a business. However, when entrepreneurial education is applied appropriately, it raises students' intention to be entrepreneurs. Several scholars assert that entrepreneurial education promotes creating individual entrepreneurship (Utomo *et al.*, 2019; & Block, 2016; Rauch & Huslink, 2015).

The investigation of entrepreneurial education among Indonesian scholars have rapidly increased (Ana *et al.*, 2016; Eryanto; 2019; Winarno, 2016; Saptono & Wibowo, 2018; Wibowo *et al.*, 2019). However, few researchers have demonstrated the relationship between entrepreneurial mindset and intention of being entrepreneurs. In fact, both variables have a pivotal role incorporate with entrepreneurial intention (Rezaei Zadeh *et al.*, 2017; Farani *et al.*, 2017; Tshikovhi & Shambare, 2015). Entrepreneurial knowledge is closely related to several business activities, such as identification, company creation, marketing, finance, and organisation. Students' knowledge of entrepreneurship could be acquired through school education and training (Bergmann, 2017; Ni & Ye, 2018; Zhao & Seibert, 2006). These findings suggest that entrepreneurial knowledge and mindset obtained from entrepreneurship education positive influences students' intention to be entrepreneurs. Roxas (2014) adds that

entrepreneurial knowledge and entrepreneurial mindset play a crucial role in mediating the impact of entrepreneurial education and entrepreneurial intention.

This study provides three contributions. First, it extends the existing understanding of entrepreneurship education by engaging entrepreneurial intention and knowledge, which is absent in prior studies. Through testing, this article highlights the mediating role of entrepreneurial knowledge on the relationship between entrepreneurial education and students' intention to be entrepreneurs. Second, the focus in Indonesia is unique due to the fact that Indonesia is a densely populated country, but it has an insufficient level of entrepreneurs. Third, this study provides new insight into the debate on the factors affecting entrepreneurial intention in Indonesia, and the debate's influence on the policymakers who decide about education.

## LITERATURE REVIEW

The growing body of literature investigating entrepreneurial intention agrees that intention can be formed with some deliberate scenarios (Van Gelderen, Kautonen, & Fink, 2015; Minola, Criaco, & Cassia, 2014). Education becomes one of the effective means of developing entrepreneurial intentions (Passoni & Glavam, 2018; Barba-Sánchez & Atienza-Sahuquillo, 2018; Küttim *et al.*, 2014). Watson (2019) reveals that entrepreneurship education could stimulate ideas and behaviours needed by an entrepreneur. Ahmed *et al.* (2020) conclude that the goals of entrepreneurship education are to foster individual entrepreneurial intentions. An empirical study by Saeed *et al.* (2015) finds that entrepreneurship education and training can strengthen individuals' entrepreneurial intentions and improve their performance.

How does entrepreneurship education improve student entrepreneurial intention? First, entrepreneurial intention in this study covers students' desire to be entrepreneurs and their willingness to set up and run businesses. Wu and Wu (2008) emphasise that entrepreneurship education focuses on increasing students' entrepreneurial knowledge, willingness, and abilities both through theory and entrepreneurship training. Similarly, Souitaris, Zerbinati, and Al-Laham (2007) and Nabi *et al.* (2018) foreground how entrepreneurship education influences students' entrepreneurial intentions through learning, inspiration, and the use of resources. Learning in entrepreneurial education helps individuals to obtain knowledge on how to start a new business.

The entrepreneurial education should be provided more practice instead of theories (George & Bock, 2011). For instance, a social programme allows an individual experience direct application of theory in the field (Dvoulety *et al.*, 2018). This practice model not only stimulates students' interest in studying entrepreneurship but also provides an entrepreneurial attitude (Lackeus, 2014). Some previous studies find a relationship between entrepreneurial education and intentions to be an entrepreneur (Fayolle & Gailly, 2015; Koe, 2016; Sánchez, 2013; Zhang, Duysters, & Cloodt, 2014). Likewise, in Indonesia, several scholars demonstrated the positive impact of entrepreneurial education on entrepreneurial intention (Purwana *et al.*, 2019; Saptono *et al.*, 2019; Wibowo *et al.*, 2019).

Furthermore, Fayolle and Gailly (2015) emphasise that entrepreneurship education impacts individual mindset, which guarantees the capacity to acquire entrepreneurial knowledge by helping an individual to focus on a proper career path. An anticipated long-term investment that results from entrepreneurial knowledge is the production of an entrepreneur who permeates one's personal, social, and professional life (Moberg, 2014). Haynie

*et al.* (2010) emphasise the strong relationship of entrepreneurial mindset with practical reasoning, entrepreneurial knowledge, and individual competence to obtain valuable resources for business success. Entrepreneurial knowledge covers a proper understanding related of entrepreneurship; e.g. sales, negotiation, product development, and risk assessment.

We believe that entrepreneurial intention and an individual's potential can be increased through entrepreneurship education. In other words, entrepreneurship education can help students to develop entrepreneurial knowledge, skills, mindset, and increase their future success in starting a business. Therefore, we developed the following hypotheses:

**H1:** Entrepreneurial education positively influences entrepreneurial intention.

**H2:** Entrepreneurial education positively influences entrepreneurial knowledge.

**H3:** Entrepreneurial education positively influences entrepreneurial mindset.

Entrepreneurial human capital (EHC) is a specialisation of high-level specific entrepreneurial competencies and knowledge, which is very important, for example, in sales, negotiation, product development, and risk assessment (Ni & Ye, 2018). Based on EHC theory, a person with a high level of education has high probability to become an entrepreneur (Cowling, Liu, & Zhang, 2018). This entrepreneur will potentially combine various types of knowledge and skills in developing good products or services to meet market tastes and demands. This person will also be more observant in exploring opportunities, introducing changes, and utilising resources optimally and effectively.

Some prior studies confirmed that knowledge about entrepreneurship impacts the establishment of start-up and development of new businesses (Ni & Ye, 2018; Farani *et al.*, 2017; Tshikovhi & Shambare, 2015). Furthermore, an entrepreneurial mindset is a feeling and belief in particular abilities to think out of the box (Nabi *et al.*, 2018). Meanwhile, the self-competence of an individual is proposed by Nasrullah, Khan, and Khan (2016), which is a variable that correlates with entrepreneurial mindset. Several scholars of entrepreneurship link entrepreneurial mindset not only with self-competence but also many other factors, namely experience and confidence to act. Moreover, entrepreneurial mindset also covers personality dimension such as values, attitudes, and beliefs (Rajagopal, 2014; Solesvik *et al.*, 2013).

Researchers believe that mindset is a holistic perception to generate new ideas, evaluate opportunities and risks, or start and run a business, which is when an individual assesses own perceptions based on holistic rather than functional attributes (Naumann, 2017; Davis & Hall, 2015; Haynie & Shepherd, 2007). Entrepreneurial mindset is also a way of thinking that sees opportunities not as barriers, instead seeking possibilities in failures and wanting to do something to make a difference rather than sit down and complain about problems (Walter & Block, 2016; Haynie *et al.*, 2010).

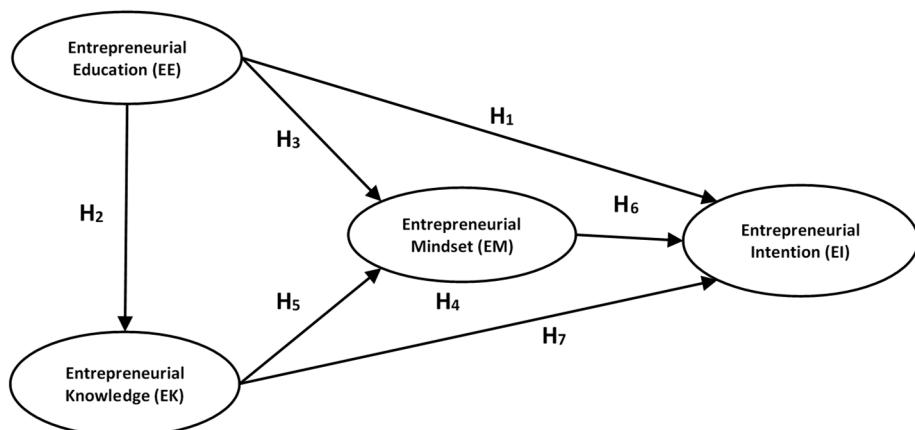
In the same way, Fayolle and Liñán (2014); Akmaliah *et al.* (2016) define entrepreneurial mindset as a particular state of mind that orients human behaviour towards entrepreneurial activities and outcomes. This implies that entrepreneurial mindset is closely related to how a person thinks (consciously or subconsciously) or his/her worldview, which influences one's tendency to be entrepreneurial. Solesvik *et al.* (2013) note that entrepreneurship education plays a vital role in developing and even strengthening entrepreneurial mindset. Entrepreneurship education not only provides knowledge, attitudes, and competencies but also increases motivation to develop an entrepreneurial mindset. Indeed, Haynie *et al.* (2010) assert that entrepreneurial mindset offers potential insight into the

various outcomes and situations fundamental to entrepreneurial studies. Therefore, we developed the following hypotheses:

- H4: Entrepreneurial knowledge positively influences entrepreneurial intention.
- H5: Entrepreneurial knowledge positively influences entrepreneurial mindset.
- H6: Entrepreneurial mindset positively influences entrepreneurial intention.
- H7: Entrepreneurial knowledge mediates the impact of entrepreneurial education and entrepreneurial intention.

### RESEARCH METHODOLOGY

The approach utilised in this study was a quantitative research design using a survey model. The major advantage of this approach is that it helps to understand how entrepreneurship education, entrepreneurial knowledge, and entrepreneurial mindset affect the intention to be an entrepreneur (Figure 1).



**Figure 1. The research framework**

Source: own elaboration based on Passoni and Glavam (2018); Barba-Sánchez and Atienza-Sahuquillo (2018); Küttim *et al.* (2014); Watson (2019); Fayolle and Gailly (2015); Koe (2016); Sánchez (2013); Zhang, Duysters, and Cloodt (2014).

### Sample and Data Collection

The participants of this study were recruited from vocational students (SMK) in Jakarta who enrolled in the entrepreneurial education course. The focus was reasonable due to the fact that vocational schools in Jakarta are more adequate in terms of educational facilities and infrastructure than other regions of Indonesia. Thus, a convenience sample was used as is frequently done in entrepreneurship research. A total of 378 questionnaires were returned and 351 questionnaires proved useful after validation. The precise demographic of respondents is provided in Table 1.

Table 1 shows the demographic of respondents of the study. Approximately 59% of students majored in business, slightly less than a quarter majored in culinary arts, and about

20% majoring in marketing. Additionally, the lowest percentage of students majored in accounting. Furthermore, there were more women than men among respondents, with a percentage of approximately 56% and 44%, respectively. Moreover, the majority of respondents' parents, more than a quarter was working as an entrepreneur. Accordingly, about 22% and 19% was found in the occupation of laborer and teacher/lecturer. Almost the same percentage of 9% came from government civil servant, police and soldier families.

**Table 1. The demographic of respondents**

No.	Categories	Number of Participants	Percentage
1.	Age		
	15-years-old	90	25.64
	16-years-old	180	51.28
	17-years-old	81	23.08
2.	Gender		
	Female	198	56.42
	Male	153	43.58
3.	Major		
	Accounting	22	6.26
	Business	207	58.97
	Marketing	71	20.22
	Culinary arts	51	14.55
4.	Parents' Job		
	Laborer	79	22.50
	Teacher/Lecturer	69	19.65
	Civil Servant	35	9.97
	Police	34	9.68
	Soldier	34	9.68
	Entrepreneur	100	28.52

Source: own study.

### Instrument Development

The questionnaires which designed to measure entrepreneurial intention (EI) was adapted from Robledo *et al.* (2015); Linan and Chen (2009), while to measure entrepreneurship education (EE), we adapted items from Denanyoh *et al.* (2015); Opoku-Antwi *et al.* (2012). Furthermore, to understand the entrepreneurial knowledge (EK), we adapted prior instruments validated by Al mamun *et al.* (2017); Kumar *et al.* (2018), whilst to measure entrepreneurial mindset (EM), we applied questionnaires from Mathisen and Arnulf (2013). All the items reflecting the independent and dependent variables were responded to along a 7-point Likert scale ranging from 1 indicating 'strongly disagree' to 7 indicating 'strongly agree.'

### Data Analysis

We conducted two stages of testing: exploratory factor analysis and confirmatory factor analysis. Exploratory factor analysis was to validate data, explore dimensions, and maintain strong indicators (Allen, Bennett, & King, 2010), followed by a reliability test. Statistical analysis was performed using SPSS 18. According to Hair *et al.* (2012), a construct can be reliable if it has a Cronbach's alpha score equal to or higher than 0.6. Secondly, this

research followed a confirmatory factor analysis performed with AMOS 24. Schermelleh and Müller (2003) note that the model tested must have several criteria and a cut-off value, including p-value (probability)  $> 0.5$ , in order to obtain a fit model. Furthermore, the value of CMIN/DF  $< 2$  (Tabachnick, Fidell, & Ullman, 2007), CFI  $> 0.95$ , and RMSEA  $\leq 0.05$  (Hu & Bentler, 1999). Data were analysed using exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modelling (SEM).

## RESULTS AND DISCUSSION

Based on the exploratory factor analysis results presented in Table 2, in total, there are 25 factors, including entrepreneurship education (6), entrepreneurial intention (6), entrepreneurial knowledge (6), and entrepreneurial mindset (7). All factors have a Cronbach's alpha ranging from 0.661 to 0.922, which we considered sufficiently reliable to be included in further analysis. Moreover, Table 2 reveals that the value of loading for the entrepreneurial mindset (EM) variable ranged from 0.578 to 0.800, with Cronbach's alpha = 0.836. Based on the results, the EM items are considered to be reliable (Hair *et al.*, 2012).

Table 3 provides information about the test result between variables using structural equation modelling (SEM). The SEM calculations is aimed to check the theoretical framework and fitted models. The probability score was 0.129, the CMIN/DF score – 1.241, the CFI score – 0.994, the FMIN score – 0.170, and the RMSEA score – 0.027. From Table 3 we know that H1, H2, H3, and H4 are significant, with each C.R. score being 7.185, 9.849, 6.686 and 2.436, respectively. In contrast, H5 and H6 were not significant due to C.R. being only 1.082 and - 0.835. Lastly, we learn that H7 is significant with b-score 2.327 (Hair *et al.*, 2012).

**Table 2. The exploratory factor analysis result**

Code	Indicator	Loadings
<b>1. Entrepreneurial Intention</b>		<b><math>\alpha = 0.661</math></b>
ei3	I have serious doubts about ever starting my own business.	0.900
ei1	I am ready to do anything to be an entrepreneur.	0.858
ei2	I will make every effort to start and run my own business.	0.833
ei4	I am determined to create a business venture in the future.	0.823
ei5	My professional goal is to be an entrepreneur.	0.813
ei6	I have a very low intention of ever starting a business.	0.719
<b>2. Entrepreneurial Education</b>		<b><math>\alpha = 0.922</math></b>
ee4	My school teaches students about entrepreneurship and starting a business.	0.892
ee2	My polytechnic provides the necessary knowledge about entrepreneurship.	0.888
ee3	My polytechnic develops my entrepreneurial skills and abilities.	0.848
ee6	I thought entrepreneurship education encourages me to be an entrepreneur.	0.826
ee5	Entrepreneurship can be developed through education.	0.824
ee1	The education in polytechnic encourages me to develop creative ideas for being an entrepreneur.	0.819
ee4	I thought entrepreneurship education encourages me to be an entrepreneur.	0.892
<b>3. Entrepreneurial Knowledge</b>		<b><math>\alpha = 0.880</math></b>
ek6	I have sufficient knowledge in managing a business.	0.842
ek3	I have sufficient knowledge to organise a business.	0.826
ek5	I have sufficient knowledge in commercialising a business idea.	0.789
ek4	I have sufficient knowledge in marketing a product/service.	0.776

Code	Indicator	Loadings
ek2	I know how to find the resources (e.g. financial) to set up a business.	0.775
ek1	I have sufficient knowledge of the legal requirements to start a business.	0.741
<b>4. Entrepreneurial Mindset</b>		<b><math>\alpha = 0.836</math></b>
em4	I look for both negative and positive information about becoming engaged in entrepreneurial activities.	0.800
em1	I consider both positive and negative aspects of becoming engaged in entrepreneurial activities.	0.794
em5	I think about possible business ideas and consider becoming engaged in entrepreneurial activities.	0.784
em3	I consider whether I have the opportunity financially to become engaged in entrepreneurial activities.	0.779
em2	I consider whether I have the time to become engaged in entrepreneurial activities.	0.726
em6	I consider whether it is desirable for me to become engaged in entrepreneurial activities.	0.633
em7	When I consider becoming engaged in entrepreneurial activities it sometimes feels right and sometimes wrong.	0.578

Source: own elaboration based on Robledo *et al.* (2015); Linan and Chen (2009); Denanyoh *et al.* (2015); Opoku-Antwi *et al.* (2012); Al Mamun *et al.* (2017); Kumar *et al.* (2018); Mathisen and Arnulf (2013).

**Table 3. The summary of testing results**

Hypothesis	Impact	S.E.	C.R.	P	Decision
$H_1$	$EE \rightarrow EI$	0.101	7.185	***	Significant
$H_2$	$EE \rightarrow EK$	0.064	9.849	***	Significant
$H_3$	$EE \rightarrow EM$	0.072	6.686	***	Significant
$H_4$	$EK \rightarrow EI$	0.063	2.436	0.015	Significant
$H_5$	$EK \rightarrow EM$	0.042	1.082	0.079	Insignificant
$H_6$	$EM \rightarrow EI$	0.129	-0.835	0.404	Insignificant
$H_7$	Indirect $EE \rightarrow EM \rightarrow EI$ b=2.327				Significant

Note: EE = Entrepreneurial Education; EI = Entrepreneurial Intention;

EK = Entrepreneurial Knowledge; EM = Entrepreneurial Mindset.

Source: own study.

## Discussion

The study aimed at examining vocational school students' entrepreneurial intention based on entrepreneurial education courses that trained entrepreneurial education, mindset, and knowledge. Findings of this study confirm five of our hypotheses and reject two. The results indicate a positive correlation between entrepreneurship education and the intention of being an entrepreneur. Moreover, the findings agree with previous studies by Sun, Liang, and Wong (2017), Li and Wu (2019), Ferreira, Fernandes, and Ratten (2017), which reveals that entrepreneurship education promotes an individual's intention to be an entrepreneur. This finding broadly supports the work of other studies in Indonesian context, thus linking entrepreneurial education with intention (Purwana & Suhud, 2018). The results of the study indicate that entrepreneurship education plays a crucial role in forming entrepreneurial intentions. Entrepreneurial education in vocational schools enables students to experience both theoretical and practical entrepreneurship. As the positive effect of entrepreneurship education

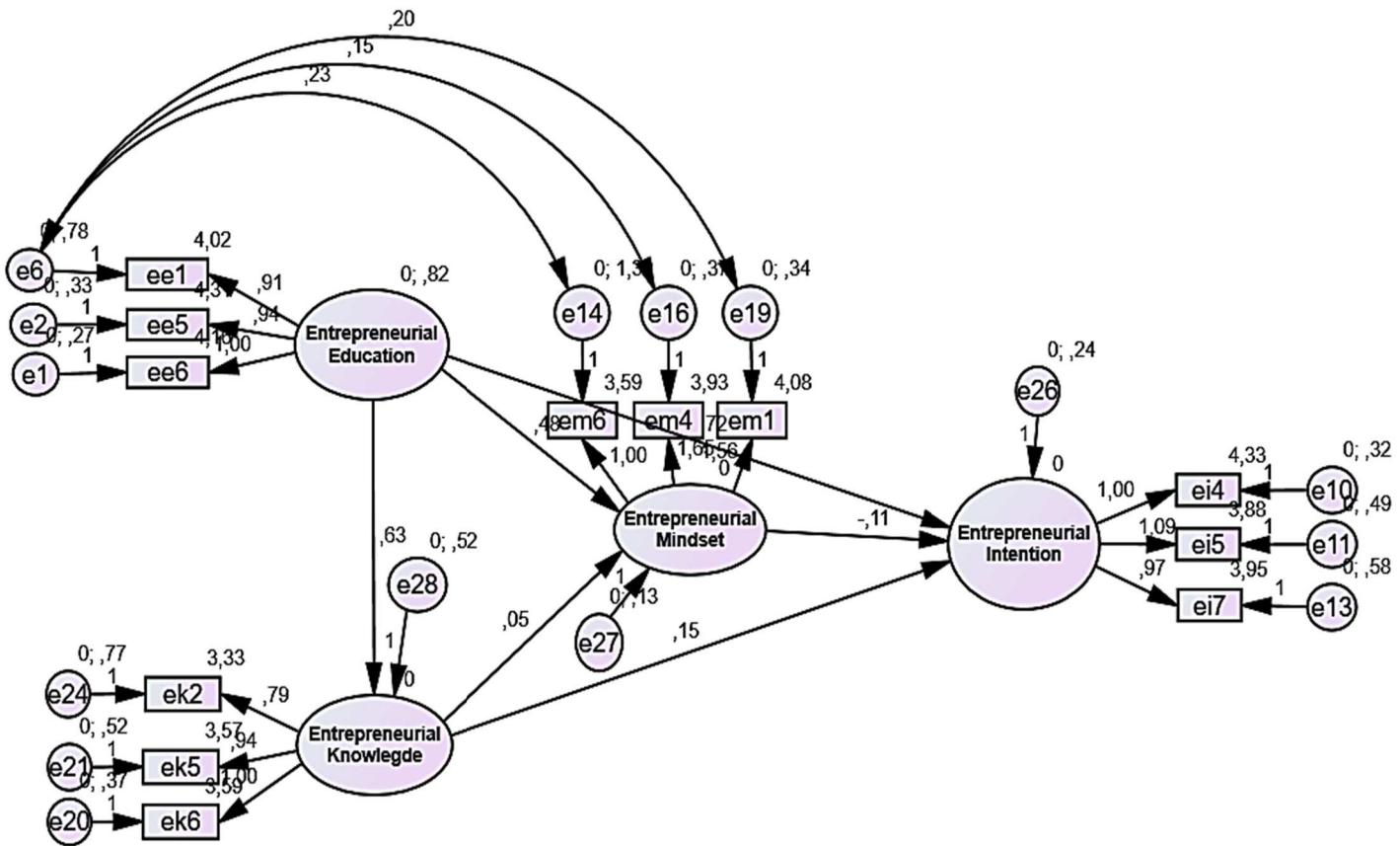


Figure 2. Results of the structural equation research model

Source: own elaboration based on SEM-AMOS Output, 2020.

motivates the Indonesian government to revitalise the curriculum and practice of entrepreneurship education, this step is expected to make effective entrepreneurship education increase young entrepreneurs' abilities through formal education.

The second question of this study sought to determine the relationship between entrepreneurial education and entrepreneurial knowledge. Increased students' knowledge as an impact of entrepreneurship education of students corroborates some earlier works. For instance, Tshikovhi and Shambare (2015), Boldureanu *et al.* (2020) confirm the close relationship between entrepreneurship education and entrepreneurial knowledge. Our finding implies that an individual with high-level education will potentially become an entrepreneur in the future. This entrepreneur will combine various types of knowledge and skills in developing good products or services to meet market tastes and demands. S/he will also be more observant in exploring opportunities, introducing change, and utilising resources optimally and effectively. Similarly, Roxas (2014) argues that entrepreneurs should have the knowledge and skills that are the main capital when running a business. Our finding also supports a prior study by Ni and Ye (2018), who confirmed that entrepreneurial knowledge influenced start-up and new business development. According to Entrepreneurial Human Capital (EHC), education can increase student knowledge related to entrepreneurship. This is because the main role of entrepreneurship education is to provide students with knowledge about entrepreneurship, while its secondary role is to equip students with the skills needed in entrepreneurship.

The third finding of our study shows the significant relationship between entrepreneurship education and entrepreneurial mindset. Consistent with Hussain (2015), Opoku-Antwi *et al.* (2012), Walter and Block (2016), Haynie *et al.* (2010), Zhao and Seibert (2006), we found that entrepreneurship education plays an essential role in developing and even strengthening an entrepreneurial mindset. Entrepreneurship education not only provides knowledge, attitudes, and competencies but also increases motivation to develop an entrepreneurial mindset. Similarly, our finding confirms prior studies by Solesvik *et al.* (2013), Haynie *et al.* (2010), Fayolle and Gailly (2015), who remark that the critical influence of entrepreneurship education on entrepreneurial mindset is to help an individual to focus on the right career path. An anticipated long-term investment that results from entrepreneurial knowledge is the motivation of entrepreneurial worldview which permeates one's personal, social, and professional life (Moberg, 2014).

Furthermore, our study failed in demonstrating the relationship between entrepreneurial mindset and entrepreneurial intention. This outcome is contrary to that of Hussain (2015), Opoku-Antwi *et al.* (2012), Walter and Block (2016), Haynie *et al.* (2010), and Zhao and Seibert (2006) who found a positive correlation between entrepreneurial mindset and the intention to be an entrepreneur. Our contradicting result may stem from the present curricula in entrepreneurship education at Indonesian vocational schools. Our finding could possibly be an entry point for the revitalisation of entrepreneurship education in Indonesia. It implies that even though entrepreneurship education in Indonesia influences entrepreneurial intention, it is not strong enough to encourage the actual entrepreneurial behaviour of vocational students. Thus, entrepreneurship education in the school should not only focuses on cognitive and affective aspects, but it also concerns on psychomotor domain.

The fifth question in this research was to provide the relationship between students' entrepreneurial knowledge and the intention to be an entrepreneur. This finding confirms

hypothesis (H4). Moreover, the finding also accords with earlier observations by Rezaei Zadeh *et al.* (2017), and Farani *et al.* (2017) who showed that entrepreneurship knowledge has a positive effect on entrepreneurship intention. Prospective entrepreneurs with entrepreneurial-related knowledge – such as how to start a business, develop products, or services that can meet customer tastes and market demands – will have a high entrepreneurial intention, compared to those who do not have any at all. Furthermore, Ni and Ye (2018) argue that entrepreneurs with entrepreneurial knowledge and skills, not only witness an increase in entrepreneurial intention but also in principal capital when running their businesses.

The prior literature mentions that entrepreneurship knowledge has a positive effect on entrepreneurial mindset. However, our finding is contrary to previous studies by Rezaei Zadeh *et al.* (2017) and Farani *et al.* (2017) who suggest that entrepreneurship knowledge positively affects not only entrepreneurial intention but also entrepreneurial mindset. The difference in results stems from the inability of respondents to distinguish between entrepreneurial knowledge, entrepreneurial mindset, and entrepreneurial orientation. Moreover, our finding contrasts with the EHC theory, according to which a person with a high level of education simultaneously shows high levels of entrepreneurial mindset and entrepreneurial intention.

Lastly, our study set out with the aim of assessing the importance of entrepreneurial knowledge in mediating influences of entrepreneurship education on students' intention to be entrepreneurs. This study findings confirm the last hypothesis (H7). This result agrees with recent studies by Rezaei Zadeh *et al.* (2017), Farani *et al.* (2017), Hussain (2015), Opoku-Antwi *et al.* (2012), and Walter and Block (2016) who indicate that entrepreneurial education not only affects entrepreneurial knowledge but also entrepreneurial intention, both directly and indirectly. Moreover, from elementary to university levels, entrepreneurial education can play three primary roles related to the entrepreneurial mindset. First, entrepreneurial education aims to create an entrepreneurial culture that permeates all activities; second, the former is to provide special courses during which students can learn more about entrepreneurship itself. Lastly, its final role is through special training courses for individuals who want to start their own businesses (Klofsten, 2000).

## CONCLUSIONS

The current article leads us to confirm five and reject two of our initial hypotheses. In more detail, the examination of entrepreneurship education impacts three variables, namely entrepreneurial mindset, entrepreneurial knowledge, and entrepreneurial intention. Moreover, the second major finding is that entrepreneurial knowledge influences students' intention to be entrepreneurs. However, entrepreneurial knowledge has an insignificant impact on entrepreneurial mindset. Lastly, our investigation of the mediating role of entrepreneurial knowledge revealed its positive influence, which implies that entrepreneurial knowledge successfully mediates entrepreneurship education and entrepreneurial intention.

These findings suggest that the Indonesian government should focus on vocational schools curricula, that could be implemented in practice instead of theory. Furthermore, the schools should provide a role model of entrepreneurs and facilitate live experience of entrepreneurship based on the model.

The most important limitation of our study lies in the fact that the data was collected in 15 vocational state schools in Jakarta, which cannot be generalised to represent real

conditions in all vocational schools in the city. Future research should involve all vocational schools in Jakarta that would allow for the generalisation of research results.

## REFERENCES

- Ahmed, T., Chandran, V.G.R., Klobas, J.E., Liñán, F., & Kokkalis, P. (2020). Entrepreneurship education programmes: How learning, inspiration and resources affect intentions for new venture creation in a developing economy. *The International Journal of Management Education*, 18(1), 100327. <https://doi.org/10.1016/j.ijme.2019.100327>
- Akmaliah, Z., Pihie, L., & Arivayagan, K. (2016). Predictors of Entrepreneurial Mindset among University Students. *International Journal of Humanities, Social Sciences and Education*, 3(7), 1-9. <https://doi.org/10.20431/2349-0381.0307001>
- Al Mamun, A., Kumar, N., Ibrahim, M.D., & Yusoff, M.N.H. (2017). Validating the Measurement of Entrepreneurial Orientation. *Economics and Sociology*, 10(4), 51-66. <https://doi.org/10.14254/2071-789X.2017/10-4/5>
- Allen, P., Bennett, K., & King, J. (2010). *PASW Statistics by SPSS: A Practical Guide, Version 18*. National Library of Australia.
- Ana, A. Hurriyati, R., Rostika, Y., & Nazeri, M. (2016). Entrepreneurial Intentions of Tourism Vocational High School Students in Indonesia and Malaysia. *Journal of Technical Education and Training (JTET)*, 8(2), 12-20.
- Backström-Widjeskog, B. (2010). *Creativity and Innovation – Preconditions for entrepreneurial education* Eds. Kjell Skogen and Jarle Sjøvoll (2010) Trondheim: Tapir Academic Press Teachers' thoughts on entrepreneurship education. 8, 107-120.
- Boldureanu, G., Ionescu, A.M., Bercu, A., Bedrule-Gregoruta, M.V., & Boldureanu, D. (2020). Entrepreneurship Education Through Entrepreneurial Model in Higher Education Institutions. *Sustainability*, 12, 1267. <https://doi.org/10.3390/su12031267>
- BPS. (2019). Keadaan Ketenagakerjaan Indonesia Agustus 2019. *Badan Pusat Statistik*.
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, 24(1), 53-61. <https://doi.org/10.1016/j.iieden.2017.04.001>
- Bergmann, H. (2017). The formation of opportunity beliefs among university entrepreneurs: an empirical study of research-and non-research-driven venture ideas. *The Journal of Technology Transfer*, 42(1), 116-140. <https://doi.org/10.1007/s10961-015-9458-z>
- Cowling, M., Liu, W., & Zhang, N. (2018). Did firm age, experience, and access to finance count? SME performance after the global financial crisis. *Journal of Evolutionary Economics*, 28(1), 77-100. <https://doi.org/10.3390/su12031267>
- Davis, M.H., & Hall, J.A. (2015). *Developing a New Measure of Entrepreneurial Mindset: Reliability, Validity, and ... Consulting Psychology Journal: Practice and*. (December). <https://doi.org/10.1037/cpb0000045>
- Denanyoh, R., Adjei, K., & Nyemekye, G.E. (2015). Factors that impact on entrepreneurial intention of tertiary students in Ghana. *International Journal of Business and Social Research*, 5(3), 19-29.
- do Paco, A., Ferreira, J.M., Raposo, M., Rodrigues, R.G., & Dinis, A. (2013). Entrepreneurial intentions: is education enough?. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-013-0280-5>

- Dvoulety, O., Mühlböck, M., Warmuth, J., & Kittel, B. (2018). 'Scarred' young entrepreneurs. Exploring young adults' transition from former unemployment to self-employment. *Journal of Youth Studies*, 21(9), 1159-1181. <https://doi.org/10.1080/13676261.2018.1450971>
- Farani, A.Y., Karimi, S., & Motaghed, M. (2017). The role of entrepreneurial knowledge as a competence in shaping Iranian students' career intentions to start a new digital business. *European Journal of Training and Development*, 41(1), 83-100. <https://doi.org/10.1108/EJTD-07-2016-0054>
- Eryanto, H., Swaramarinda, D.R., & Nurmalaasi, D. (2019). Effectiveness of entrepreneurship practice program: Using cipp program evaluation. *Journal of Entrepreneurship Education*, 22(1), 1-10.
- Fayolle, A. (2006). *Assessing the impact of entrepreneurship education programmes: a new methodology*. 30(9), 701-720. <https://doi.org/10.1108/03090590610715022>
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93. <https://doi.org/10.1111/jsbm.12065>
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666. <https://doi.org/10.1016/j.jbusres.2013.11.024>
- Ferreira, J.J., Fernandes, C.I., & Ratten, V. (2017). The influence of entrepreneurship education on entrepreneurial intentions. In *Entrepreneurial universities* (pp. 19-34). Cham: Springer.
- George, G., & Bock, A.J. (2011). The Business Model in Practice and its Implications for Entrepreneurship Research. *Entrepreneurship: Theory and Practice*. <https://doi.org/10.1111/j.1540-6520.2010.00424.x>
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2012). Partial least squares: the better approach to structural equation modeling?. *Long Range Planning*, 45(5-6), 312-319.
- Hani, U., Rachmania, I.N., Setyaningsih, S., & Putri, R.C. (2012). Patterns of Indonesian Women Entrepreneurship. *Procedia Economics and Finance*. [https://doi.org/10.1016/s2212-5671\(12\)00342-5](https://doi.org/10.1016/s2212-5671(12)00342-5)
- Haynie, J.M., & Shepherd, D.A. (2007). Exploring the entrepreneurial mindset: Feedback and adaptive decision-making. *Frontiers of Entrepreneurship Research*, 27(6), 1-15.
- Haynie, J.M., Shepherd, D., Mosakowski, E., & Earley, P.C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, 25(2), 217-229. <https://doi.org/10.1016/j.jbusvent.2008.10.001>
- Hu, L.T., & Bentler, P.M. (1999). Cut-off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modelling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hussain, A., & Norashidah, D. (2015). Impact of Entrepreneurial Education and Entrepreneurial Intention of Pakistani Students. *Journal of Entrepreneurship and Business Innovation*, 2(1), 43-53. <https://doi.org/10.5296/jebi.v2i1.7534>
- Jabeen, F., Faisal, M.N., & Katsioloudes, M.I. (2017). Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship. *Journal of Small Business and Enterprise Development*, 24(1), 136-157. <https://doi.org/10.1108/JSBED-07-2016-0117>
- Jena, R.K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275. <https://doi.org/10.1016/j.chb.2020.106275>
- Kim, M., & Park, M.J. (2019). Entrepreneurial education program motivations in shaping engineering students' entrepreneurial intention. *Journal of Entrepreneurship in Emerging Economies*, 11 (3), 328-350. <https://doi.org/10.1108/JEEE-08-2018-0082>

- Koe, W.-L. (2016). The relationship between Individual Entrepreneurial Orientation (IEO) and entrepreneurial intention. *Journal of Global Entrepreneurship Research*. <https://doi.org/10.1186/s40497-016-0057-8>
- Kumar, N., Al Mamun, A., Ibrahim, M.D., & Yusoff, N.H. (2018). Entrepreneurial Orientation and Antecedents of Low-Income Household Heads in Kelantan, Malaysia. *Journal of International Studies*, 11(1), 140-151. <https://doi.org/10.1425/2071-8330.2017/11-1/10>
- Kuttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship Education at University Level and Students' Entrepreneurial Intentions. *Procedia – Social and Behavioral Sciences*, 110, 658-668. <https://doi.org/10.1016/j.sbspro.2013.12.910>
- Lackeus, M. (2014). An Emotion Based Approach to Assessing Entrepreneurial Education. *The International Journal of Management Education*, 12(3), 374-396. <https://doi.org/10.1016/j.ijme.2014.06.005>
- Li, L., & Wu, D. (2019). Entrepreneurial education and students' entrepreneurial intention: does team cooperation matter?. *Journal of Global Entrepreneurship Research*, 9(1), 35. <https://doi.org/10.1186/s40497-019-0157-3>
- Linan, F., & Chen, Y.W. (2009). Development and Cross-Cultural Application of A Specific Instrument to Measure Entrepreneurial Intention. *Entrepreneurship Theory and Practice*, 33(3), 593-617. <https://doi.org/10.1111%2Fj.1540-6520.2009.00318.x>
- Mathisen, J.E., & Arnulf, J.K. (2013). Competing Mindsets in Entrepreneurship: The Cost of Doubt. *The International Journal of Management Education*, 11(3), 132-141. <https://doi.org/10.1016/j.ijme.2013.03.003>
- Minola, T., Criaco, G., & Cassia, L. (2014). Are youth really different? New beliefs for old practices in entrepreneurship. *Int. J. Entrepreneurship and Innovation Management*, 18(2/3), 233-259.
- Moberg, K. (2014). Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level. *The International Journal of Management Education*, 12(3), 512-528. <https://doi.org/10.1016/j.ijme.2014.05.002>
- Nabi, G., Linan, F., Fayolle, A., Krueger, N., & Walmsley, A. (2018). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning and Education*, 16, 277-299. <https://doi.org/10.5465/amle.2015.0026>
- Nasrullah, S., Khan, M.S., & Khan, I. (2016). The Entrepreneurship Education and Academic Performance. *Journal of Education and Practice*, 7(1), 1-4.
- Naumann, C. (2017). Entrepreneurial Mindset: A Synthetic Literature Review. *Entrepreneurial Business and Economics Review*, 5(3), 149-172. <https://doi.org/10.15678/eber.2017.050308>
- Ni, H., & Ye, Y. (2018). Entrepreneurship Education Matters: Exploring Secondary Vocational School Students' Entrepreneurial Intention in China. *Asia-Pacific Education Researcher*, 27(5), 409-418. <https://doi.org/10.1007/s40299-018-0399-9>
- Passoni, D., & Glavam, R.B. (2018). Entrepreneurial intention and the effects of entrepreneurial education. *International Journal of Innovation Science*, 10(1), 92-107. <https://doi.org/10.1108/IJIS-05-2017-0042>
- Purwana, D., Sadat, A.M., & Wibowo, A. (2019). A Comparative Study of Tertiary Student's Entrepreneurial Intention: Indonesia and Taiwan. *International Journal of Entrepreneurship*, 23(4), 1-9.
- Purwana, D., & Suhud, U. (2018). Investigating the effect of motivation on entrepreneurial intention: Three different approaches. *Problems and Perspectives in Management*, 16(2), 200-208. [https://doi.org/10.21511/ppm.16\(2\).2018.18](https://doi.org/10.21511/ppm.16(2).2018.18)
- Rajagopal. (2014). The Entrepreneurial Mindset. In *Architecting Enterprise*. [https://doi.org/10.1057/9781137366788\\_2](https://doi.org/10.1057/9781137366788_2)

- Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship Education where the intention to Act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of management learning & education*, 14(2), 187-204. <https://doi.org/10.5465/amle.2012.02>
- Robledo, J.L.R., Aran, M.V., Sanchez, V.M., & Molina, M.A.R. (2015). The moderating Role of Gender on Entrepreneurial Intentions: A TPB Perspective. *Intangible Capital*, 11(1), 92-117. <https://doi.org/10.3926/ic.557>
- Roxas, B. (2014). Effects of Entrepreneurial Knowledge on Entrepreneurial Intention: A Longitudinal Study of Selected South-East Asian Business Studies. *Journal of Education and Work*, 27(4), 432-453. <https://doi.org/10.1080/13639080.2012.760191>
- Saeed, S., Yousafzai, S.Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, 53(4), 1127-1145. <https://doi.org/10.1111/jsbm.12090>
- Sánchez, J.C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, 51(3), 447-465. <https://doi.org/10.1111/jsbm.12025>
- Saptono, A., & Wibowo, A. (2018). Do Learning Environment and Self-Efficacy Impact on Student's Entrepreneurial Attitude?. *International Journal of Entrepreneurship*, 22(4), 1-11.
- Saptono, A., Purwana, D., Wibowo, A., Wibowo, S.F., Mukhtar, S., Yanto, H., ... Kusumajanto, D.D. (2019). Assessing the university students' entrepreneurial intention: Entrepreneurial education and creativity. *Humanities and Social Sciences Reviews*, 7(1), 505-514. <https://doi.org/10.18510/hssr.2019.7158>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(2), 23-74.
- Sendouwa, R.H.E., Lonto, A.L., & Saroinsong, S.J.R. (2019). Entrepreneurship development program in the higher education in Indonesia. *International Journal of Recent Technology and Engineering*. <https://doi.org/10.35940/ijrte.B1022.0982919>
- Solesvik, M.Z., Westhead, P., Matlay, H., & Parsyak, V.N. (2013). Entrepreneurial assets and mind-sets: Benefit from university entrepreneurship education investment. *Education + Training*, 55, 748-762. <https://doi.org/10.1108/ET-06-2013-0075>
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Sun, H., Lo, C.T., Liang, B., & Wong, Y.L.B. (2017). The impact of entrepreneurial education on entrepreneurial intention of engineering students in Hong Kong. *Management Decision*, 55(7), 1371-1393. <https://doi.org/10.1108/MD-06-2016-0392>
- Suparno, S., Wibowo, A., Mukhtar, S., Narmaditya, B.S., & Sinta, H.D. (2019). The Determinant Factors of Development Batik Cluster Business: Lesson from Pekalongan, Indonesia. *The Journal of Asian Finance, Economics and Business*, 6(4), 227-233. <https://doi.org/10.13106/jafeb.2019.vol6.no4.227>
- Tabachnick, B.G., Fidell, L.S., & Ullman, J.B. (2007). *Using Multivariate Statistics* (Vol.5, pp. 481-498). Boston: MA: Pearson.
- Tshikovhi, N., & Shambare, R. (2015). Entrepreneurial Knowledge, Personal Attitudes, and Entrepreneurship Intentions Among South African Enactus Students. *Problems and Perspectives in Management*, 13(1), 152-158.

- Utami, C.W. (2017). Attitude, Subjective Norms, Perceived behavior, Entrepreneurship education and Self-efficacy toward entrepreneurial intention University student in Indonesia. *European Research Studies Journal*, 20(2), 475-495.
- Utomo, H., Priyanto, S.H., Suharti, L., & Sasongko, G. (2019). Developing social entrepreneurship: A study of community perception in Indonesia. *Entrepreneurship and Sustainability Issues*, 7(1), 233-246. [https://doi.org/10.9770/jesi.2019.7.1\(18\)](https://doi.org/10.9770/jesi.2019.7.1(18))
- Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655-673. <https://doi.org/10.1016/j.jbusvent.2015.01.003>
- Walter, S.G., & Block, J.H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, 31(2), 216-233. <https://doi.org/10.1016/j.jbusvent.2015.10.003>
- Watson, K. (2019). Stimulating entrepreneurial behaviour through start-up competitions: current features of provision in UK higher education institutions. In *Entrepreneurial Behaviour* (pp. 121-143). Cham: Palgrave Macmillan.
- Wibowo, A., Saptono, A., & Suparno (2018). Does teachers' creativity impact on vocational students' entrepreneurial intention?. *Journal of Entrepreneurship Education*, 21(3).
- Wibowo, S.F., Purwana, D., Wibowo, A., & Saptono, A. (2019). Determinants of entrepreneurial intention among millennial generation in emerging countries. *International Journal of Entrepreneurship*, 23(2), 1-10.
- Winarno, A. (2016). Entrepreneurship Education in Vocational Schools: Characteristics of Teachers, Schools and Risk Implementation of the Curriculum 2013 in Indonesia. *Journal of Education and Practice*.
- Solesvik, Z.M., Westhead, P., Matlay, H., & N. Parsyak, V. (2013). Entrepreneurial assets and mind-sets. *Education + Training*. <https://doi.org/10.1108/et-06-2013-0075>
- Zhang, Y., Duysters, G., & Cloost, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3). <https://doi.org/10.1007/s11365-012-0246-z>
- Zhao, H., & Seibert, S.E. (2006). The big five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259-271. <https://doi.org/10.1037/0021-9010.91.2.259>

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