PROFESSIONAL EDUCATION & TRAINING | RESEARCH ARTICLE

The university students enterprises development: Lesson from Indonesia

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Abstract: Promoting new entrepreneurs face challenges and the government has responded to this issue by stimulating students’ entrepreneurial intention as it directly affects the economy of a nation. The study aims at examining what factors affecting the enterprise development of students in Indonesia. The focus in Indonesia is unique as it experienced a high unemployment rate from university graduates. The data of this research were collected from several state universities in Indonesia through an online survey and was computed undergoing Structural Equation Modelling Partial Least Squares (SEM-PLS). The results of the study indicate that students’ entrepreneurial self-efficacy and entrepreneurial intention can be determined by subjective norms, risk perception, social factors, entrepreneurial education, motivation to a start-up business, and national norms. Additionally, the study confirms that entrepreneurial intention has a robust correlation with self-efficacy as well as students’ preparation for entrepreneurship.

Subjects: Education & Training; Entrepreneurship and Small Business Management; Entrepreneurship; Education Studies; Study of Higher Education

Keywords: enterprises development; entrepreneurial intention; enterprises development; subjective norms; self-efficacy; risks perception; university students

1. Introduction

The last decade has seen the rapid enhancement of enterprises in many countries. Entrepreneurship has become an issue of great importance recently due to the advantages of nations’ economic welfare. Enterprises offer the potential to enhance economic development,
poverty alleviation, and economic growth by creating new job opportunities (Klofsten et al., 2019; Sutter et al., 2019; Wu & Si, 2018). However, the primary issue in Indonesia is an inadequate number of entrepreneurs compared to the rest of population. The total of entrepreneurs in Indonesia is approximately 3.47 percent of the population, while other countries such as Malaysia (4.74%), Thailand (4.26%), and Singapore (8.76%) (Wardana et al., 2021).

Dealing with this, the Indonesian government in association with colleges, has promoted enterprises' development model through the students' entrepreneurship program. The national entrepreneurship students’ program is intended to promote students’ entrepreneurial knowledge, skills, and attitude. The program is provided in the form of strengthening entrepreneurship education, workshop, and students’ business assistance. Some consensus also believe that entrepreneurial education is powerful tool in providing and creating entrepreneurs’ intentions (Jena, 2020; Mei et al., 2020). For this reason, we claim that the entrepreneurship education will act a pivotal role in promoting entrepreneurial intention and the vast enterprises in Indonesia.

In a broad sense, the entrepreneurial intention is outlined as one’s attempt and action to provide new business creation or enhances the value-added of the existing business (Vuorio et al., 2018). Jena (2020) added that entrepreneurial intention is proxied by the primary factors, including individual characteristics and the environment, while Pauceanu et al. (2019) revealed that entrepreneurial confidence impacts students’ entrepreneurial intention. The recent studies in the Indonesian context believe that the low level of intention of entrepreneurs can be predicted by cultural and entrepreneurial attitude (Wardana et al., 2021), mindset and knowledge (Karyaningsih et al., 2020), entrepreneurial environment (Kusumojanto et al., 2021).

Considering the essential contribution of entrepreneurship, the study on this theme is also on the rise. The growing body of literature has examined entrepreneurial intention studies in several countries. For example, Wang and Wong (2004) noted that entrepreneurial interest in Singapore is explained by the personal environment, including education and business. Pejic Bach et al. (2018) reported the determinant factors of entrepreneurial intention in Slovenia. The study from Jena (2020) remarked that individuals’ subjective norms, and perceived behavioral control useful insight into the intention to start a business. Additionally, Nabi et al. (2018) checked the robustness of entrepreneurship education for first-year students in the United Kingdom and their entrepreneurial intention. Mahmood et al. (2019) tested the causality of entrepreneurial intention and pre-start-up among millennials of Malaysians. Lastly, Nguyen et al. (2019) focused on youth entrepreneurial intention in Vietnam.

However, the study on what factors affecting students' enterprise development, primarily socio-psychological sides, desirability, and the barrier to entrepreneurship, have been overlooked by researchers. The recent studies, for example, Purusottama (2019) examined the factors affecting the entrepreneurial intention of college students using the theory plan behavior approach. The results showed that subjective norm, attitude, and perceived are closely linked with entrepreneurial intention. Furthermore, Saptono et al. (2019) documented that entrepreneurial education does not impact entrepreneurial intention, while the subjective norm and entrepreneurial attitude correlate with entrepreneurial intention. Meanwhile, Patricia and Silangen (2016) focused on the nexus between entrepreneurial education and the intention of being entrepreneurs. Lastly, Indarti (2004); Kusumojanto et al. (2021) mentioned that entrepreneurial intention among Indonesia is determined by self-efficacy, while other factors, such as locus of control and demographic do not influence university students' intention towards entrepreneurship.

Hence, to capture a deeper understanding of this issue, we concern in this study on further examining these factors. Therefore, the purpose of this study aims at examining what factors driving entrepreneurs’ development of students by elaborating socio-psychological perspectives that are missing in the prior studies. In more detail, this present study provides useful insights by elaborating on other variables, including a willingness to begin a business, entrepreneurial
education, behavioral control perception, and entrepreneurial intention. The focus study in Indonesia is unique as it owned a high population but facing a limited number of entrepreneurs. From this empirical evaluation, this study can offer to educational institutions and governments on how to increase the students’ intention of being entrepreneurs.

2. Literature review and hypotheses

2.1. Underpinnings theory

This research is anchored on the theory of planned behavior (TPB), theory reasoned action (TRA), and the entrepreneurship event model (EEM). TPB by Ajzen (1991) and TRA developed by Ajzen and Fishbein (1980) have been widely acknowledged among scholars to explain individual behavior and intention in various fields such as social sciences, management, and entrepreneurship. TPB provides the foundation in understanding non-spontaneous behavior and spontaneous decision (Krueger et al., 2000). The precedence of TPB provides several contributions to explain intention to a particular behavior, including attitude, subjective norms, and perceived behavioral control (Baharuddin & Ab Rahman, 2021; Linan & Fayolle, 2015; Ruiz-Rosa et al., 2020; Samydevan et al., 2021; Usman, 2019). Additionally, TPB is believed to consider personal factors, social factors, and environmental contexts surrounding individuals (Palmer et al., 2019; Elnadi & Gheith, 2021). The social dimension determines individual behavior deriving from perspectives of the peers, parents, community, and public opinions (Linan & Fayolle, 2015). Subjective norms contribute to perceived social impact to involve or not to involve in entrepreneurship, while perceived behavior control is the ease or difficulty that an individual to a career as an entrepreneur (Entrialgo & Iglesias, 2016). While TRA notes that intention is often assumed to portray the motivational dimensions which drive individual willingness or behavior (Al-Mamary et al., 2020; Koe et al., 2015). This theory believes that attitudes and subjective norms can explain intention. TPB and TRA also denote to desirability and feasibility of the entrepreneurial event model (EEM) developed by Shapero and Sokol (1982), and it mentioned that promoting a business creation is an event (Krueger et al., 2000). The EEM illustrated that a dynamic situational event leads to individuals’ perceptions and values, which are determined by social and environmental from their previous experience (Esfandiar et al., 2019; Rai et al., 2017). To explain the EEM, this study provided some constructs, such as perceived desirability and feasibility, as the essential factors of intention for business.

2.2. Subjective norm and perceived desirability

Subjective norm refers to the perception about how individuals behave or not in business activities and its often associated with their circumstances such as peers, family, and colleagues (Shin & Hancer, 2016). According to the TRA, which was introduced by Ajzen and Fishbein (1980), and the TPB by Ajzen (1991), individual behavior is determined by intention, while the intention is affected by these primary elements: personal attitude and subjective norms. More specifically, personal attitude is probed by the motif of trust and evaluation of motivational achievement. Meanwhile, TPB focuses on predicting and explain individual behavior in particular contexts. Additionally, TPB affirms that attitudes and personality traits can solely have an indirect influence on particular forms of behavior, affecting factors that drive the action (Al-Jubari, 2019). Based on those theories, entrepreneurial intention is covered by three essential dimensions: positive and negative attitudes, subjective norms, and self-efficacy. The fundamental rationale is that subjective norms are determined through normative beliefs, which support or defuse particular behavior (Mamun et al., 2017). The perceived behavior control is closely linked with the dimension of self-efficacy. Tsai et al. (2016) proposed that entrepreneurial self-efficacy is conviction in the individual capability to achieve the venture’s start-up process.

The entrepreneurial intention is often perceived by an individual’s readiness to initiate a venture creation as well as to conduct behavior related to entrepreneurship. Prior studies by Wu et al. (2008); Miranda et al. (2017) believed that entrepreneurial intention is the deciding component in forecasting effective venture creation that involves perceptions of entrepreneurial feasibility and desirability. The increasing number of work literature on entrepreneurship’s subject
remarked that perceived desirability is a willingness and eagerness to provide for their own business (Abbasianchavari & Moritz, 2020; Paunescu et al., 2018). While other researchers, such as Vazquez et al. (2009); Esfandiar et al. (2019) argued that perceived desirability is related to one’s beliefs on whether or how likely they are to benefit from undergoing the success of new ventures establishment. The nexus between subjective norms, perceived desirability, and entrepreneurial intention has been confirmed by Wang et al. (2011), Yousaf et al. (2015), and Ahmad et al. (2019). Therefore, the hypothesis is provided as follows.

**H1. There is an influence between subjective norms and self-efficacy**

**H2. There is an influence between subjective norms and entrepreneurial intention**

**H3. There is an influence between perceived desirability and self-efficacy**

**H4. There is an influence between perceived desirability and entrepreneurial intention**

### 2.3. Entrepreneurial barrier and national norms

Entrepreneurial intention can be elucidated by perceived barriers, cultural values, and individual circumstances (Carayannis et al., 2016; Pittaway & Cope, 2007). Meanwhile, self-efficacy takes a notable role in determining the strength of both intention and activity towards entrepreneurship. In this study, the national norms represent how the community perceives entrepreneurs and entrepreneurship (Tung et al., 2020). Thanh et al. (2020) pointed out that the entrepreneurial barrier, such as the lack of infrastructure, administration, funding, anxiety, peers, and family attitudes, can affect the intention of being an entrepreneur. Indeed, Shinnar et al. (2012) considered their institutional, political, economic, and personal nature as barriers in entrepreneurship. Those anxieties drive people being paid job workers in a company instead of being an entrepreneur. Meanwhile, Shapero and Sokol (1982) argues that a higher entrepreneurial intention tends to ignore obstacles in starting and running a business. The connectivity between national norms, entrepreneurial barriers, self-efficacy, and intention of being entrepreneurs has been acknowledged by Heilbrunn and Almor (2014); Tung et al. (2020). Thus, the hypothesis is presented as follows.

**H5. There is an influence between entrepreneurial barrier and self-efficacy**

**H6. There is an influence between entrepreneurial barrier and entrepreneurial intention**

**H7. There is an influence between national norms and self-efficacy**

**H8. There is an influence between national norms and entrepreneurial intention**

### 2.4. Entrepreneurial motivation and entrepreneurial education

Entrepreneurship can be promoted in both formal and informal ways. Some scholars believe that entrepreneurship education is a motor in promoting intentions from the formal settings (Kusumojanto et al., 2021; Wardana et al., 2021). Entrepreneurship education is helpful to improve their cognition, continuously adjust their thoughts and actions to make their entrepreneurship more directional and coherent (Ferreira et al., 2017; Fiore et al., 2019). In addition to entrepreneurship education, motivation for entrepreneurship is essential to organize, manipulate, and control an organization, people, or ideas (Solosvik et al., 2019). An individual with a high entrepreneurial motivation has a high potential to be an entrepreneur. Entrepreneurial motivation has many facets and consists of prevalent motivation (need for accomplishment, locus of control, goal, freedom, impulse, and encouragement) and task-
specific motivation (e.g., goals setting and self-efficacy) (Alam et al., 2019). In addition, Collins et al. (2004) found that entrepreneurial motivation is positive and robust, affecting the choice of entrepreneurial career paths. According to Ajzen (1991), individual belief shapes attitudes toward entrepreneurship, subjective norms, and perceived behavioral control. Bandura and McClelland (1977) states that individuals’ expectations of self-efficacy are formed by four primary sources: performance accomplishment, experience depiction, verbal conviction, and physiological states. On the contrary, Zhao et al. (2005) believed that entrepreneurial education can promote these main resources. During the entrepreneurial course, students can carry out a practical draft and enhance their self-efficacy undergoing real achievements. Students can also have opportunities to obtain knowledge from the story of entrepreneurs who are representative learning resources. Lastly, students can be convinced that an entrepreneurial career is an attainable purpose and develops positive feelings. Therefore, the hypothesis is provided as below.

**H9. There is an influence between entrepreneurial motivation and self-efficacy**

**H10. There is an influence between entrepreneurial motivation and entrepreneurial intention**

**H11. There is an influence between entrepreneurial education and self-efficacy**

**H12. There is an influence between entrepreneurial education and entrepreneurial intention**

### 2.5. Entrepreneurial intention and prepare for entrepreneurship

Entrepreneurial intention has become a great concern in the entrepreneurship studies as its role in preparing individual as entrepreneurs. Entrepreneurial intention is defined as the self-belief of individual to provide new venture creation or enhances the value-added of the current business (Vuorio et al., 2018). Therefore, the questions on what or how to enhance entrepreneurial intention as well as preparing for business have raised attention among scholar and policymakers in various countries (Jena, 2020; Kusumojanto et al., 2021; Martins & Perez, 2020). Based on the viewpoints of social cognitive theory, individuals tend to pursue their own targets only when they believe their abilities and actions can achieve the expected results (Bandura, 2018). The TPB (Ajzen, 1991) and TRA (Ajzen & Fishbein, 1980) are well known for understanding the individual intention that determine behavior. However, a longitudinal study by Kaffka and Krueger (2018) believe that socio-psychological models can explain individuals’ attitudes and beliefs to enhance comprehend of entrepreneurial intention. Socio-psychology in this study refers on how and why people think, feel and act depending upon their social context. This study underpins those main theories, entrepreneurial potential (Krueger et al., 2000), and socio-psychological perspectives (Turkina & Thai, 2015). The entrepreneurial intention reflects the intention construct from TPB, while business preparation represents behavior construct from TRA by (Ajzen, 1991). Several prior studies by Mamun et al. (2017) remarked that entrepreneurial intention is the initial stage in providing a new business. The underlying rationale is that there is no action without any willingness or intention. In addition, the entrepreneurial intention has been highlighted by Linan and Fernandez-Serrano (2014) as a predictor in explaining new venture creation. Thus, the hypothesis is presented as below.

**H13. There is an influence between self-efficacy and entrepreneurial intention**

**H14. There is an influence between entrepreneurial intention and prepare for entrepreneurship**
3. Methods and materials

3.1. Research model and analysis
This study applied a quantitative approach elaborated on a cross-sectional design to obtain a comprehend analysis of some forecasted variables that can stimulate students’ enterprise development in Indonesia. Figure 1 provides information about the research framework elaborated in this study. Based on literature review and previous relevant research, it suggested interrelationship between some constructs, including: subjective norm (SN), perceived desirability (RI), entrepreneurial barrier (EB), national norms (NO), entrepreneurial motivation (MO), entrepreneurial education (EU), self-efficacy (SE), entrepreneurial intention (EI), and prepare for entrepreneurship (PR). From the theoretical framework, this research proposed 14 hypotheses (See Figure 1).

3.2. Sample and data collection
The respondents in this study were recruited from undergraduate students of several state universities in Indonesia who have joined in entrepreneurship activities managed by their university. The questionnaires were provided to 430 students. A total of 415 valid responses were obtained (depicting a response level of 96.51%) with 157 (37.8%) males and 258 (62.2%) females regarding their perceptions of entrepreneurial intention determinant and prepare for business. In terms of age, 69.4 percent respondents were 19–20 years old, and 30.6 percent were more than 20 years old. This study involved second-year (37.83%) and third-year (62.17%) students as respondents as the often participate in entrepreneurial activities and completed the entrepreneurship education course (see Table 1). This study was conducted in accordance with the recommendations and approval of ethics committee of Universitas Negeri Malang, Indonesia.

3.3. Measurement and data analysis
To measure the relationship between variables, we adapted from several previous adjustments in Indonesia’s context. In general, the questionnaire included fifty-five questions plotting the

![Figure 1. The theoretical framework.](https://doi.org/10.1080/2331186X.2021.1973286)
respondent’s profile and variables were examined. First, to comprehend the students’ entrepreneurial intention (EI), we borrowed five points based on Linan and Chen (2009), while entrepreneurial education (EU) was calculated by five elements modified from Denanyoh et al. (2015). Additionally, entrepreneurial motivation (MO), national norms (NO), and prepare for entrepreneurship (PR) were modified from Tung et al. (2020). Furthermore, perceived desirability (RI) was indicated by five items borrowed from Linan and Chen (2009); Turker and Selcuk (2009), while self-efficacy (SE) was measured by six items adapted from Autio et al. (2001). Lastly, entrepreneurial barrier (EB) was performed by eight items adapted from Krueger et al. (2000). Each construct was calculated with the Five-point Likert Scale from “strongly disagree” (1) to “strongly agree” (5).

After calculation scores for each dimension, we calculated undergoing Structural Equation Modelling Partial Least Squares (SEM-PLS). This approach was used to gain a detailed understanding of the connectivity among variables/constructs and know the components that make up these variables as well as their magnitude. The two primary standards used in PLS analysis are to determine the calculation model or the outer model to involve validity and reliability (Ramayah et al., 2017). This study adopted Hair et al. (2013) by providing a five-stage structural model assessment procedure, including assessing the structural model for collinearity issue, path coefficients, R-Square ($R^2$), the effect size ($f^2$), and the predictive relevance ($Q^2$).

4. Results

4.1. Assessment of outer model
This study performed the outer model with several statistical estimation: convergent validity, discriminant validity, and composite reliability. The convergent validity will be achieved when

| Table 1. The demographics of respondents |
|----------------------------------------|
| S/No. | Characteristics          | Frequency | Percentage |
|--------|--------------------------|-----------|------------|
| 1.     | Age                      |           |            |
|        | 19 years old             | 160       | 38.6       |
|        | 20 years old             | 128       | 30.8       |
|        | Over 20 years old        | 127       | 30.6       |
| 2.     | Disciplines              |           |            |
|        | Economics and Business   | 256       | 61.7       |
|        | Sciences and Engineering | 159       | 38.3       |
| 3.     | Semester                 |           |            |
|        | IV                       | 157       | 37.83      |
|        | VI                       | 258       | 62.17      |
| 4.     | Gender                   |           |            |
|        | Female                   | 258       | 62.2       |
|        | Male                     | 157       | 37.8       |
| 5.     | Parents’ job             |           |            |
|        | Entrepreneur             | 206       | 49.63      |
|        | Teachers                 | 22        | 5.30       |
|        | Farmers                  | 92        | 22.16      |
|        | Government employees     | 89        | 21.44      |
|        | Soldier                  | 6         | 1.47       |
Table 2. The summary of outer model estimation

| Variable                          | Item | Loading | CR  | α   | AVE  |
|-----------------------------------|------|---------|-----|-----|------|
| (1) Entrepreneurial Intention (EI)|      |         |     |     |      |
| EI1                               |      | 0.804   |     |     |      |
| EI2                               |      | 0.828   |     |     |      |
| EI3                               |      | 0.906   |     |     |      |
| EI4                               |      | 0.886   |     |     |      |
| EI5                               |      | 0.874   |     |     |      |
| (2) Entrepreneurship Education (EU)|      |         |     |     |      |
| EU1                               |      | 0.873   |     |     |      |
| EU2                               |      | 0.916   |     |     |      |
| EU3                               |      | 0.913   |     |     |      |
| EU4                               |      | 0.859   |     |     |      |
| (3) Entrepreneurial Motivation (MO)|      |         |     |     |      |
| MO2                               |      | 0.801   |     |     |      |
| MO3                               |      | 0.810   |     |     |      |
| MO4                               |      | 0.790   |     |     |      |
| MO6                               |      | 0.764   |     |     |      |
| (4) National Norms (NO)           |      |         |     |     |      |
| NO1                               |      | 0.838   |     |     |      |
| NO2                               |      | 0.884   |     |     |      |
| NO3                               |      | 0.884   |     |     |      |
| NO4                               |      | 0.852   |     |     |      |
| NO5                               |      | 0.778   |     |     |      |
| (5) Prepare for Entrepreneurship (PR)|      |         |     |     |      |
| PR1                               |      | 0.812   |     |     |      |
| PR2                               |      | 0.792   |     |     |      |
| PR3                               |      | 0.858   |     |     |      |
| PR4                               |      | 0.832   |     |     |      |
| PR5                               |      | 0.836   |     |     |      |
| PR6                               |      | 0.860   |     |     |      |
| PR7                               |      | 0.832   |     |     |      |
| (6) Perceived Desirability (RI)   |      |         |     |     |      |
| RI1                               |      | 0.754   |     |     |      |
| RI2                               |      | 0.846   |     |     |      |
| RI3                               |      | 0.856   |     |     |      |
| RI4                               |      | 0.826   |     |     |      |
| RI5                               |      | 0.835   |     |     |      |
| (7) Self-Efficacy (SE)            |      |         |     |     |      |
| SE1                               |      | 0.846   |     |     |      |
| SE2                               |      | 0.880   |     |     |      |
| SE3                               |      | 0.866   |     |     |      |
| SE4                               |      | 0.880   |     |     |      |
| SE5                               |      | 0.870   |     |     |      |
| SE6                               |      | 0.879   |     |     |      |

(Continued)
### Table

| Variable                          | Item | Loading | CR   | α    | AVE |
|----------------------------------|------|---------|------|------|-----|
| **(8) Entrepreneurial Barrier (EB)** |      |         |      |      |     |
| EB2                              |      | 0.741   | 0.913| 0.888| 0.599|
| EB3                              |      | 0.797   |       |      |     |
| EB4                              |      | 0.738   |       |      |     |
| EB5                              |      | 0.770   |       |      |     |
| EB6                              |      | 0.796   |       |      |     |
| EB7                              |      | 0.789   |       |      |     |
| EB8                              |      | 0.786   |       |      |     |
| **(9) Subjective Norms (SN)**    |      |         | 0.928| 0.813| 0.608|
| SN1                              |      | 0.764   |       |      |     |
| SN2                              |      | 0.856   |       |      |     |
| SN3                              |      | 0.889   |       |      |     |
| SN4                              |      | 0.837   |       |      |     |

The loading factor score of each construct is higher than 0.70 (Hair et al., 2013). As informed in Table 2, all indicator for each variable, including entrepreneurial intention (EI), entrepreneurship education (EU), entrepreneurial motivation (MO), national norms (NO), prepare for entrepreneurship (PR), perceived desirability (RI), self-efficacy (SE), entrepreneurial barrier (EB) have loading factor ranging from 0.738 to 0.916 (>0.7), indicating to accomplish the convergent validity criteria. Additionally, the Cronbach’s Alpha (α) and composite reliability (CR) should more than 0.70. The statistical calculation showed that the CR value ranging from 0.870 to 0.949 (> 0.70), and the Cronbach Alpha (α) ranged between 801 and 936, implicating that it fulfilled the composite reliability criteria (See Table 2).

The results of discriminant validity are presented in Table 3. The criterion remarks that the square root of the AVE should be greater than all the loading factors. The diagonal patterns (bold) are the square root of AVE. As shown in Table 3, the AVE score of the construct, including EI, EU, MO, NO, PR, RI, SE, EB, and SN were ranging from 0.774 to 0.891 (0.70). These results indicated that the variable confirmed the discriminant validity criteria (Chin, 1998, 2010; Hair et al., 2013).

### 4.2. Assessment of structural model

To calculate the estimation of the model, we adopted five stages from Hair et al. (2013), consisting of the Collinearity test, path analysis, R-square ($R^2$), size effect ($f^2$), and Q-square predictive relevant test ($Q^2$). The collinearity was approved when the variance inflation factor (VIF) is less than 5.00. From the analysis result, it is shown that the VIF was ranging from 1.49 to 3.99, which indicate that there is no collinearity, and the construct indicators tested were valid. Furthermore, the indicator of $R^2$ has the main categories, strong (0.67), moderate (0.33), and weak (0.19) (Chin, 1998). The statistical estimation of the $R^2$ test performed that EI has a value of 0.676, which pointed that 67.6 percent of variable EI can be strongly performed by the variables SN, RI, EB, NO, MO, EU, and SE. Meanwhile, the $R^2$ value of SE is moderately expounded by SN, RI, EB, NO, MO, and EU, with a score of 0.552. Additionally, the variable of PR is moderately predicted by other variables with a score of 0.417.

In addition, the $f^2$ has diverged into these basis: small (0.02), medium (0.15), and large effect (0.35). From the preliminary estimation, it showed that the $f^2$ values of EU, MO, NO, RI, SE, EB, and
Discussion

Additionally, the output of the structural model is provided in Table 4. This study applied 500 bootstrapped samples with confidence level of 95%. The statistical calculation revealed that hypotheses proposed were accepted with the significant value of 0.000–0.030 (< 0.05). These outputs remarked that the university students’ entrepreneurial intention can be determined by subjective norms, perceived desirability, entrepreneurial barrier, entrepreneurial motivation, national norms, and entrepreneurship education. This study also noted a vigorous link between students’ entrepreneurial intention and prepare for business.

5. Discussion

This study investigated factors driving the enterprise development of university students in Indonesia. As the study by Mamun et al. (2017), Tsai et al. (2016), Tung et al. (2020), and Wardana et al. (2020), this study confirmed subjective norms positively impact to students’ self-efficacy and intention for entrepreneurship. As previously mentioned, the score of the t-value is 2.549 and 1.992, respectively (> 1.96), showing that the first and second hypotheses were accepted. This finding is also consistent with that of Ajzen and Fishbein (1980) on their theory of reasoned action (TRA) and theory of planned behavior (TPB) by Ajzen (1991), which remarked that there is a robust correlation amid subjective norms and self-efficacy. These results reflect those of by Linan and Chen (2009), Mamun et al. (2017), and Tsai et al. (2016), which pointed out that the high and low levels of self-efficacy can be determined by an individual’s subjective norms. In the context of Indonesia, as a country with high subjective norms, it will greatly impact the individuals’ self-efficacy. Additionally, the fact for Indonesian students, the high level of subjective norms also impacting on entrepreneurial intention. The most essential element of the subjective norms that would enhance prospective of business intention is friends and family. Direct acts to make students feel that entrepreneurs are considerable job need to be promoted by educational sides. These results relevant to some preliminary studies by Wu et al. (2008); Miranda et al. (2017) revealed that subjective norms can drive to an individual’s entrepreneurial intention. It seems possible that these results are due to the subjective norms aspect that should not be neglected to build entrepreneurial intention through formal education at universities. Therefore, building

| Table 3. Discriminant validity |
|-----------------------------|
| EI  | EU  | MO  | NO  | PR  | RI  | SE  | EB  | SN  |
|---|---|---|---|---|---|---|---|---|
| EI | 0.861 | | | | | | | |
| EU | 0.768 | 0.891 | | | | | | |
| MO | 0.749 | 0.729 | 0.791 | | | | | |
| NO | 0.716 | 0.753 | 0.719 | 0.848 | | | | |
| PR | 0.746 | 0.766 | 0.701 | 0.761 | 0.832 | | | |
| RI | 0.734 | 0.785 | 0.790 | 0.778 | 0.732 | 0.824 | | |
| SE | 0.746 | 0.714 | 0.735 | 0.726 | 0.777 | 0.768 | 0.870 | |
| EB | 0.736 | 0.755 | 0.751 | 0.755 | 0.752 | 0.730 | 0.768 | 0.774 |
| SN | 0.781 | 0.799 | 0.766 | 0.773 | 0.726 | 0.721 | 0.724 | 0.732 | 0.793 |

WI against EI were 0.023, 0.020, 0.023, 0.045, 0.049, 0.093, and 0.026, respectively, meaning those were categorized in small effect size. Moreover, the $f^2$ values of EU, MO, NO, RI, EB, and SN against SE were 0.050, 0.061, 0.033, 0.039, 0.076, and 0.026, respectively, which showed a small effect size. Lastly, the $f^2$ value of the EU, MO, NO, RI, SE, EB, SN, and EI variables on PR is 0.715, which indicated a large effect. For the $Q^2$ estimation, we adopted the indicator from Hair et al. (2013) and Chin (1998), with the value of $Q^2$ should higher than 0. In accordance with the preliminary estimation, it can be understood that the $Q^2$ value of each variable outperformed than 0, illustrating that the model has a predictive relevance value.
students’ entrepreneurial intentions should involve subjective norms so that the results will be effective and maximized.

With respect to the prior hypotheses, the results of this study confirmed the correlation between perceived desirability, self-efficacy, and students’ entrepreneurial intentions. The findings were supported by prior statistical estimation with the t-value of 4.470 and 2.538. These works agree with the preliminary study of in this area, which linking perceived desirability toward self-efficacy and entrepreneurial intention (Tung et al., 2020). A possible reason for this result is that perceived desirability is a crucial and main variable for students to have high self-efficacy and students’ entrepreneurial intention. The findings indicate that the higher contribution of self-efficacy to students’ intentions leads their greater belief of capabilities and skills to involve in entrepreneurial activities. Referring to the EEM by Krueger et al. (2000), the higher the students’ perceived desirability will lead to a greater the self-efficacy and entrepreneurial intention can be predicted. This finding confirms that to increase students’ self-efficacy and entrepreneurial intention, the campus must provide a number of entrepreneurial programs that inspire, stimulate and develop students’ perceived desirability.

Consistent with the literature, this work noted that there is an influence between entrepreneurial barrier, self-efficacy and intention of being entrepreneurs with t-value 3.765 and 3.894, respectively. This study corroborates the primary theory of social cognitive by Bandura and McClelland (1977), stating that individual self-efficacy can be formed by these primary sources: accomplishment performance, experience, verbal persuasion, and physiological states. The respondents involved in this study believe that the barriers among entrepreneurship have the greatest effect on decreasing entrepreneurial intentions and its acquaintance with economy, business capital and insufficient knowledge. The finding also confirms some antecedent studies by Collins et al. (2004); Alam et al. (2019); Tung et al. (2020), which showed that there is a relation between entrepreneurial barrier and self-efficacy and entrepreneurial intention. These findings support some previous studies, especially in the Indonesian context, that building student intentions in universities need to adopt a holistic strategy. These results suggest that all antecedent variables that reinforce entrepreneurial intention should also be involved, including entrepreneurial barriers and self-efficacy.

Despite investigating the connectivity between perceived desirability, self-efficacy, and entrepreneurial intention, this work also elaborates on national norms as a predictive variable. The
finding of this research showed that the association between national norms, self-efficacy, and intention for business was provided by the t-value of 1.992 and 3.085 (> 1.96), which implies that the hypothesis was accepted. This study supports several previous observations by Shinnar et al. (2012), Heilbrunn and Almor (2014), Wardana et al. (2020), and Thanh et al. (2020), which confirmed that both variables can enhance students’ entrepreneurial intention. The rationale for this finding is that national norms are essential for students’ self-efficacy and intention towards entrepreneurship. National norms that favor entrepreneurship will increase student self-efficacy and entrepreneurial intentions. The Indonesian government has also created a culture and national norms that fully support entrepreneurship through various entrepreneurial programs, considering that entrepreneurship is an important driver for the people’s prosperity as well as economic growth.

This research also noted that there is a significant relationship between entrepreneurial motivation and self-efficacy, as well as entrepreneurial intention. The statistical calculation demonstrated that the t-value of each variable is 4.274 and 2.917, respectively. This result corroborates the findings of several preliminary work by Shinnar et al. (2012), Heilbrunn and Almor (2014), Tung et al. (2020), Wardana et al. (2020), and Tung et al. (2020) mentioned, National norms also play a pivotal act in building student intention to become entrepreneurial. In the Indonesian context, the government is actively issuing policies to increase young entrepreneurs’ number and birth from universities. The most recent program is the students’ entrepreneurship program by ministry of education for supporting and funding the students’ business. Also the program is intended to stimulate the business creation and intention for business engagement. The Indonesian government has also issued various policies that promote a conducive entrepreneurial climate, including regulations that facilitate the licensing, business establishment and regulate various problems arising from business competition.

Furthermore, this study noted that there is a connectivity between entrepreneurial education, self-efficacy, and intention for entrepreneurship. The statistical calculation in Table 4 showed that the value of each variable is 2.340 and 2.110, respectively, which means that this hypothesis is accepted. As expected, this study also confirmed that there is a robust relation between entrepreneurial self-efficacy and intention with a t-value of 3.160. This study supports evidence from prior works (e.g., Alam et al., 2019; Tung et al., 2020; Wardana et al., 2020), which noticed that entrepreneurial education can perform the students’ self-efficacy and its intention for business. The underlying possibility is that the entrepreneurial education on the campus through entrepreneurship courses and practice can stimulate students’ intentions. Entrepreneurship education activities integrated through all subjects are to internalize entrepreneurial values into various subjects presented by each educator through the learning process. In this case, the methods, strategies, approaches, materials, and the learning environment itself both in the classroom and outside class are highly relevant in supporting students’ intention.

The last finding of the research showed that entrepreneurial intention is strongly linked with preparation for entrepreneurship (t-value of 20.616 > 1.96). In the context of the robust influence of entrepreneurial intention to prepare for entrepreneurship, this study strengthens the TPB and TRA by Ajzen (1991), where the intention is an effective predictor variable. This study also confirms the prior findings of Mamun et al. (2017), Pejic Bach et al. (2018), and Nabi et al. (2018); Mahmood et al. 2019 and Tung et al. (2020), that high intention will affect students’ preparation for entrepreneurship. This work corroborates a recent study by Wardana et al. (2020) that entrepreneurial intention is a dominant variable in influencing the preparation for entrepreneurship of youth Indonesia. These research results reinforce previous insights that intention for entrepreneurship is the initial phase in creating a new business creation. The underlying rationale is that there is no action without any willingness or intention. The intention is a robust predictor of students preparing for entrepreneurship as well as entrepreneurial behavior. The higher the student’s intention, it can be predicted that the person concerned will have prepared for entrepreneurship and become an entrepreneur from college graduates.
5.1. Implications for research
This study expands the TPB by Ajzen (1991) and SCT by Bandura and McClelland (1977), primarily examining the dominant factors affecting students preparing for entrepreneurship in the Indonesian context. The result of the study is in agreement with some recent literature and research by Alam et al. (2019); Wardana et al. (2020), which mentioned that entrepreneurial intention being a predictive variable of entrepreneurial education, motivating to initiate a business, national norms, risk perception, behavioral control perception, and social factor and willing to do business. Furthermore, this study confirms that entrepreneurial intention strongly relates to the preparation for entrepreneurship (Tung et al., 2020).

5.2. Implications for practice
As the research by Tung et al. (2020); Wardana et al. (2020), this study provides some practical contributions mainly for students, educators, colleges, and policymakers. For college students, this research demonstrated that entrepreneurial intention takes a remarkable role in promoting students for business. Additionally, this research noted that risk perception and social factors might reinforce individuals to shift students’ entrepreneurial intentions to prepare for entrepreneurship. For educators, the teaching and learning process need to involve on the cognitive dimension and motivate students to consider entrepreneurs as occupation. Also, the learning approach for entrepreneurship classes can elaborate the story of successful businessman in the form of public lecturing or guest lecturing. As the research of Bernardus et al. (2020), this work also recommends that in the first year of study, entrepreneurship can be concerned on the enlargement of psychological characteristics to stimulate in initiating business, risk perception, behavioral control perception, readiness to do entrepreneurship activities, intention and formulate for entrepreneurship. Moreover, in the next year for study, entrepreneurial practice needs to be performed regarding to the enhancement of students’ creative ideas. For the college, our research gives considerable suggestions to revise curriculum for entrepreneurship in the context that can directly promote intention for business. Additionally, this research raises the government attention to provide entrepreneurship program for students and funding for business students in the form of business competition or other relevant programs. Similar to the study of Shirokova et al. (2016); Tung et al. (2020), this research also propose insights for lectures in plotting students who are appropriate for enhancing start-up ventures according to their motivating, risk perception, behavioral control perception, readiness for entrepreneurship, entrepreneurial intention and formation for business.

6. Conclusions
Enlarging the total of entrepreneurs from university is a pressing issue that requires to be designated by continuing to promote students’ entrepreneurial intention. However, focusing solely on entrepreneurship education on the campus cannot promote students’ intention of being entrepreneurs and new business establishment from university graduates. Hence, this study set out to examine how several predicted variables can influence entrepreneurial intention and enterprise development of students. From the preliminary calculation, it can be concluded that the university students’ intention for entrepreneurship can be determined by subjective norms, perceived desirability, entrepreneurial barrier, entrepreneurial motivation, national norms, and entrepreneurship education. This study indicated a robust link between students’ entrepreneurial intention and enterprise development students. In detail, the findings of this study indicated that the subjective norms, risk perception and social factors need to be considered by policy research for the enhancement of students’ self-efficacy and entrepreneurial intention in Indonesia. The research also confirmed national norms have a robust correlation with self-efficacy and intention towards entrepreneurship. Indeed, it was noted that entrepreneurship education and the motivation to a start-up business take part in determining students’ entrepreneurial self-efficacy and the intention of being entrepreneurs. Lastly, the study confirmed that entrepreneurial intention has a robust link with self-efficacy as well as students’ preparation for entrepreneurship.

The limitation of this study is that the study applied a cross-sectional design, which enables authors to gain an understanding of the relationship between variables as well as examining the
 moderating variables. Unfortunately, the adoption of the method is failed in explaining the cause and effect of the relationship (Tuckman & Harper, 2012). As Wardana et al. (2020) suggested, a study with a longitudinal design is needed to acquire a holistic comprehend of the dynamics of the prepare for entrepreneurship relationships and the moderating influence of these variables. Similar to what was provided in prior studies (e.g., Shirokova et al., 2018; Bernardus et al., 2020; Wardana et al., 2020), this study employed an undergraduate student as participants who grouped as a homogeneous batch. For this matter, the generalizability of this finding to the broader population remains arguable. Notwithstanding these limitations, we suggest that future scholars in this theme may focus a wider population by elaborating both private and state college to obtain more heterogeneous subjects and more comprehensive findings.

Funding
The authors received no direct funding for this research.

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Citation information
Cite this article as: The university student enterprises development: Lesson from Indonesia, Puiji Handayati, Aqus Wibowo, Bagus Shandy Namraditya, Djoko Dwi Kusumojango, Awi Budi Setiawan & Diep Thanh Tung, Cogent Education (2021), 8: 1973286.

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