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

Rr Ponco Dewi Karyaningsih, Agus Wibowo, Ari Saptono, Bagus Shandy Narmaditya

<table>
<thead>
<tr>
<th>A B S T R A C T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> 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.</td>
</tr>
<tr>
<td><strong>Research Design &amp; Methods:</strong> 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).</td>
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<tr>
<td><strong>Findings:</strong> 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.</td>
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<td><strong>Implications &amp; Recommendations:</strong> Entrepreneurship education in Indonesia should be further developed due to its essential role in education young entrepreneurs, for instance, through curriculum revitalisation.</td>
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<td><strong>Contribution &amp; Value Added:</strong> 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.</td>
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</tbody>
</table>

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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; Uta mi, 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
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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

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

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 ≤ 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

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

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Impact</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>EE → EI</td>
<td>0.101</td>
<td>7.185</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>H₂</td>
<td>EE → EK</td>
<td>0.064</td>
<td>9.849</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>H₃</td>
<td>EE → EM</td>
<td>0.072</td>
<td>6.686</td>
<td>***</td>
<td>Significant</td>
</tr>
<tr>
<td>H₄</td>
<td>EK → EI</td>
<td>0.063</td>
<td>2.436</td>
<td>0.015</td>
<td>Significant</td>
</tr>
<tr>
<td>H₅</td>
<td>EK → EM</td>
<td>0.042</td>
<td>1.082</td>
<td>0.079</td>
<td>Insignificant</td>
</tr>
<tr>
<td>H₆</td>
<td>EM → EI</td>
<td>0.129</td>
<td>-0.835</td>
<td>0.404</td>
<td>Insignificant</td>
</tr>
<tr>
<td>H₇</td>
<td>Indirect EE → EM → EI b=2.327</td>
<td></td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

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
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.

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