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Drivers of entrepreneurial intention among economics students in Indonesia

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ABSTRACT

Objective: The objective of the article is to investigate the impact factors on entrepreneurial intention among economics students in Indonesia. It examines how culture, attitude, and entrepreneurship education affect students' entrepreneurial intention.

Research Design & Methods: The study applied a quantitative method using structural equation modelling. A questionnaire survey was done using a sample of 376 economics students in Malang of East Java, Indonesia.

Findings: The findings confirmed that entrepreneurial culture and attitude have successfully affected students' intention of being entrepreneurs. The results of this study indicated the essential role of entrepreneurial attitude in mediating the relationship between entrepreneurial culture, entrepreneurial education, and intention to become an entrepreneur.

Implications & Recommendations: These findings suggest several actions for both universities and the Indonesian government to elaborate the entrepreneurship education model, which applied more practical experience instead of classroom theories.

Contribution & Value Added: The study further elaborated the scholarly understanding of driving factors of students' intention to become entrepreneurs.

Article type: research article

entrepreneurship education; entrepreneurial intention; entrepreneurial attitude; entre-

preneurial culture; students' intention

JEL codes: A20, D91, L26

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INTRODUCTION

In the recent few decades, awareness has grown about the role of entrepreneurship. For instance, the types entrepreneurship career have remained a trend in current research (Pruett *et al.*, 2008; Zamrudi & Yulianti, 2020). Some scholars consider a model of entrepreneurial determination that identifies several factors shaping decisions in entrepreneurship (Schlaegel & Koenig, 2014; Diegoli *et al.*, 2018; Şeşen & Pruett, 2014; Zampetakis *et al.*, 2011). The reason for the increasing attention of scholars is the essential role of entrepreneurship in job creation, poverty alleviation, and the economic growth of nations (Engle *et al.*, 2010; Zampetakis *et al.*, 2008; Udayanan, 2019).

Indonesia faces a big challenge of reducing poverty and unemployment rate (Nagib & Ngadi, 2008). To deal with that issue, the Indonesian government in collaboration with universities provides a program to enhance knowledge, skill, and attitude towards entrepreneurship based on technology and information. The program was intended to change students' mindset toward becoming entrepreneurs, which should create new job opportunities and lower the unemployment rate. Hence, entrepreneurial

intention is crucial for an individual and must be continuously presented to the students (Syuhada & Gambett, 2013; Wibowo *et al.*, 2018).

A prior study by Cheng *et al.* (2009) reveals that students who experienced developing various technical skills and training are more confident to become entrepreneurs. Unfortunately, the finding shows an insignificant relationship between entrepreneurial knowledge and interest in starting a business due to ineffective entrepreneurial learning methods used. Entrepreneurial attitude is an agent of change that leads productivity and profitability (Borasi & Finnigan, 2010). Attitude is a tendency to like or dislike objects, people, institutions, and events (Küttim *et al.*, 2014); it is evaluative, that is related to someone's evaluation of an object. If the object is considered to be beneficial, then someone will be supportive, and vice versa.

On the other hand, Hofstede (2001) underlines culture as an embodied mind programming that differentiates elements of one group from other groups. Hayton and Cacciotti (2013) define concepts as expected values, beliefs, and behaviours that are quite common among people in certain geographical areas. Moreover, some scholars argue that the cultural sense will drive uncertainty tolerance and risk-taking, as these are forecasted to support creativity and innovation that underlie entrepreneurial action (Kreiser *et al.*, 2010). The findings of Zahra and George (2002) confirm that entrepreneurial action is incorporated either by beliefs or values shared culturally that support or hinder the required behaviour. Similarly, Karayiannis (1993) mentions that entrepreneurs form their beliefs through cultural heritage and direct life experience. This implies that entrepreneurial culture impacts entrepreneur education conditioning (Şeşen & Pruett, 2014; Adekiya & Ibrahim, 2016).

Culture influences values, attitudes, and beliefs (Adekiya & Ibrahim, 2016). Some literature continues to develop this thread by arguing that culture is one of the crucial factors of a country's economic level (Porter, 1990) and the development of entrepreneurship (House *et al.*, 2002). Hence, national culture is linked with the level of entrepreneurship either through cultural benefit that is part of a community (Triandis, 1982) or through an organization that represents that culture (Ahlstrom & Bruton, 2002; Dickson *et al.*, 2004). Expanding this reason motivates the proposition that the higher the density of entrepreneurial orientation among a country's residents, the larger the presence of possible entrepreneurs and the higher the level of new business generation (Mueller & Thomas, 2001).

Besides entrepreneurial studies, what also recently gained importance is the study of causality between entrepreneurial culture and entrepreneurial intention. For instance, Ao and Liu (2014) and Şeşen and Pruett (2014) state that entrepreneurship culture influences entrepreneurial intention. Their findings show that culture is essential in every dimension of entrepreneurship because it determines individual attitudes towards entrepreneurship initiation. Despite the growing interest in whether entrepreneurial culture impacts entrepreneurial intention, researchers overlook how culture impacts entrepreneurial behaviour (Hayton *et al.*, 2002; Zahra *et al.*, 1999). Most studies ignore testing the effect of variable entrepreneurial attitude, entrepreneurial intention, and the mediating role of entrepreneurial attitude and entrepreneurial education.

The contribution of this article is twofold. First, this study overviews current literature in entrepreneurship studies from the perspective of culture and attitude. A preliminary study by Matlay *et al.* (2012) introduced the term of 'culture' as 'shared believes and attitudes.' In this study, we provide a different indicator and meaning of culture that brings different knowledge. Moreover, we elaborated entrepreneurial attitude that is missing in previous studies. Secondly, Indonesia has a unique culture, which is well known as a mutual cooperation (*gotong royong*) society. Since this finding shows a correlation between culture, intention, and attitude, it elaborates the cultural values for increasing entrepreneurs in Indonesia. The study on entrepreneurship in Indonesia is crucial due to the lack number of entrepreneurs compared to the rest of population. Indonesia ranks 94th in the level of entrepreneurs compared to other countries such as Singapore (27th), Brunei (53rd), and Malaysia (58th) (Acs *et al.*, 2017).

The article is divided into five sections. The introduction section is followed by the literature review, which highlights the addressed research gap in the context of Indonesia. The next section concerns methodology. The fourth section involves findings and statistical calculations, followed by conclusions that cover the implications, limitations, and recommendations of the study.

LITERATURE REVIEW

Entrepreneurial intention is closely linked to the theory of planned behaviour (TPB) introduced by Ajzen (1991). The TPB is a development and refinement of the reason action theory (TRA) proposed by Fishbein and Ajzen (1975). These two theories have share the focus on individual's intention to present a behaviour. Based on the TPB and TRA, intention can be applied to understand and predict the factors that affect individual behaviours. Entrepreneurial intention involves the cognitive process of the behaviour applied by an individual either to establish a new business or to produce new value in a company (Fini *et al.*, 2012; Karimi *et al.*, 2016). Emrah *et al.* (2013), Ibrahim and Mas'ud (2016), and Jena (2020) note that there are three factors affecting entrepreneurial intention, which are personality, the environment, and demography. Personal characteristics include traits and backgrounds, while environmental factors include entrepreneurship education as a determinant of entrepreneurial intentions.

Entrepreneurship education links teaching and learning about entrepreneurship, which seek to enhance the personal knowledge, skills, attitudes, and character of students according to their age and capabilities (Ayalew & Zeleke, 2018; Oosterbeek *et al.*, 2010; Solesvik *et al.*, 2014; Gerba, 2012). Moreover, Bergmann *et al.* (2018), Wach and Wojciechowski (2016), and Kirkwood *et al.* (2014) note that the factors influencing students' entrepreneurial intentions are belief in the current condition and prospects for entrepreneurship in the future. Generally, entrepreneurship education is intended to reinforce students' recognition of entrepreneurship as a career opportunity and foster their understanding of inaugurating and managing new business (Linan *et al.*, 2017). However, Kusmintarti *et al.* (2014) indicate that entrepreneurship education insignificantly affects entrepreneurial attitude when emphasis lies solely on the theoretical aspects.

Besides entrepreneurial education, the entrepreneurship concept results from the influence of individual circumstances in local context or culture (Reynolds *et al.*, 2007; Kibler, 2013). Hofstede (2001) and Collins *et al.* (2004) assert that culture is concerned with the suffusive organizing of the mind that differentiates members of one group from members of another. Culture is a feature that can promote career opportunities decisions (lakovleva & Solesvik, 2013), and provide or hinder company establishment (Kreiser *et al.*, 2010; Akcay *et al.*, 2014; Ao & Liu, 2014; Vargas-Hernández *et al.*, 2010). Previous studies by Ao and Liu (2014) and Şeşen and Pruett (2014) reveal that entrepreneurial culture affects entrepreneurial intention. However, those studies did not find the influence of entrepreneurial education on entrepreneurial culture.

Several theoretical approaches and empirical evidence show that attitude cannot occur when considered as a one-dimensional construction, because its evaluation contains two inseparable components, one being instrumental or cognitive and the other being experiential or affective (Botsaris & Vamvaka, 2016). The instrumental element refers to considerations that are more cognitive instead of a behaviour that seeks something beneficial and in accordance with thoughts, knowledge, and perceptions. The affective component refers to emotions, feelings (e.g. excitement, satisfaction), and impulses generated by chances of individual behaviour (Ajzen, 1991; Botsaris & Vamvaka, 2016; Fayolle & Gailly, 2015; Yan, 2014).

Scholars long debated that cognition has a reciprocal influence in shaping instrumental and affective attitudes as causal to each other (Fernandes & Proença, 2014). Longitudinal data are required to initiate a causal correlation between these two elements of attitude. Wach and Wojciechowski (2016) indicated that there is a robust connection between entrepreneurial attitude and the intention to become an entrepreneur. Taormina (2019) states that attitudes and environments may influence entrepreneurial intentions. Measured by psychological characteristics, attitudes have a substantial effect on entrepreneurial potential. At the same time, the environmental factor – which includes social, economic, political, and infrastructure development – has a strong influence on entrepreneurial success. Intention remains the crucial and unbiased predictor of career options (Hackett, 2018; Sajjad & Dad, 2010; Miranda *et al.*, 2017). Previous research results state that entrepreneurial attitudes have a significant and robust consequence for entrepreneurial intentions (Guerrero *et al.*, 2008; Hsu *et al.*, 2016; Hussain & Norashidah, 2015; Liñán, 2008). The above findings allow us to assume the following research hypotheses:

- **H1:** Entrepreneurial culture positively influences entrepreneurship education.
- **H2:** Entrepreneurial culture positively influences entrepreneurial attitude.
- **H3:** Entrepreneurial education positively influences entrepreneurial attitude.
- **H4:** Entrepreneurial attitude positively influences entrepreneurial intention.
- **H5:** Entrepreneurial culture positively influences entrepreneurial intention.
- **H6:** Entrepreneurial attitude mediates the impact of entrepreneurial culture and entrepreneurial intention.
- **H7:** Entrepreneurial attitude mediates the impact of entrepreneurship education and entrepreneurial intention.

RESEARCH METHODOLOGY

Research Methods

This study applied a quantitative method using structural equation modelling to comprehensively understand the relationship among variables. The study involved a cross-sectional survey of economics faculties from several universities in Malang of East Java, Indonesia. To attain the objectives, this study develops a structured online questionnaire. This study engaged several variables, including the intention to become an entrepreneur, entrepreneurship education, culture, and entrepreneurial attitude. The framework of the research is provided in Figure 1.

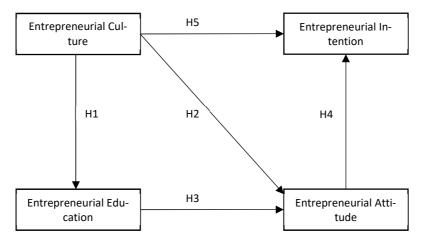


Figure 1. The theoretical framework methodology

Source: adapted from Krueger et al. (2000); Linan & Chen (2009); Mathisen & Arnulf (2013); Ackenzie et al. (2011); Ireland et al. (2009); Denanyoh et al. (2015).

Population and Sample

An online questionnaire was used to gather information from volunteers from September to December 2019. The sample in this study was determined through a convenience sampling technique following Sekaran and Bougie (2009) and Malhotra (2010). The total of 425 questionnaires were provided online, and approximately 373 were usable in the following analysis. The response rate of 88.47% was relatively high. The rationale for using economic faculty students as respondents was that they received entrepreneurship education and conducted various entrepreneurial training and practices organized by universities, ministries of higher education, and SMEs in collaboration with universities. The respondents demographic in this study consisted of 127 men (33.77%) and 246 women (65.42%) The study was conducted among first-year, second-year, and third-year undergraduate students and students in the final year of their graduate studies. In more detail, class 2014 numbered two students (0.53%); class of 2015 – 5 (1.34%); class of 2016 – 98 (26.06%); class of 2017 – 249 (66.22%); class of 2018 – 10 (2.66%); class of 2019 – nine (2.39%).

Research Instruments

All the construct's calculation was adapted from preliminary works with a slight modification for the Indonesian context. The questionnaire included 35 questions framing each participant's profile and variables to be examined. The seven-items questionnaire was adapted from Krueger *et al.* (2000) and Liñán and Chen (2009) to measure entrepreneurial intention, while another seven-items questionnaire was expanded from Mathisen and Arnulf (2013) to understand the entrepreneurial mindset. Moreover, to measure the entrepreneurial culture, we adapted 10 indicators from Mackenzie *et al.* (2011) and Ireland *et al.* (2009), while to measure entrepreneurial attitude, we adapted five indicators from Linan and Chen (2009). Finally, to calculate entrepreneurship education, the authors engaged six indicators from Denanyoh *et al.* (2015). A five-point Likert scale was employed for each variable from 1 for 'strongly disagree' to 5 for 'strongly agree.'

RESULTS AND DISCUSSION

In the initial stage, we tested an exploratory factor analysis using SPSS to validate data, evaluate dimensions, preserve firm indicators (Allen & Bennett, 2010), and pursue a reliability test with the criteria of Cronbach's alpha of 0.6 or higher (Hair *et al.*, 1998). The second stage was the confirmatory factor analysis with AMOS 25. To obtain the fitting model, it had to satisfy certain criteria and cut-off values, namely p > 0.5 (Schermelleh-Engel *et al.*, 2003), CMIN / DF of < 2 (Tabachnick & Fidell, 2007), and RMSEA of \leq 0.06 (Hu & Bentler, 1999).

Exploratory Factor Analysis

According to the calculation of exploratory factor analysis, there generally are 38 factors that consist of Entrepreneurial Intention (6), Entrepreneurial Attitude (5), Entrepreneurial Culture (19), and Entrepreneurial Education (6). All factors have Cronbach's alphas ranging from 0.599 to 0.975, and they are considered reliable for inclusion in further analysis.

Hypotheses Testing

According to Structural Equation Modeling (SEM) analysis, a fitting model was obtained with a probability score of 0.069, a CMIN / DF score of 1.270, a CFI score of 0.995, and an RMSEA score of 0.027. As presented in Tables 1, H1, H2, H3, H4, and H5 were significant with CR scores of 17.937, 2.823, 2.161, 11.586, 3.584, respectively. Furthermore, H6 and H7 also satisfied the criteria with CR scores of 2.124 and 2.742 (see Table 1 and Figure 2).

Table 1. Result summary of theoretical framework to	testing
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Hypotheses	Impact	CR	Р	Decision
H1	EC → EE	17.937	0.000	Accepted
H2	EE → EA	2.823	0.005	Accepted
Н3	EC → EA	2.161	0.031	Accepted
H4	EA → EI	11.586	0.000	Accepted
H5	EC → EI	3.584	0.000	Accepted
Н6	EC → EA → EI	2.124	0.006	Accepted
H7	EE → EA → EI	2.742	0.006	Accepted

Note: EC = entrepreneurial culture; EE = entrepreneurial Education; EA = entrepreneurial Attitude; EI = entrepreneurial intention. Source: own study.

The Relationship Between Variables

The results of this work address the seven proposed hypotheses. The first hypothesis (H1) shows that there is a positive impact of entrepreneurial culture on entrepreneurial education with a CR score of 17.937. This is due to the fact that culture in university and community environment makes students have to learn about entrepreneurship. With the support of culture, students are more confident in

learning entrepreneurship material. There are examples of young entrepreneurs who successfully presented at universities as practitioners. The result of this study is indifferent of the prior studies by Ao and Liu (2014), Holmgren and From (2005), Jack and Anderson (1999), Mueller and Thomas (2001), Jabeen *et al.* (2017), and Jack and Anderson (1999).

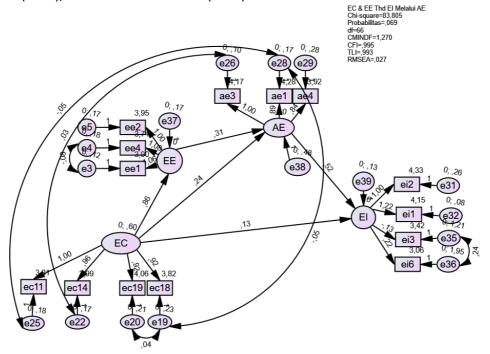


Figure 2. The structural equation model estimation Source: own elaboration.

Moreover, based on the previous analysis, we found a significant effect between entrepreneurial culture and entrepreneurial attitude, with a CR score of 2.823 and *p*-value of 0.005. This implies that entrepreneurial culture within the student environment could form attitudes towards entrepreneurship. Culture is important in every dimension of entrepreneurship because it determines individual attitudes towards entrepreneurship initiation. This finding suggests that culture is the most effective constant for entrepreneurs. A good cultural value also leads to intentions of becoming an entrepreneur. The result of this study is in agreement with prior research by Aloulou (2016), Holmgren and From (2005), Şeşen and Pruett (2014).

The third hypothesis (H3) argues that there is a direct positive impact of entrepreneurial education on entrepreneurial attitude. This study confirmed previous research by Fayolle and Gailly (2015), Florin and Rossiter (2015), Potishuk and Kratzer (2017), Schwarz *et al.* (2009), Şeşen and Pruett (2014), and Zhang and Espinoza (1998). Students who enrolled in this study considered that the results of entrepreneurial learning could form attitudes able to foster their entrepreneurial spirit. Due to its moderate CR score, the entrepreneurship material from this time is considered in need of improvement because of the limited lecture time, which only gives three credit semesters in one semester during the study period. Entrepreneurship curriculum on campuses has more theoretical material than practical exercises.

Furthermore, this study also showed the significant effect of entrepreneurial attitude on entrepreneurial intention. In this study, students who participated stated that entrepreneurial intentions can be formed if students consider that a career as an entrepreneur is exciting. Many opportunities can be obtained through entrepreneurship. The need for seriousness in conducting an entrepreneurial career happens through exploring all existing business processes. These students can also create business ventures in the future. This implies that high motivation and intention toward entrepreneurship can drive students' success in running a business. The finding supports prior research conducted by Ayalew and Zeleke (2018), Fayolle and Gailly (2015), Krueger *et al.* (2000), Potishuk and Kratzer (2017), Schwarz *et al.* (2009), and Zampetakis *et al.* (2008).

The next hypothesis is that there is a positive direct impact on entrepreneurial culture and entrepreneurial intention. The study found that H5 was significant with a CR score of 3.584, which implies that entrepreneurial culture positively affects entrepreneurial intention. In this study, there is evidence from some students who believe that entrepreneurial culture in an institution was important in supporting their confidence gain. Noticeable students also began to open to changes in teaching and learning models. Some students became open to an organization's vision of the future. Institutions began to increase mutual trust and respect among students. Support from the academic community during a crisis is what students who start businesses need. Nevertheless, this finding confirmed the results of preliminary studies by Ao and Liu (2014), Bogatyreva *et al.* (2019), Şeşen and Pruett (2014), Solesvik *et al.* (2014), Gerba (2012).

The sixth and seventh hypothesis sought to understand the mediating role of entrepreneurial attitude. Based on statistical calculation, the variable of entrepreneurial attitude was successful in mediating entrepreneurial culture towards entrepreneurial intention. The results of this work support the results of Bogatyreva *et al.* (2019), Sajjad and Dad (2010), Solesvik *et al.* (2014), Ayalew and Zeleke (2018), Díaz-García and Jiménez-Moreno (2010), Mahendra *et al.* (2017), Shao-Hui *et al.* (2011). This is evidenced by the attitude towards good entrepreneurship from students who intend to become better entrepreneurs with the support of the entrepreneurial culture of their environment. This finding is reasonable because the entrepreneurial culture built at universities will form an entrepreneurial attitude and a strong intention to become an entrepreneur. The Indonesian government, through the Ministry of Higher Education, has instructed all universities — both public and private — to foster entrepreneurial culture in order to increase the number of entrepreneurs born from the world of higher education.

The study also confirmed that entrepreneurial attitude can mediate the relationship between entrepreneurship education and entrepreneurial intention. This agrees with the numerous findings by Hussain and Norashidah (2015), Kalyoncuoğlu *et al.* (2017), Piperopoulos and Dimov (2015), Souitaris *et al.* (2007), Tiwari *et al.* (2017), Ayalew and Zeleke (2018), Díaz-García and Jiménez-Moreno (2010). Thus, our study implies that entrepreneurship education plays a crucial role in promoting students' entrepreneurial intention. Hence, universities should explore models of entrepreneurship education at all levels of education, e.g. by providing more practical courses instead of theoretical ones and by elaborating existing curricula to follow the rapid global changes.

CONCLUSIONS

This study aimed to evaluate the influence of entrepreneurial education, entrepreneurial culture, and entrepreneurial attitude on entrepreneurial intention. The above analyses allow us to surmise that entrepreneurship education positively influences entrepreneurial attitude. Similarly, entrepreneurial culture impacts entrepreneurial attitude, entrepreneurship education, and entrepreneurial intention. Moreover, entrepreneurial attitude affects the intention to become an entrepreneur. Furthermore, entrepreneurial attitude can explain both the connectivity between entrepreneurship education and entrepreneurial intention – or entrepreneurial culture – and students' intention to become entrepreneurs.

Thus, the study confirmed that entrepreneurship and cultural education play an essential role in the intention to become an entrepreneur. Therefore, universities not only update and revitalize entrepreneurship curricula but also create a strong entrepreneurial culture. This entrepreneurial culture can be adapted to the characteristics of each campus. An entrepreneurial culture can be built e.g. by holding meetings of young entrepreneurs from both campus and outside, seminars, conferences, festivals, and fairs; and by using printed media in the form of brochures, banners, and magazines.

The main limitation of our study lies in the fact that the data was gathered solely from several universities in Malang of Indonesia, so the results cannot be generalized to represent real conditions in all universities in Indonesia. Future scholars should involve all universities in Indonesia so as to provide results that could be generalized. Moreover, this study only tested three independent variables and one dependent variable. Future studies should investigate other dominant factors that influence students' intention to begin a business activity. Research using the mixed method is very suitable to develop this study in the future.

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Conflict of Interest

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