The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial Self-Efficacy on University Students' Entrepreneurial Intention

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Abstract
This study aims to analyze the effect of Entrepreneurship Education (EE), Perceived Desirability (PD), and Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intentions (EI) in the context of graduates of Jambi University – Indonesia. The study adopted inferential design with cross-sectional data. The sample was alumni of 11 faculties of Jambi University, totaling 505 (47.72% men, 51.68% women). The result is EE positively and significantly affects PD, ESE and EI. PD and ESE positively and significantly affect EI. The limitation of the study is it focuses only on the antecedents of EI by ignoring entrepreneurial behavior, which is how respondents start new businesses. Besides, this study used cross-sectional data, so the link of causality was carefully interpreted. Longitudinal datasets use is needed for future analysis. The study practical implication is this study provides a conceptual framework for thorough evaluation for EE organizers to establish learning outcomes, study materials, learning methods, learning environments, and networking with business communities in providing students authentic experiences in how to start businesses. The originality value of this study is it uses a combination of two models - Shapero's Model of "Entrepreneurial Event" (1982) and Ajzen's Model of "Theory of Planned Behavior" (1991) – to explain EI.

Keywords Entrepreneurship Education (EE), Perceived Desirability (PD), Entrepreneurial Self-Efficacy (ESE), Entrepreneurial Intentions (EI)

1. Introduction
Entrepreneurship Education (EE) can be seen as a key factor for generating new entrepreneurs who will play a role in increasing economic growth and sustainable development. It contributes to growing a country's competitiveness in its national and international markets; overcoming unemployment as a solution to this ever-growing problem; encouraging entrepreneurs in bringing innovative ideas to the market and achieving their personal growth (Acs and Szerb, 2010). Therefore, many educational institutions in almost all over the world - including universities - are developing entrepreneurship education, preparing new entrepreneurial cadres. For example, over the past three decades the number of Entrepreneur Education Programs (EEPs) has increased tenfold in the United States and elsewhere (Spiteri and Maringe, 2014). Since 2012, as a mid-term and long-term project, the Korean Ministry of Education has led the activation of creative entrepreneurship, entrepreneurship education and entrepreneurial culture in universities by establishing entrepreneurship centers in 61 universities (Yoon et al., 2015).

According to Shaomeng Jia (2018), entrepreneurship is also an effective tool to reduce poverty in underdeveloped countries (United Nations General Assembly (UNGA) Resolutions A / RES / 69/320, 2014, p. 3). For example, the Organization for Economic Co-operation and Development Strategy (OECD) launched a synthesis of the first cross-country policy on "Fostering Entrepreneurship" in 1998. The report concluded that the vibrations of entrepreneurship depend on institutions, government programs and cultural factors. (OECD, 1998). The World Bank has similar projects aimed at promoting entrepreneurship, including the info Dev and the Women Entrepreneurs Finance Initiative (We-Fi). In particular, these programs and projects focus on technological innovation and finance start-ups. According to the Independent Evaluation Group (2013, p. 41), the World Bank has an "investment portfolio of $ 18.7 billion" in innovation and entrepreneurship during the fiscal year 2000-2013. These projects target "R&D infrastructure, entrepreneurial capabilities reinforcement, and start-ups financing" in low and middle income countries. Likewise,
Entrepreneurship education is very important for economic and social development, be it regionally, nationally or nationally. It is because it has been understood as a priority on the political and economic agenda and debate in various countries in the world, including discussions at the highest level of the UN (Lima et al., 2015). [12] It is known that the development and implementation of entrepreneurship education programs follows the recommendations of the United Nations Educational, Scientific and Cultural Organization (UNESCO) for 21st century education, namely learning how to know, learning how to do, learning how to live and learning how to be.

According to DeTienne and Chandler (2004), "Entrepreneurship education is the transfer of knowledge and discussion in business management to students with insight into their creation in the effort of creation. [13] Entrepreneurship education refers to "pedagogical [programs] or any educational process regarding entrepreneurial attitudes and skills" (Fayolle et al., 2006). [14] The aim of entrepreneurship education is to help students increase the likelihood of their business success and to improve careers that they can choose (Nabi et al., 2017). [15] In addition, Schmitz et al., (2017) argue the aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative. [16] This is in line with Kirkley (2017) who state that entrepreneurship education can legitimize entrepreneurship as a viable career choice and develop a culture of entrepreneurship among students. [17] This can give students the opportunity to meet famous entrepreneurs and influence attitudes towards entrepreneurship. In other words, entrepreneurship courses can help students find their role models to become entrepreneurs. Entrepreneurship courses are positively related to financial and nonfinancial business performance (Choi and Lee, 2018). [18] This study examines the effect of Entrepreneurship Education (EE), Perceived Desirability (PD), Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intentions (EI), in the context of university graduates in Indonesia. The model used in this study is a combination of the two models.

### 2. Literature Review and Hypothesis

#### 2.1. Entrepreneurial Intentions (EI)

EI is a state of conscious mind that precedes action and directs attention towards goals such as starting a new business (Moriano et al., 2012). [19] However, various factors influence a person's conscious decision to start a new business (Liñan and Chen, 2009). Behavior performance depends on motivation (intention) and ability (behavioral control) (Ajzen, 1991). Both personal and situational factors will play an important role in determining a person's decision to take the initiative to do entrepreneurship. Previous studies show that in addition to the personality of an individual, external factors have a role in inviting students to engage in entrepreneurial behavior. Iakovleva et al. (2011) underline that the economic environment in developing countries appears to
be less stable, often characterized by strong turbulence. This makes choosing a career in developing countries a difficult task for graduates because they cannot expect the same demand for salaried employees as in developed countries. The same applies to career advancement. However, the volatile economy offers opportunities for entrepreneurial activities, perhaps even wider than that of a stable and advanced economy. [20]

The study of EI has received much attention from researchers and this has led to the formulation of different entrepreneurial models that aim to understand an individual’s intention for business creation. Each model tries to both capture the psychological process of individual intentions and predict individual behavior. The former emerges from social psychology while the latter analyzes the behaviors and mental processes that occur when changing attitudes and beliefs into effective actions (Clara Gieure, 2019). [21] Therefore, in literature there are two models for explaining entrepreneurial intention (EI), namely Shapero's Model of the "Entrepreneurial Event" (1982) and Ajzen's Model of "Theory of Planned Behavior" (1991). The first model explains EI based on perception of desire, perceived feasibility, and tendency to act. PD refers to the extent to which he feels an interest in entrepreneurship. The second model analyzes the behaviors and mental processes that occur when changing attitudes and beliefs into effective actions (Clara Gieure, 2019). [21] Therefore, in literature there are two models for explaining entrepreneurial intention (EI), namely Shapero's Model of the "Entrepreneurial Event" (1982) and Ajzen's Model of "Theory of Planned Behavior" (1991). The first model explains EI based on perception of desire, perceived feasibility, and tendency to act. PD refers to the extent to which he feels an interest in entrepreneurship. The second model analyzes the behaviors and mental processes that occur when changing attitudes and beliefs into effective actions (Clara Gieure, 2019). [21]

According to the European Commission (2012), "EI in higher education enhances students' basic competencies in entrepreneurship to strengthen students' Entrepreneurial Intention (EI)". [32] Empirically, research shows that EE can influence the development of EI (Pedrini et al., 2017). [33] Küttima et al. (2014) also showed that students participating in EE in 17 European countries had the intention to engage in entrepreneurship. [34] Research results of Puni et al. (2018) found that EE positively affected EI and Self-Efficacy. The study by Passoni and Glavam (2017) shows that EE has a positive effect on EI among students in undergraduate management and engineering programs. [35] Data analysis in Otache's research (2018) shows a positive relationship between EE and EI students on the one hand and between EE and EI students in entrepreneurial lecturers (PEL) on the other. [36] Sun et al., (2016) found that entrepreneurship education had an effect on attitudes, social norms, self-efficacy and entrepreneurial intentions. [37] Education can develop and improve one's self-efficacy (UNCTAD, 2010). [38] Gradually acquired through education, self-efficacy significantly increases the level of personal aspirations, goals and decisions of people (Bandura et al., 2001). [39] Zhao et al. (2005) found a significant relationship between formal learning and ESE. Similarly, Dickson et al. (2008) found that entrepreneurship training had a positive impact on individual perceptions about their ability to start new businesses. [40] Recently, Rauch and Hulsink (2015) concluded that entrepreneurship education increases the control of behavior perceived by students. [41]

On the other hand, some research results show different results. In a recent meta-analytic review, Bae et al. (2014) found that although entrepreneurship education has a positive effect on EI, the effect is weak or small. [42] Even Fayolle and Gailly (2015) found that the impact of entrepreneurship education on entrepreneurial intentions was negatively affected by previous student experience about entrepreneurship. Because of the level of experience of the average newborn entrepreneur or early stage is high, the effectiveness of education may not be that strong. [43] EEP (entrepreneurial education program) can have a negative impact on EI (Martin, MacNally, and Kay, 2012). [44] Finally, a series of studies found that EEP has no impact on EI (A do Paço et al., 2015). [45]
This difference is possible because of differences in curriculum, learning environment, learning strategies and material for study on entrepreneurship education between universities. The hypotheses proposed are:

- **H₁**: Entrepreneurship education (EE) influences entrepreneurial intentions (EI)
- **H₂**: Entrepreneurship education (EE) influences perceived desirability (PD)
- **H₃**: Entrepreneurship education (EE) influences entrepreneurial self-efficacy (ESE)

2.3. Perceived Desirability (PD)

According to Linan (2004) the construct of perceived desirability (entrepreneurial event-Shapero & Sokol, 1982) has similarities with personal attitudes and subjective norms (Theory of Planned Behavior-Ajzen’s, 1991). Both are an explanatory variable of intention. According to him, the willingness to do entrepreneurial behavior (perceived desirability) can be understood as composed by personal attitudes and perceptions of social norms. In this sense, it can be remembered that Shapero & Sokol (1982) regard desire as a result of social and cultural influences. Researchers who applied Ajzen’s (1991) theory of planned behavior (TPB) concluded that positive attitudes toward entrepreneurial behavior encourage subjective norms for entrepreneurial behavior and behavioral control that are perceived as beneficial for entrepreneurial behavior are positively related to EI (Bahadur and Naimatullah, 2015). [46] This means that people are more likely to engage in entrepreneurial behavior if they have the desired behavior rating, a positive perception that the person they are referring to agrees with the behavior, and a positive perception that their involvement in the behavior is appropriate. Similarly, the researchers who applied the Shapero and Sokol's (1982) entrepreneurial event model (EEM) revealed that the desired positive perceptions of an entrepreneurial business, a stronger tendency to act in an entrepreneurial manner and a possible perceived feasibility to start an entrepreneurial business increase individual tendencies to choose an entrepreneurial career (Urban and Kujinga, 2017). [47] This implies that people are more likely to be involved in entrepreneurial behavior if they consider it interesting and practical - and if they have the capacity to act on identified opportunities (Bacq et al., 2016). [48]

Further, another similar study shows that the perceived positive desires of an entrepreneurial business, a stronger tendency to act in an entrepreneurial manner and a positive perception of eligibility to start an entrepreneurial business increase the tendency of individuals to choose an entrepreneurial career (Urban and Kujinga, 2017). [49] Solesvik's analysis, et al. (2014) reveals that students who have perceived desirability and perceived feasibility for entrepreneurship have significantly higher intensity of entrepreneurial intentions. [50] Bell's empirical evidence (2009) shows that attitudes, subjective norms and perceived behavioral control mediate the relationship between perceptions of entrepreneurial motivation and entrepreneurial intentions. [51] Variable personal attitudes that can be predicted from EI (Buli and Yesuf, 2017). [52] The results of the study indicate a significant relationship between some entrepreneurial attitudes and several variables in student background and entrepreneurial intentions (Wassim J. Aloulou, 2016). [53] Proactive personality and perceived support for the concept of development are also important determinants of students' entrepreneurial intentions (Mustafa, et al., 2016). [54] Young people who are building their individual identities that will influence their choice of future work are strongly influenced by their individual characteristics (beliefs, attitudes, motivations) and by their socialization with family, friends and classmates (Falck, Heblich, & Luedemann, 2012). [55] Therefore, understanding what drives entrepreneurial intentions takes into account the motivation of students' personal careers, their perceptions of entrepreneurial work and the role of university education as a supporter and transmitter of entrepreneurship is important for designing targeted educational processes (Tognazzo, Gianecchini, and Gubitta, 2017). [56] The hypothesis proposed is:

- **H₁**: Perceived desirability (PD) influences entrepreneurial intentions (EI)

2.4. Entrepreneurial Self-Efficacy (ESE)

Self-efficacy is the belief that a person has sufficient abilities to excel in what he decides or wants to achieve (Bandura, 1997). According to him, entrepreneurial self-efficacy (ESE) is an important motivational attribute of the entrepreneurial process because individuals accept the provisions of ambiguity around business situations that require effort, perseverance, and planning. [57] People who have high self-efficacy tend to show higher intrinsic interest in entrepreneurial behavior and activities (e.g. Miranda et al., 2017). [58] The concept of self-efficacy has been applied in social sciences by many researchers, including ESE (Chen et al., 1998). [59]

Lent et al. (1994) highlight that self-efficacy is significantly related to career interest, career choice goals (intentions), and job performance. [60] In accordance with these findings, Zhao et al. (2005), suggest that ESE is a mediator in the relationship between three antecedent variables (effects of perceived learning from entrepreneurship-related courses, previous entrepreneurial experience, and risk trends) and the development of students' intention to become entrepreneurs. [61] ESE has emerged as an important antecedent of the intention to become an entrepreneur (Krueger, 2007). [62] In fact, one of the main contributions in research on ESE concerns its role in the formation of entrepreneurial intentions (EI) (Drnovšek et al., 2010). [63] Prabhu et al. (2012) have found that especially for people with high ESE levels, this
3.1. Participants

This empirical study was conducted on a sample of alumni from 11 faculties of Jambi University, Indonesia, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they wished to participate in a follow-up study. Individuals of higher education graduates were chosen since they have been heavily involved in entrepreneurial activities. In this study 505 alumni were taken as the respondents (47.72% men, 51.68% women).

3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, with direct permission from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intention: All items were measured using a 6-point Likert scale with response options ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). An example of an item was EI-1: I am ready to make anything start a company someday. The Cronbach’s alpha for the scale was 0.894.

Entrepreneurial Education: All items were measured using a 5-point Likert scale with response options ranging from 1 (absolute ignorance) to 4 (full knowledge). Sample items included EE-1: Special training for young entrepreneurs, EE-5: Consultation services on favorable terms. The Cronbach’s alpha for the scale was 0.919.

Perceived Desirability (personal attitude and perceived social norms): All items were measured using an 8-point Likert scale with response options ranging from 1 (strongly disagree) to 4 (strongly agree). Examples of items included PD-1: Your immediate family, World War 8: - It is commonly thought that entrepreneurs take advantage of other people. The Cronbach's alpha for the scale was 0.826.

Entrepreneurial Self-efficacy. All items were measured using a 6-point Likert scale with response options ranging from 1 (strongly disagree) to 4 (strongly agree). Sample items included ESE-1: If I try to start a company, I will have a high probability of success. The Cronbach's alpha for the scale is 0.895.

3.2. Data Analysis

Using statistical software, the data was analyzed to determine whether there is a relationship between variables. Following accepted standards applied by several researchers (Koh, 1995; [73] Harris and Gibson, 2008; [74] Keat et al., 2011 [75]), we measured the correlation between variables and linear regression models between independent variables and dependent variable.
4. Results

4.1. Sample Characteristics

The sample characteristics are presented in Table 1. The sample is dominated by women (51.68%); this reflects the characteristics of the population of graduates of undergraduate programs of Jambi University every year, with women being the majority. As many as 94.26 percent of respondents were over 21 years old, and 85.74 percent of them did not have a family background of entrepreneurs. Only 60.40 percent of respondents had attended specialized entrepreneurship training.

Table 1. Summary of descriptive statistic sample characteristics

| Variable                  | Obs. | Number | Percentage | Cumulative |
|---------------------------|------|--------|------------|------------|
| Gender                    |      |        |            |            |
| Male                      | 241  | 47.72  | 47.72      |            |
| Female                    | 261  | 51.68  | 100        |            |
| Age                       |      |        |            |            |
| < 20                      | 505  | 22     | 4.36       | 4.36       |
| > 21                      | 476  | 94.26  | 100        |            |
| Family Background         |      |        |            |            |
| Entrepreneur              | 505  | 66     | 13.07      | 13.07      |
| Non-Entrepreneur          | 433  | 85.74  | 100        |            |
| Entrepreneur Training     |      |        |            |            |
| Ever                      | 198  | 39.21  | 39.21      |            |
| Never                     | 305  | 60.40  | 100        |            |

4.2. Validity and Reliability

Validity is obtained by looking at correlations between constructs or factors. Items must correlate more strongly with their own constructs than with anything else, indicating that they are perceived by respondents as their own theoretical constructs (Messick, 1988). [76] The results in Table 2 show a correlation matrix between predictor constructors. All constructs, EI, PD, ESE, and EE, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggested that reliability is an indicator of the extent to which item differences, measurements, or judgments are consistent with each other, [77] whereas Zumbo (2007) sees the measurement or validation of test scores as an ongoing process in which one provides evidence to support conformity, meaningfulness; and the specific uses of conclusions are made from scores about individuals from the sample and context given. The approach used to examine two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). [79] In this condition, alpha values range from 0.826 to 0.919 (Table 2). Therefore, surveys can be considered reliable.

Table 2. Summary of test validity & reliability results

| Variable                  | Item | Correlation | Reliability |
|---------------------------|------|-------------|-------------|
|                           |     | r           | Sig. | Status | Alpha Cronbach | Status |
| Entrepreneurship Education| EI-1 | 713**      | .00  | Valid  | .904            | Reliable |
|                           | EI-2 | 841**      | .00  | Valid  | .926            | Reliable |
|                           | EI-3 | 831**      | .00  | Valid  | .925            | Reliable |
|                           | EI-4 | 831**      | .00  | Valid  | .925            | Reliable |
|                           | EI-5 | 820**      | .00  | Valid  | .925            | Reliable |
|                           | EI-6 | 832**      | .00  | Valid  | .925            | Reliable |
|                           | EI-7 | 851**      | .00  | Valid  | .925            | Reliable |
|                           | EI-8 | 772**      | .00  | Valid  | .925            | Reliable |
|                           | EI-9 | 753**      | .00  | Valid  | .925            | Reliable |
|                           | EI-10| 712**      | .00  | Valid  | .919            | Reliable |
| Perceived Desired         | PD-1 | 741**      | .00  | Valid  | .895            | Reliable |
|                           | PD-2 | 768**      | .00  | Valid  | .895            | Reliable |
|                           | PD-3 | 841**      | .00  | Valid  | .895            | Reliable |
|                           | PD-4 | 851**      | .00  | Valid  | .895            | Reliable |
|                           | PD-5 | 852**      | .00  | Valid  | .895            | Reliable |
|                           | PD-6 | 856**      | .00  | Valid  | .895            | Reliable |
|                           | PD-7 | 856**      | .00  | Valid  | .895            | Reliable |
| Entrepreneur - Self Efficacy| ESE-1 | 741**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-2 | 768**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-3 | 841**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-4 | 851**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-5 | 852**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-6 | 856**     | .00  | Valid  | .895            | Reliable |
|                           | ESE-7 | 856**     | .00  | Valid  | .895            | Reliable |
| Entrepreneurship Education| EE-1 | 850**     | .00  | Valid  | .919            | Reliable |
|                           | EE-2 | 876**     | .00  | Valid  | .919            | Reliable |
|                           | EE-3 | 850**     | .00  | Valid  | .919            | Reliable |
|                           | EE-4 | 850**     | .00  | Valid  | .919            | Reliable |
|                           | EE-5 | 824**     | .00  | Valid  | .919            | Reliable |

* significant at 0.05, ** significant at 0.01
4.3. Hypothesis Testing

The correlation matrix presented in Table 3 shows that there is a positive relationship between predictor variables and the dependent variable. The correlation coefficients between EE and EI are 0.507, ESE and EI 0.650, and PD and EI 0.463, suggesting all of them are positive and significant.

Table 3 correlation coefficient only shows the relationship between variables, but does not provide an indication of the direction of causality. Therefore, to determine the direction of quality, a hypothesis is tested by applying linear regression. The results are presented in Table 4. Based on Table 4, it is known that the direction of causality between variables are positive and significant, indicating that all of the proposed hypotheses are accepted.

5. Discussion and Conclusions

In this study, the findings indicate that the EE, PD and ESE variables are useful models to explain IE. This means that graduates who have obtained EE have great potential to become new entrepreneurs. These results are consistent with previous studies (e.g. Müller, 2011; Zhang et al., 2014; Küttima et al. 2014; Pedrini et al., 2016 & 2017; Puni et al., 2018). Empirical evidence shows that EE is a very important variable because it has a significant effect on the formation of PD and ESE. Further, the subsequent effect of it is the emergence of EI, which is the intention of graduates to start new businesses. The next finding is that PD and SE have a significant influence on EI; and this is certainly in line with the theory of planned behavior (Ajzen, 1991), where PD (attitude towards the behavior, and the subjective norms) and the perceived behavioral control or ESE are cognitive antecedents of intentions. Also, the research results of Alessandra T. (2017) revealed that cognitive antecedents of intentions (i.e. attitude towards entrepreneurship, subjective norms and perceived behavioral control) are positively related to entrepreneurial intentions. [80]

Therefore, this study has theoretical implications because it contributes to this literature by highlighting the moment graduates feel that EE has provided them with management skills and abilities to identify opportunities and develop networks. The graduates’ EI grows as their understanding of attitudes, values and actions (entrepreneurial character) develops. Once such keeps going, then they will have a positive outlook on entrepreneurial careers to pursue their desired career. This
add to the literature that shows that entrepreneurship and business education appear to have a positive relationship with EI (Bae et al., 2014). [81] Because EE has a significant influence on cognitive factors (PD and ESE) and EI, our findings also have practical implications, which is, the implementation of EE at an undergraduate level in Higher Education needs serious attention. EE can be regarded as the most effective way to instill an entrepreneurial culture in Higher Education through fostering the entrepreneurial mindset of students and developing a supply of future graduate entrepreneurs. Traditionally, universities initially focused on preparing students and graduates for employment, but Gibb and Hannon (2006) argued that titles were no longer "tickets to entry into the workforce." [82]

Kabongo and Okpara (2010), after conducting studies at 58 higher education institutions at Sub-Saharan University, found that there were several courses offered in key scientific disciplines such as entrepreneurial negotiation, leadership, developing new ideas, creative thinking, and technological innovation. They emphasize that existing educational practices need to be modified to enhance entrepreneurial self-efficacy, highlight entrepreneurial excellence and encourage the courage of wise risk-taking. [83] This is similar to the findings discovered by Mary Fenton and Almar Barry (2014), who state that Higher Education can foster greater entrepreneurship through EE; knowledge transfer; academic spin-off; spin-in; commercialization of R & D; campus incubator; and / or indirectly through networking and training. [84] They are considered as seeds of innovation that grow new knowledge and ideas that can be translated into commercial entities, exploit intellectual assets and increase economic growth. Florida (1999) believes that the main role of Higher Education Institutions (HEI) as "a nation's primary knowledge source" is to produce graduates or "knowledge workers". [85] Entrepreneurs and governments must support graduates with various entrepreneurial skills or mindsets with a focus on creativity, capacity for innovation, management, networking and risk-taking.

6. Limitations and Further Research

The sample consisting of 505 student graduates is certainly right to explore EI. This is beneficial because of the same age and qualifications so that it is more homogeneous. Focusing on one university allows us to control several factors, such as location, study materials, semester learning plans, methods and sources of learning, etc. However, it has obvious weaknesses as it is limited. Replication of this research is needed with a wider and more cross-sectional sample of universities and cultures involved so as to increase the generalization of our findings. In addition, this study uses cross-sectional data, so the link of causality has to be carefully. The use of longitudinal datasets is needed for future analysis. In addition, it should be noted that different measuring instruments may cause different results. So, the definition of construction and size needs further attention. Finally, there is a saying that implies not all intentions will lead to behavior, one more factor known as opportunity is still required. Therefore, the results of the study cannot be absolutely made as an inference that all graduates who show entrepreneurial intentions will actually create a company or start a new business in the future. However, there are strong theories and empirical findings pointing out the fact that there is a strong link between intention and behavior.

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