THE NEXUS BETWEEN ENTREPENEURIAL EDUCATION, THE ROLE OF PARENTS AND ENTREPRENEURIAL ATTITUDE AMONG UNIVERSITY STUDENTS: THE MEDIATING ROLE OF SELF-EFFICACY

DJOKO DWI KUSUMOJANTO1*, AGUS WIBOWO2 AND BAGUS SHANDY NARMADITYA1

¹Faculty of Economics, Universitas Negeri Malang, Indonesia. ²Doctoral Candidate in Economic Education, Universitas Negeri Malang/ Faculty of Economics, Universitas Negeri Jakarta, Indonesia.

 $*Corresponding\ author:\ djokodwi.fe@um.ac.id$

Submitted final draft: 10 February 2021 Accepted: 18 February 2021

http://doi.org/10.46754/jssm.2021.12.002

Abstract: This study aims to investigate the relationship between the role of parents, entrepreneurial education and attitude, as well as the mediating role of self-efficacy. This research used a quantitative approach through a structural equation modelling to comprehensively understand the relationship between the variables. The data for this study were gathered from 290 economics students in various state universities in Indonesia. The results showed that entrepreneurial self-efficacy plays a crucial role in affecting entrepreneurial attitude. Besides, the role of parents is a variable that needs to be considered in the relationship between entrepreneurial attitude and self-efficacy. These findings provide insights into the collaboration of various parties, such as universities, the government and community to stimulate young entrepreneurs.

Keywords: Attitude towards entrepreneurship, entrepreneurship education, self-efficacy, the role of parents.

Introduction

In recent years, entrepreneurship has received the recognition of scholars in developed and emerging countries. Entrepreneurship is acknowledged as crucial for economic growth (Aparicio *et al.*, 2016; Bosma *et al.*, 2018). Prior studies by Bruton (2013) and Sutter *et al.* (2019) noted that entrepreneurship plays a pivotal role in poverty alleviation. Hence, the increasing quantity of entrepreneurs in a nation will lead to greater economic welfare (Linan & Fernandez-Serrano, 2014; Fritsch & Kublina, 2018; Neumann, 2020).

In the context of Indonesia, the government has responded to this issue by providing enormous support to the development of entrepreneurs, particularly in terms of education (Saptono *et al.*, 2019; Purwana *et al.*, 2019). This is due to the essential role that education plays in instilling entrepreneurial attitude and character, allowing students to be successful entrepreneurs in the future (Stamboulis & Barlas, 2014; Kasseean *et al.*, 2015; Fayolle & Gailly, 2015). Data from Statistics Indonesia (BPS, 2019) mentioned that the number of unemployed people in Indonesia

stood at 5.28%, with the highest number being contributed by tertiary institutions

Malach and Kristova (2017) and Paco et al. (2017) agreed that entrepreneurship education at all levels successfully encourages the spirits of entrepreneurship, self-reliance and work. Similarly, Karimi et al. (2016), Maresch (2016) and Nabi et al. (2018) revealed that entrepreneurial education is one of the essential factors in nurturing and developing passion, soul and entrepreneurial behaviour among the younger generation. The results of the study confirmed that entrepreneurial education could create the mindset, attitudes, and behaviours for students to become entrepreneurs.

Despite the heightening interest in how entrepreneurship education and entrepreneurial attitude are related, extant research has overlooked the role of parents as a mediating effect in students becoming entrepreneurs. Ratumbuysang and Rasyid (2015) stated that parents' experiences provide an input in the formation of children's attitudes that lead to the latter's decision-making process. This is also affirmed by Ramadhanti *et al.* (2016),

who remarked that the socio-economic status of parents has a positive influence on entrepreneurial attitudes. This study seeks to complement previous scholar gaps with a focus on understanding the factors affecting students' entrepreneurial attitudes.

Literature Review

Entrepreneurial Education

Education provides knowledge of the principles of entrepreneurship and technical skills regarding business management (Fayolle, 2018). However, Welsh *et al.* (2016) mentioned that students who understand the principles of entrepreneurship and business management are not always linked with successful entrepreneurs. Therefore, entrepreneurship education must be designed to encourage students to become entrepreneurs (Iglesias-Sánchez *et al.*, 2016; Jabeen *et al.*, 2017; Saptono *et al.*, 2019).

The educational background of entrepreneurs has received significant attention among scholars. Some people have argued that successful entrepreneurs received education on entrepreneurship from their families, instead of from educational institutions of all levels (Walidaini & Winarno, 2017; Hutasuhut, 2018). However, education is a pivotal part in the entrepreneur's journey. This importance is either demonstrated in entrepreneurs' level of education or in the fact that education continues to help them overcome the problems.

Entrepreneurial education could stimulate students' mindset, attitudes, self-efficacy and behaviour, which leads to them selecting entrepreneurship as a profession choice (Shinnar et al., 2014; Fayolle & Gailly, 2015; Iglesias-Sánchez et al., 2016). Additionally, entrepreneurial education not only contributes a theoretical foundation on the notion of entrepreneurship, but also shapes the attitudes, behaviours, and mindset of an entrepreneur. Entrepreneurial education is an investment for individuals to start a new venture through the incorporation of experience, skills, and knowledge (Hahn et al., 2017).

Johannisson (2020)argued that entrepreneurship education has five components, namely know-what (entrepreneurial knowledge), know-why (values and motives), know-who (social interaction), know-how (entrepreneurial skills and abilities), and know-when (intuition, the right time to start up). Nabi et al. (2017) and Gurbuz and Aykol (2008) have provided details on indicators of entrepreneurship education, including on entrepreneurship education and training, and individuals at universities who have successfully started their own companies. These universities encourage them to realise their ideas and ideals of being entrepreneurs, encourage individuals who have the idea of being entrepreneurs, and provide adequate infrastructure for prospective entrepreneurs.

- H₁: Entrepreneurial education (EE) has an effect on students' entrepreneurial self-efficacy (ES).
- H₂: Entrepreneurial education (EE) has an effect on students' entrepreneurial attitude (EA).

The Role of Parents

In addition to entrepreneurial education, a factor that also greatly influences entrepreneurial attitudes is the role of parents. According to Lee (2006), culture and entrepreneurial attitudes are determined by family influences and socialisation. Indeed, Lindquist (2015) argued that parents play a role in education in terms of providing entrepreneurial mental provisions to their children and this continues up to the stage of the child being able to be an entrepreneur. Furthermore, Hisrich et al. (2008) confirmed that four factors influence entrepreneurial characteristics, namely education, personal values, childhood family environment and work history. Wang and Wong (2004) found that parents' work background had a positive influence on students' interest in entrepreneurship. In Indonesia, Dewi and Mulyatiningsih (2013) and Walidaini and Winarno (2017) confirmed that familial environment influences interest in entrepreneurship.

On another note, self-efficacy is related to entrepreneurial attitudes. Self-efficacy is the conviction that an individual can successfully carry out the desired behaviour by exerting the motivational, cognitive and action skills needed to obtain an outcome (Hechavarria et al., 2012; Hopp & Stephan, 2012). Piperopoulos and Dimov (2015) stated that self-efficacy correlates strongly with one's intentions and attitudes. Therefore, studying the influence of entrepreneurship education, self-efficacy and the role of parents on entrepreneurial intentions is an interesting research opportunity. study, which would review and complement previous empirical studies, would add a mediating variable on student attitudes on entrepreneurship.

Ratumbuysang and Rasyid (2015)remarked that parents' experiences can lead to encouragement in the form of an opinion on something based on their knowledge and experiences that is useful as in input, which can ultimately affect the decision-making process. The influence of the role of parents on students' attitudes to entrepreneurship were shown by Ramadhanti (2016), who concluded that parents' socio-economic status had a positive influence on entrepreneurial attitudes. However, Ratumbuysang and Rasyid (2015) said the role of parents did not have a positive influence on student entrepreneurship readiness.

- H₃: The role of parents (RP) has an effect on students' entrepreneurial self-efficacy (ES).
- H₄: The role of parents (RP) has an effect on students' entrepreneurial attitude (EA).

The Mediating Role of Self-Efficacy

The influence of entrepreneurial education, self-efficacy and the role of parents on student entrepreneurship intentions becomes effective if there is a robust student attitude towards entrepreneurship. Winarno (2011) argued that entrepreneurial attitude includes a tendency to think (cognitive), feel (affective) and behave (conative) from an entrepreneur's perspective in terms of work that leads to attempts in finding, creating and applying ways of working,

technologies, and new products by providing efficient good service to obtain greater profits. Do and Dadvari (2017) were of the view that individuals who show a positive attitude towards entrepreneurship are more likely to become entrepreneurs and believe that entrepreneurship is not just a method of survival, but a way to achieve self-actualisation. Rasli et al. (2013) argued that when a person is not fully aware of entrepreneurship as a career, they will never have a positive attitude on the matter and instead will develop themselves into alternative careers that are better understood. Some studies mentioned that variable entrepreneurial attitude can influence students' entrepreneurial intentions (Law & Breznik, 2017; Kusmintarti et al., 2017). Additionally, several studies also showed that self-efficacy can explain entrepreneurial attitude (Jain & Ali, 2013; García-Rodríguez et al., 2017; Verzat et al., 2017; Sánchez-Báez et al., 2018; Al-Jubari et al., 2019). Following the above review, this study tested the following hypotheses:

- H₅: Entrepreneurial self-efficacy (ES) has an effect on students' entrepreneurial attitude (EA).
- H₆: Entrepreneurial self-efficacy (ES) mediates entrepreneurial education (EE) toward students' entrepreneurial attitude (EA).
- H₇: Entrepreneurial self-efficacy (ES) mediates role of parents (RP) on students' entrepreneurial attitude (EA).

Materials and Methods

This study used the survey method with a quantitative approach to determine the relationship between the variables (See figure 1). This study elaborates on entrepreneurial education and the role of parents in determining students' entrepreneurial attitude, as well as entrepreneurial self-efficacy, which plays a role as a mediator variable. The participants of this study were students of economics faculties of various state education universities in Indonesia. The rationale in choosing economics students for this study is that they have received the

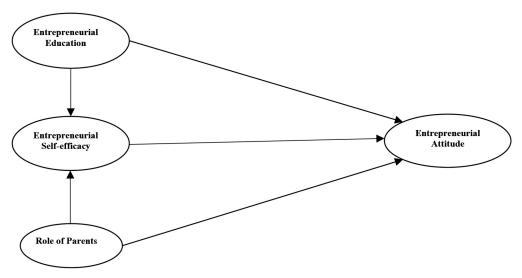


Figure 1: Theoretical framework

materials related to entrepreneurship compared with of private universities, which provides a different model of entrepreneurship education. Of the total of 300 questionnaires distributed, 290 were filled out and returned.

To measure entrepreneurial education (EE), we adapted 12 items from Johannisson (2020), Denanyoh (2015), and Gurbuz and Aykol (2008), while to understand entrepreneurial selfefficacy (ES), we applied 14 items developed by Zhao et al. (2005) and Moriano et al. (2011). Additionally, nine-item questions by Linan and Chen (2009) were used in this study to measure entrepreneurial attitude (EA). Lastly, to measure the role of parents (RP), we adapted instruments by Wang and Wong (2004) which comprise 11 items. The variables in this study were determined through a five-point Likert scale, with 1 being "strongly disagree" and 5 "strongly agree". The question items summarise the willingness to discuss, financial/capital support, and exemplary. To calculate the data, we applied exploratory factor analysis (EFA), confirmatory factor analysis (CFC), and structural equation models (SEM).

We also carried out two stages of data analysis. In the first stage, the authors conducted an exploratory factor analysis test using the SPSS software version 18. This analysis aims to approve data, investigate dimensions and preserve robust indicators (Allen & Bennett, 2010). A construct is said to be reliable if it has a Cronbach alpha (α) score equal to or higher than 0.6 (Hair *et al.*, 2006). Second, we conducted a confirmatory factor analysis (CFA) using AMOS version 18. The model experimented should meet some criteria and a cut-off value, among them, a p-value (probability) of > 0.5 in order to obtain a fit model (Schermelleh & Müller, 2003), as well as CMIN / DF values of <2 (Tabachnick & Fidell, 2007), CFI> 0.95 (Hu & Bentler, 1995), and RMSEA ≤ 0.05 (Hu & Bentler, 1999).

Results and Discussion

Based on the EFA, from a total of 46 factors, consisting of EE (12), RP (11), entrepreneurial self-efficacy (14), and entrepreneurial attitude (9), each variable has a loading factor from 0.612 to 0.894, and a Cronbach's alpha from 0.789 to 0.896. From the structural equation modelling calculation, it solely leaves three indicators for each variable (see Table 1). Furthermore, based on the SEM calculation results to determine the theoretical framework and fitted models, a probability score of 0.180, CMIN / DF score of 1.212, CFI score of 0.990, FMIN score of 0.151 and RMSEA score of 0.027 are obtained.

Table 1: The results of the measurement model

Construct and Items	Factor Loading	<i>t</i> -value	P	Cronbach's Alpha
Ee1→ EE	Deleted			
Ee2→ EE	0.819	6.940	***	0.906
Ee3→ EE	Deleted			
Ee4→ EE	0.802	6.940	***	0.906
Ee5→ EE	Deleted			
Ee9→ EE	0.822	6.940	***	0.906
Es1→ ES	0.800	3.429	***	0.815
Es2→ ES	0.817	6.429	***	0.815
Es3→ ES	Deleted			
Es4→ ES	Deleted			
Es5→ ES	0.793	3.229	***	0.815
Ea1→ EA	0.870			
Ea2→ EA	0.822	5. 251	***	0.822
Ea7→ EA	0.753	3.211	***	0.822
Ea8→ EA	Deleted			
Ea9→ EA	0.821	3.325	***	0.822
Rp4→ RP	0.832	3.189	***	0.831
Rp5→ RP	Deleted			
Rp6→ RP	0.852	3.293	***	0.831
Rp9→ RP	Deleted			
Rp10→ RP	0.751	3.344	***	0.831
Rp11→ RP	Deleted			

Note: $x^2=217.0$; df = 1.79; x^2 /df = 1.212; CFI = 0.990; TLI = 0.964; AGFI = 0.924; RMSEA = 0.027; GFI = 0.921.

Table 2: The results outline of the hypotheses testing

				CR	P	Result
H ₁	EE	\rightarrow	ES	3.900	***	Significant
$\mathrm{H_2}$	EE	\rightarrow	EA	1.842	0.065	Insignificant
H_3	RP	\rightarrow	ES	3.399	***	Significant
$\mathrm{H_4}$	ES	\rightarrow	EA	2.031	0.042	Significant
H_{5}	Indirect effect EE \rightarrow EA = b score 0.600*				Significant	
H_6	Indirect effect R	$P \rightarrow EA = b$	score 0.580*			Significant

Note: EE=Entrepreneurial education, ES=Entrepreneurial self-efficacy, EA=Entrepreneurial attitude, and RP= The role of parents, * the indirect effect was measure by using b-score.

Table 2 shows the compendium of the hypothesis testing of the variables. Based on the table, it is known that H_1 , H_3 , H_4 , H_5 and H_6

are significant with CR scores of 3.900, 3.399, 2.031, b=0.600, and b=0580, respectively. According to Hair *et al.* (2006), the CR value of

each of these hypotheses is significant (\pm 1.96). This contrasts strongly with H_2 , which is not significant as the CR value is 1.842.

Figure 2 explains the results of the structural equation model of this study. Based on the results of the hypothesis testing, this study answered six proposed hypotheses. From Table 2, it is known that EE has an effect on ES (CR > 1.96). This finding is relevant with prior studies in some countries, such as the ones by Oosterbeek et al. (2010), Laviolette (2012), Shinnar (2014), Fayolle and Gailly (2015), and Iglesias-Sánchez et al. (2016). Similarly, this finding agrees with previous papers in the Indonesian context by Purwana et al. (2019) and Saptono et al. (2019). It also confirms the importance of entrepreneurship education in forming self-efficacy. Therefore, the Indonesian government needs to enhance the growth of entrepreneurs by revitalising the curricula that nurture self-efficacy and entrepreneurial attitude.

The findings of this work are logical because entrepreneurship education will be useful if there is support from the government as the policymaker. More than that, entrepreneurship education should be reproduced in practice rather than just merely theory so that entrepreneurial attitudes and skills can be improved.

Another result showed that EE does not effect on EA with a CR value of <1.96. The finding differs from those in Western countries in general and Asia (Bae *et al.*, 2014; Ozaralli & Rivenburgh, 2016). This result proves that entrepreneurship education does not contribute to student entrepreneurial attitudes. This result can be a starting point for the Indonesian government to improve entrepreneurship education to be more attractive and to provide great experiences that can influence students' entrepreneurial attitudes. In fact, entrepreneurship education in Indonesia is still focused on theory rather than practical experiences.

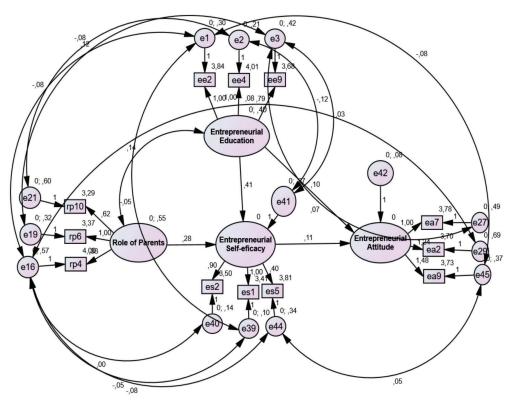


Figure 2: The results of the Structural Equation Research Model

Journal of Sustainability Science and Management Volume 16 Number 8, December 2021: 14-27

In addition, RP has an effect on ES (see Table 2). The result of this study agrees with the findings of previous academics in developed and developing countries (Wang & Wong, 2004; Hisrich et al., 2008). The results of this study also reinforce prior studies by Dewi and Mulyatiningsih (2013) and Walidaini and Winarno (2017), who remarked that parents play a role providing an entrepreneurial mind set in children and continues up to when they are able to become entrepreneurs. Moreover, the family becomes a compelling factor in providing experience entrepreneurial and education to children. These findings are reasonable considering the role of parents in forming children's character. Between campuses and parents, it is necessary to establish the right cooperation so that university programmes becomes more significant in the formation of the entrepreneurial spirit among students. Parents in Indonesia have never been involved in entrepreneurship education programmes at the campus, so they seem to be running independently.

Similarly, ES significantly influences EA with a CR value of >1.96. This result supports the findings of Jain and Ali (2013), García-Rodríguez et al. (2017), Verzat et al. (2017), Sánchez-Báez et al. (2018), Al-Jubari et al. (2019), who revealed that entrepreneurial selfefficacy influences students' entrepreneurial attitude. Entrepreneurial self-efficacy contributes to entrepreneurial attitudes, in which when someone has high confidence, it will encourage optimal behaviour that leads to successful entrepreneurship. The findings show that selfefficacy is very influential on entrepreneurial attitudes. In the context of Indonesia, a climate that bridges and supports the influence of selfefficacy on entrepreneurial attitudes needs to be expanded.

Furthermore, ES mediates EE towards EA (b=0.600). With the effect of EE on EA, EE affects EA and mediated by ES. These findings are unique because Indonesian students who are respondents of this study find it difficult to distinguish between self-efficacy and

entrepreneurial attitudes. This also agrees with the previous findings of Remeikiene *et al.* (2013), Do and Dadvari (2017), Zhang *et al.* (2014), and Ozaralli and Rivenburgh (2016). Therefore, the Indonesian government needs to redesign entrepreneurship education that focus not only on the cognitive realm, but also the affective and psychomotor realms. Entrepreneurship education in Indonesia needs to shape self-confidence and entrepreneurial attitude in students. These findings indicate that it is important that the Indonesian government design entrepreneurship education that is synergistic with various elements of society, business and industry.

The latest findings of this study showed that ES mediates RP towards EA. The results is not different than those of previous academics' (Shinnar et al., 2014; Esfandiar et al., 2019). They further emphasise the role of parents towards student entrepreneurial attitudes. The role of parents towards student entrepreneurial attitudes in developing countries is also significant. This study confirms that entrepreneurship education also needs to involve parents in addition to culture, the role of government and the learning environment. Indeed, this finding supports prior scholars, such as Wang and Wong (2004), Hisrich (2008), Dewi and Mulyatiningsih (2013), and Walidaini and Winarno (2017), who mentioned that the role of parents is crucial in shaping entrepreneurial attitude. Given the very urgent role of parents, the campus world needs to involve parents in entrepreneurship education programmes, ensuring harmonious cooperation between the campus, parents and the industrial world. This step will give birth to an entrepreneurial climate that is synergistic and effective in producing new entrepreneurs through the campus world.

Conclusion

The study on the relationship between these variables accepts five hypotheses, but rejected one. The study confirms that to stimulate young entrepreneurs, the cooperation of various parties is needed. Entrepreneurship education alone

does not nurture entrepreneurial attitude, and requires the participation of parents and all components of the nation. Higher education needs to revitalise entrepreneurship education to make it more attractive, thereby increasing student interest in entrepreneurship.

In addition to the improved curriculum, strategies, methods, lecturers and learning environments must support entrepreneurship education activities. For effective entrepreneurship education. this study recommends the participation of parents as role models, and train children in entrepreneurship. Additionally, since the significant result of parents' role in this study, it can be considered as a moderator variable for further studies. Future studies can, in a broader area, look into both private and state universities with more complex data, which can be used by stakeholders as a basis for implementing policies related to increasing the number of entrepreneurs in Indonesia.

Acknowledgements

This research was supported by the Faculty of Economics, Universitas Negeri Malang, Malang, Indonesia

References

- Al-Jubari, I., Hassan, A., & Liñán, F. (2019). Entrepreneurial intention among university students in Malaysia: Integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, 15(4), 1323-1342. https://doi.org/10.1007/s11365-018-0529-0
- Allen, P., Bennett, K., & King, J. (2010). *PASW* statistics by SPSS: A practical guide, version 18.0. National Library of Australia.
- Aparicio, S., Urbano, D., & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological forecasting and social change*, 102, 45-61.

- https://doi.org/10.1016/j.techfore.2015.04.
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta–analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254.
- Bosma, N., Sanders, M., & Stam, E. (2018). Institutions, entrepreneurship, and economic growth in Europe. *Small Business Economics*, 51(2), 483-499. https://doi.org/10.1007/s11187-018-0012-x
- BPS. (2019). *Tingkat pengangguran terbuka* (TPT) sebesar 5,01 persen. Jakarta: Badan Pusat Statistik.
- Bruton, G. D., Ketchen Jr, D. J., & Ireland, R. D. (2013). Entrepreneurship as a solution to poverty. *Journal of Business Venturing*, 28(6), 683-689. https://doi.org/10.1016/j.jbusvent.2013.05.002.
- 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. http://dx.doi.org/10.18533/ijbsr.v5i3.693.
- Dewi, A. V., & Mulyatiningsih, E. (2013). Pengaruh pengalaman pendidikan kewirausahaan dan keterampilan kejuruan terhadap motivasi berwirausaha siswa. *Jurnal Pendidikan Vokasi*, 03(02).
- Do, B. R., & Dadvari, A. (2017). The influence of the dark triad on the relationship between entrepreneurial attitude orientation and entrepreneurial intention: A study among students in Taiwan University. *Asia Pacific Management Review*, 22(4), 185-191. https://doi.org/10.1016/j.apmrv.2017.07.011
- Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, *94*, 172-182. https://doi.org/10.1016/j.jbusres.2017.10.045

- Fayolle, A. (2018). Personal views on the future of entrepreneurship education. In *A research agenda for entrepreneurship education*. Edward Elgar Publishing.
- 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
- Fritsch, M., & Kublina, S. (2018).
 Entrepreneurship, growth, and regional growth regimes. In *Entrepreneurial, Innovative and Sustainable Ecosystems* (pp. 3-34). Cham: Springer.
- García-Rodríguez, F. J., Gil-Soto, E., Ruiz-Rosa, I., & Sene, P. M. (2015). Entrepreneurial intentions in diverse development contexts: A cross-cultural comparison between Senegal and Spain. International Entrepreneurship and Management Journal, 11(3), 511-527. https://doi. org/10.1007/s11365-013-0291-2
- Gurbuz, G., & Aykol, S. (2008). Entrepreneurial intentions of young educated public in Turkey. *Journal of Global Strategic Management*, 4(1), 47-56.
- Hahn, D., Minola, T., Van Gils, A., & Huybrechts, J. (2017). Entrepreneurial education and learning at universities: Exploring multilevel contingencies. *Entrepreneurship* & *Regional Development*, 29(9-10), 945-974. https://doi.org/10.1080/08985626.201 7.1376542
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*. New Jersey: Prentice-Hall, Inc.
- Hechavarria, D. M., Renko, M., & Matthews, C. H. (2012). The nascent entrepreneurship hub: Goals, entrepreneurial self-efficacy and start-up outcomes. *Small Business Economics*, 39(3), 685-701. https://doi.org/10.1007/s11187-011-9355-2

- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2008). *Entrepreneurship*. Jakarta: Salemba Empat.
- Hopp, C., & Stephan, U. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrepreneurship & Regional Development*, 24(9-10), 917-945.
- Hu, L. T., & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hutasuhut, S. (2018). The roles of entrepreneurship knowledge, self-efficacy, family, education, and gender on entrepreneurial intention. *Dinamika Pendidikan*, *13*(1), 90-105.
- Iglesias-Sánchez, P. P., Jambrino-Maldonado, C., Velasco, A. P., & Kokash, H. (2016). Impact of entrepreneurship programmes on university students. *Education+ Training*, 58(2), 209-228. https://doi.org/10.1108/ET-01-2015-0004
- 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
- Jain, R., & Ali, S. W. (2013). Self-efficacy beliefs, marketing orientation and attitude orientation of Indian entrepreneurs. *The Journal of Entrepreneurship*, 22(1), 71-95.
- Johannisson, B. (2020). Searching for the roots of entrepreneuring as practice: Introducing the enactive approach. In *Research handbook* on entrepreneurial behavior, practice and process. Edward Elgar Publishing.
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of

- iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, *54*(1), 187-209. https://doi.org/10.1111/jsbm.12137.
- Kassean, H., Vanevenhoven, J., Liguori, E., & Winkel, D. E. (2015). Entrepreneurship education: A need for reflection, real-world experience and action. *International Journal of Entrepreneurial Behavior & Research*, 21(5), 690-708. https://doi.org/10.1108/IJEBR-07-2014-0123
- Kusmintarti, A., Asdani, A., & Riwajanti, N. I. (2017). The relationship between creativity, entrepreneurial attitude and entrepreneurial intention (case study on the students of State Polytechnic Malang). *International Journal of Trade and Global Markets*, 10(1), 28-36.
- Law, K. M., & Breznik, K. (2017). Impacts of innovativeness and attitude entrepreneurial intention: Among engineering and non-engineering students. *International* Journal Technology and Design Education, 27(4), https://doi.org/10.1007/s10798-683-700. 016-9373-0
- Lee, J. (2006). Impact of family relationships on attitudes of the second generation in family business. *Family Business Review*, 19(3), 175-191. https://doi.org/10.1111/j.1741-6248.2006.00069.x
- Linan, F., & Chen, Y. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. https://doi.org/10.1111/j.1540-6520.2009.00318.x.
- Linan, F., & Fernandez-Serrano, J. (2014). National culture, entrepreneurship and economic development: Different patterns across the European Union. *Small Business Economics*, 42(4), 685-701. https://doi.org/10.1007/s11187-013-9520-x
- Lindquist, M. J., Sol, J., & Van Praag, M. (2015). Why do entrepreneurial parents have entrepreneurial children? *Journal of Labor Economics*, 33(2), 269-296.

- Malach, J., & Kristová, K. (2017). The impact of school education and family environment on pupils' entrepreneurial spirit and attitude to entrepreneurship. *The New Educational Review*, 49(3), 101-114.
- Maresch, D., Harms, R., Kailer, N., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting and Social Change*, 104, 172-179. https://doi.org/10.1016/j.techfore.2015. 11.006.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162-185. https://doi. org/10.1177/0894845310384481
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452-467. https://doi.org/10.1080/03075079.2016.1177716
- Neumann, T. (2020). The impact of entrepreneurship on economic, social and environmental welfare and its determinants: A systematic review. *Management Review Quarterly*, 1-32. https://doi.org/10.1007/s11301-020-00193-7
- Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European Economic Review*, *54*(3), 442-454.
- Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: Antecedents to entrepreneurial behavior in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), 3. https://doi.org/10.1186/s40497-016-0047-x
- Paço, A., Ferreira, J., & Raposo, M. (2017). How to foster young scientists' entrepreneurial

- spirit? International Journal of Entrepreneurship, 21(1), 47-60.
- Piperopoulos, P., & Dimov, D. (2015). Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intentions. *Journal of Small Business Management*, 53(4), 970-985. https://doi.org/10.1111/jsbm.12116
- 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.
- Ramadhanti, D., Mulyadi, H., & Razati, G. (2016). Pengaruh status sosial ekonomi orang tua terhadap sikap kewirausahaan. *Strategic: Jurnal Pendidikan Manajemen Bisnis*, 16(2), 32-37.
- Ramayah, T., & Harun, Z. (2005). Entrepreneurial intention among the student of Universiti Sains Malaysia (USM). *International Journal of Management and Entrepreneurship*, 1, 8-20.
- Rasli, A., Khan, S. U. R., Malekifar, S., & Jabeen, S. (2013). Factors affecting entrepreneurial intention among graduate students of Universiti Teknologi Malaysia. *International Journal of Business and Social Science*, 4(2), 182-188.
- Ratumbuysang, M. F. N. G., & Rasyid, A. A. (2015). Peranan orang tua, lingkungan, dan pembelajaran kewirausahaan terhadap kesiapan berwirausaha. *Jurnal Pendidikan Vokasi*, 5(1), 15-26.
- Remeikiene, R., Dumciuviene, D., & Startiene, G. (2013). Explaining entrepreneurial intention of university students: The role of entrepreneurial education. In Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management, Knowledge and Learning International Conference 2013 (pp. 299-307). ToKnowPress.
- Sánchez-Báez, E. A., Fernández-Serrano, J., & Romero, I. (2018). Personal values and

- entrepreneurial attitude as intellectual capital: Impact on innovation in small enterprises. *Amfiteatru Economic*, 20(49), 771-787.
- 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.
- Shinnar, R. S., Hsu, D. K., & Powell, B. C. (2014). Self-efficacy, entrepreneurial intentions, and gender: Assessing the impact of entrepreneurship education longitudinally. *International Journal of Management Education*, *12*(3), 561-570. https://doi.org/10.1016/j.ijme.2014.09.005
- Stamboulis, Y., & Barlas, A. (2014). Entrepreneurship education impact on student attitudes. *The International Journal of Management Education*, *12*(3), 365-373. https://doi.org/10.1016/j.ijme.2014.07.001
- Sutter, C., Bruton, G. D., & Chen, J. (2019). Entrepreneurship as a solution to extreme poverty: A review and future research directions. *Journal of Business Venturing*, *34*(1), 197-214. https://doi.org/10.1016/j.jbusvent.2018.06.003
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5 ed.). Boston: Pearson/Allyn & Bacon.
- Verzat, C., O'Shea, N., & Jore, M. (2017). Teaching proactivity in the entrepreneurial classroom. *Entrepreneurship & Regional Development*, 29(9-10), 975-1013. https://doi.org/10.1080/08985626.2017.1376515

- Walidaini, A. B., & Wirnarno, A. (2017). Vocational High School students entrepreneurship: The success of family or school education? *JPBM (Jurnal Pendidikan Bisnis dan Manajemen)*, *3*(1), 1-11.
- Wang, C. K., & Wong, P. K. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 242, 163-172. https://doi.org/10.1016/S0166-4972(02)00016-0
- Welsh, D. H., Tullar, W. L., & Nemati, H. (2016). Entrepreneurship education: Process, method, or both? *Journal of Innovation & Knowledge 1*(3), 125-132. https://doi.org/10.1016/j.jik.2016.01.005
- Zhang, Y., Duysters, G., & Cloodt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3), 623-641. 10.1007/s11365-012-0246-z
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272. https://doi.org/10.1037/0021-9010.90.6.1265

Appendix

The exploratory factor analysis result of entrepreneurship education

Code	Indicator	Factor Loadings
Ee1	Entrepreneurship education increases my understanding of entrepreneurial attitudes	0.832
Ee2	Entrepreneurship education increases my understanding of the characteristics of individual entrepreneurs (facing risks, innovations)	0.819
Ee3	Entrepreneurship education can provide me to sharpen my entrepreneurial instincts	0.810
Ee4	Entrepreneurship education increases my understanding of various entrepreneurial motivations (earning money, personal success, social status)	0.802
Ee5	Entrepreneurship education enhances my understanding of developing innovative ideas	0.793
Ee6	Entrepreneurship education increases my understanding of the environment in entrepreneurship	0.792
Ee7	Entrepreneurship education increases my understanding of how to prepare financially in entrepreneurship	0.756
Ee8	Entrepreneurship education enhanced my understanding of business planning	0.850
Ee9	Entrepreneurship education enhanced my understanding of market research in entrepreneurship	0.822
Ee10	Entrepreneurship education increases my understanding to develop networks in entrepreneurship (based on advice / information from lecturers, guest lecturers)	0.801
Ee11	The creative atmosphere in entrepreneurship lectures inspires entrepreneurial ideas	0.813
Ee12	Entrepreneurship education enhanced my skills in developing business planning	0.795

The exploratory factor analysis result of entrepreneurial self-efficacy (ES)

Code	Indicator	Factor Loadings		
Es1	I have confidence regarding achieving market share	0.800		
Es2	I have confidence in achieving sales turnover	0.817		
Es3	I have confidence when it comes to achieving profit	0.812		
Es4	I have confidence in my established position in the product market	0.802		
Es5	I have the confidence to compile a market analysis	0.793		
Es6	I have confidence for business development	0.792		
Es7	I have the confidence to find new product ideas	0.756		
Es8	I have the confidence to come up with new products and services	0.851		
Es9	I have the confidence to discover new markets and territories	0.821		
Es10	I have the confidence to find new production methods, markets and management	0.820		
Es11	I have the confidence to reduce risk and uncertainty	0.812		
Es12	I have the confidence to develop strategic plans and develop information systems	0.795		
Es13	I have the confidence to manage my time according to purpose	0.732		
Es14	I have the confidence to be steady in my goals	0.762		
$\alpha = 0.815$				

The exploratory factor analysis result of entrepreneurial attitude (EA)

Code	Indicator	Factor Loadings
Ea1	By choosing to be an entrepreneur I will become rich	0.870
Ea2	Working as an entrepreneur will get a higher income than being an employee	0.822
Ea3	With high income signifies I am successful in life	0.812
Ea4	Finding a high income is very important to my success	0.832
Ea5	Working on a fixed, schedule basis is very tedious	0.793
Ea6	I love being an entrepreneur because I can increase my network	0.752
Ea7	Working as an entrepreneur faces many challenges	0.753
Ea8	I often need changes in work to increase motivation, despite facing uncertainty	0.855
Ea9	University and faculty programs really help me in business competition	0.821
	$\alpha = 0.822$	

The exploratory factor analysis result of role of parents (RP)

Code	Indicator	Factor Loadings			
Rp1	My parents always take the time to chat about the work I want to do in the future	0.861			
Rp2	My parents really gave me the freedom to choose the job that I would pursue later	0.863			
Rp3	Parents are always guiding and practicing skills for my future	0.862			
Rp4	Parents always provide criticism and suggestions for every job I do	0.832			
Rp5	My parents' work experience influenced me to have a career in entrepreneurship	0.893			
Rp6	My parents are very active in encouraging me to pursue a profession as an entrepreneur	0.852			
Rp7	I always discussed entrepreneurship with my parents	0.853			
Rp8	Helping parents in entrepreneurship increases my desire to become an entrepreneur	0.855			
Rp9	My parents are very supportive if I choose a profession as an entrepreneur	0.821			
Rp10	My parents are able to finance my business activities	0.751			
Rp11	My parents are the best examples of the success of my business	0.761			
	$\alpha = 0.831$				