Stimulating Higher Education Students' Entrepreneurial Intention: Observing the Influence of Entrepreneurship Education and Lecturers' Personal Competence

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Entrepreneurship education, Higher education, Lecturers' personal competencies, Students' entrepreneurial intention

Abstract: Entrepreneurship is becoming an increasing topic of discussion. It has attracted the attention of academics worldwide due to its beneficial impact on economic and social development worldwide. For this reason, it is essential to stimulate the intention to engage in entrepreneurial endeavors as early as possible, preferably while still a student. Unfortunately, no research has explored the role of higher education, such as universities, as providers and supporters of a supportive environment in fostering entrepreneurial intentions, which can ultimately produce entrepreneurs. Based on these problems, this research examines essential factors such as entrepreneurship education and lecturers' competencies, which influence students' entrepreneurial intentions. Using a quantitative method involving 314 respondents through Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, this research concludes that entrepreneurship education and lecturers' personal competencies positively and significantly influence students' entrepreneurial intentions. This research also offers educational institutions and the government an increase in students' intentions to become entrepreneurs. On the other hand, this study suggests that both the mixed methods approach and longitudinal models should be expanded to provide a more thorough knowledge of the readiness of individuals to engage in entrepreneurial enterprise.

INTRODUCTION

Entrepreneurship is becoming an increasing topic of research and discussion (Sieg et al., 2023; Sousa et al., 2019). It has attracted the attention of academics worldwide today (Kusumojanto et al., 2021). In the context of business, entrepreneurship refers to the practice of actively seeking out and capitalizing on possibilities to develop new products and services, as well as market and production organization strategies, innovations in process and raw material, and other effects that may not be immediately apparent (Mahama et al., 2023).

Due to its beneficial impact on economic and social development on a world scale, entrepreneurship is gaining popularity. A country's economy can be strengthened through this creative and innovative process, which can increase profit yields, provide new opportunities, revitalize and develop companies, encourage welfare programs, and much more (Khuram et al., 2022). Unfortunately, Indonesia is currently among the countries with the lowest number of entrepreneurs globally. According to the Global Entrepreneurship Index, Indonesia ranked 94th out of the 137 assessed nations. When compared to countries that are geographically close by, such as "Singapore, Brunei Darussalam, and Malaysia," this accomplishment is not remarkable (Handayati et al., 2020a). This situation becomes apparent when more
and more college graduates choose to become workers rather than entrepreneurs.

Of course, this is a challenge for Indonesia. Indonesia has economic and social challenges, including unemployment and the imperative for sustainable development (Kusuma et al., 2023). Based on the study, those challenges highlight the importance of promoting entrepreneurship (Huang et al., 2023; Sendra-Pons et al., 2022). This is especially critical among higher education students, who are conventionally perceived as prospective employees rather than individuals who generate employment opportunities (Wardana et al., 2020). Therefore, it is essential to stimulate the intention to engage in entrepreneurial endeavors as early as possible, preferably while still a student. According to (Kusumojanto et al., 2021), an essential factor contributing to entrepreneurial development is the intention to become an entrepreneur among students. If this is the case, then education, especially in tertiary institutions, is an important indicator that plays a significant role in forming entrepreneurial intentions among students (Amofah & Saladrigues, 2022). Therefore, we are working to improve students' entrepreneurial intention (SEI) by taking strategic initiatives (Yahaya et al., 2022).

Unfortunately, so far, no research has explored the role of universities as providers and supporters of a supportive environment in fostering entrepreneurial intentions, which can ultimately produce entrepreneurs (Amofah & Saladrigues, 2022). Not only that, (Sampene et al., 2023) also revealed that empirical research supporting entrepreneurial intention (EI) in developing countries is still lacking (Sampene et al., 2023).

Based on these problems, this research aims to examine important factors that influence students' intention in entrepreneurship. According to several research sources, education can influence entrepreneurial behavior, especially intention (Handayati et al., 2020b; Saptono et al., 2020). Unfortunately, (Lavelle, 2021) revealed that the evidence from studies investigating the relationship and influence of Entrepreneurial Education (EE) on EI is still unclear because it provides mixed results.

Therefore, this research will re-examine the influence of EE on EI with a research focus on Indonesia. Considering Indonesia has a high unemployment rate among university graduates, the focus on Indonesia is relatively new (Handayati et al., 2021). Because the existing research so far has mainly been conducted in China (Liu et al., 2022), Vietnam (Nguyen & Nguyen, 2023), and other countries such as Ghana (Nunfam et al., 2022), Botswana (Svotwa et al., 2022), Oman (Shah et al., 2020), and many more.

Indeed, similar research has been conducted in Indonesia, such as by (Listyaningsih et al., 2023). However, the research is less extensive in scope (only in Bandar Lampung) and has very little data (only 180 respondents). Meanwhile, this research has a broader scope and more data. On the other hand, this research also uses entrepreneurship motivation. As a differentiator, apart from EE, this research also involves lecturers' personal competency (LPC) factors, which also have limited research, as another variable, according to Ismail (2022), that influences EI. Thus, this research examines whether EE (H1) and LPC (H2) can influence EI positively and significantly.

Thus, it is hoped that this research can beneficially strengthen entrepreneurship education programs, improve the quality of lecturers' competencies in teaching, and encourage innovation and creativity among students. With its contribution to the entrepreneurship literature, this research also strengthens the connection between education and the business world to support entrepreneurial development.

METHOD

This research was conducted on students of entrepreneurship study programs at universities in Indonesia. The majority are universities in Java and Sumatra because, so far, the majority of entrepreneurship study programs in Indonesia are only available on these two islands. The research design utilized in this study was a cross-sectional research design, which is appropriate for providing an overview of the subject matter. In order to collect information from 314 students, a structured questionnaire was employed during this process. The questionnaire was delivered online because it ensures accessibility and a higher response rate among the target demographic of university students. A sample size of this magnitude is sufficient to fulfill the prerequisites for conducting multivariate data analysis (J. F. Hair & Sarstedt, 2019), such as Partial Least Squares Structural Equation Modeling (PLS-
Of the 314 respondents, the characteristics of this study showed that 126 (40.13%) were men, and the remaining 188 (59.87%) were women. This indicates that the number of female students in tertiary institutions is greater than that of male students. In addition, the sample age categories show that all students involved in the research (314 students) were in the age category 19–23 years as many as 221 students (70.38%), 24 – 28 years as many as 66 students (21.02%), and the remaining 29 – 33 year as many as 27 students (8.60%). Therefore, a reasonable explanation is that in universities in Indonesia, the majority of students, especially undergraduate students, are aged between 19 and 23 years. The respondents from private universities were 253 students (80.57%) and 61 students from state universities (19.43%).

The respondents were asked for their opinions and chose which statement was more appropriate in describing themselves regarding EE, lecturer’s personal competence (LPC), and EI. Each questionnaire contains four statements adopted from research (Zaid et al., 2024) relating to EE and three statements for each LPC and EI, which were adopted and developed from research (Ismail, 2022). Each variable has been adjusted. The measurement indicators were adopted from previous research, which has proven valid and reliable. After the questionnaire is filled in, it is collected for further analysis. PLS-SEM was chosen for this study.

According to J. Hair & Alamer (2022), PLS-SEM is a precious method for assessing intricate theoretical connections among many variables, particularly in social science research. It also can handle complex models (J. Hair & Alamer, 2022). Therefore, apart from being popular (Legate et al., 2023), this analysis method has also been used by previous researchers such as (Boubker et al., 2021; Boutaky & Sahib Eddine, 2022). Based on this, this analysis method is appropriate for exploratory studies like this research that examined the influence between EE and LPC on EI. The application used in this analysis is the SmartPLS 3.2.9 application.

RESULT AND DISCUSSION

In PLS-SEM analysis, the first thing important to analyze is the validity and reliability of each indicator and variable, usually known as manifest variables (Henseler, Hubona et al., 2016), which is observed in this research. This analysis is known in the PLS-SEM method as a measurement model test, usually called “the outer model” (Henseler, Hubona, et al., 2016). Table 1 below shows the results of data processing for the measurement model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Loading</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE.1</td>
<td>0.835</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE.2</td>
<td>0.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE.3</td>
<td>0.791</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE.4</td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC.1</td>
<td>0.877</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC.2</td>
<td>0.903</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC.3</td>
<td>0.858</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI.1</td>
<td>0.874</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI.2</td>
<td>0.905</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI.3</td>
<td>0.841</td>
<td></td>
<td></td>
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</tbody>
</table>

The loading value functions to explain the reliability of each indicator. Regarding that, Ringle et al. (2023) stated that when it comes to loading thresholds, the standard value is 0.50. More than that, it displays reliable indicators. Based on this assertion, it is possible to assert that all of the indicators in this study are reliable because they are more than 0.50. The α and CR values function to explain the reliability
of each variable studied. The recommended threshold for the α value is 0.708 (Guenther et al., 2023), while the CR is 0.60 (F. J. Jr. Hair et al., 2019). Considering that the data processing outcomes are shown in Table 1, it can be seen that the overall α value is > 0.708 and CR > 0.60. Thus, all variables in this study are convincingly reliable.

### Table 2. Discriminant validity

<table>
<thead>
<tr>
<th></th>
<th>EE</th>
<th>LPC</th>
<th>EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>0.841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC</td>
<td>0.759</td>
<td>0.879</td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>0.718</td>
<td>0.721</td>
<td>0.874</td>
</tr>
</tbody>
</table>

Furthermore, the AVE value listed in Table 1 describes the validity of a variable (in terms of convergent validity). A variable is valid if it exceeds the threshold value > 0.50 (Dash & Paul, 2021). As shown in Table 1 above, where each variable has an AVE value > 0.50, it can be concluded that in addition to being reliable, all the variables in this study are also valid. So that the validity value can be refined, it is also necessary to test discriminant validity. This type of validity guarantees that construct measures are empirically distinct and accurately describe phenomena of interest that other measures cannot capture in structural equation models (Henseler et al., 2015). Based on Table 2 above, all variables in this research are valid according to the discriminant validity function.

### Table 3. R-square (R²) Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>0.589</td>
</tr>
</tbody>
</table>

After testing the measurement model, it was time to test the structural model (also known as “the inner model”) (Henseler, Ringle, et al., 2016). In this section, the coefficient of determination (R²) and effect size redundancy index (f²) are tested (Benitez et al., 2020). In SmartPLS, this value will be obtained through bootstrapping (Streukens & Leroi-Werelds, 2016). R² measures how effectively the model explains endogenous or dependent variable fluctuations. It also indicates how much the independent variables or constructs in the model explain the variability of the response variable (endogenous variable). Table 3 shows that the R-square value of EI is 0.589. With this value, it can be assessed that the influence of EE and LPC on EI is 58.9%.

### Table 4. F-square (F²) Test Results

<table>
<thead>
<tr>
<th></th>
<th>EE</th>
<th>LPC</th>
<th>EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>0.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPC</td>
<td>0.178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 above is the result of testing the F-square. In short, this test evaluates the predictive influence of exogenous factors on endogenous variables in a model. The clue is 0.020 to 0.150 (weak influence), 0.150 to 0.350 (moderate influence), or greater than 0.350 (strong influence) (Benitez et al., 2020). If so, EE and LPC have a reasonably moderate influence because they have f-square values of 0.168 and 0.178, which still range from 0.150 to 0.350.

### Table 5. Summary of the influence among Variables Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>T-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE → EI</td>
<td>0.403</td>
<td>4.450</td>
<td>0.000</td>
</tr>
<tr>
<td>LPC → EI</td>
<td>0.415</td>
<td>4.709</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The final test in PLS-SEM is the influence test between variables. The first thing to be tested is EE against SEI. Referring to the data presented in Table 5 above, the influence value between the two is β = 0.403; T-value 4.450; P-value = 0.000. Based on these data, it can be said that the influence of EE on SEI is significantly positive. The significance of the influence can be seen from the P-value, which is <0.05.
This result strongly indicates that the more often students receive entrepreneurship education, the more their interest in entrepreneurship and becoming entrepreneurs will increase.

On the other hand, the more often students do not receive entrepreneurship education, the more their interest in entrepreneurship decreases. These results are consistent with previous research (Handayati et al., 2020a; Lavelle, 2021; Otache et al., 2021). This result implies that entrepreneurship education must be disseminated using various strategies through “theory, practice, and collaboration with companies, industries, and startups” throughout Indonesia (Gianiodis & Meek, 2020).

Second, the influence of LPC on SEI was also tested. The result exhibits $\beta = 0.415$; T-value 4.709; P-value = 0.000. Based on these data, it can be said that the influence of LPC on SEI is also significantly positive. The significance of the influence can be seen from the P-value, which is <0.05 (Cheah et al., 2023). This result strongly indicates that the more competent a lecturer is in entrepreneurship, the more their interest in entrepreneurship and becoming an entrepreneur will increase. On the other hand, the more incompetent a lecturer is, the lower their intention in entrepreneurship will be. These results are consistent with previous research conducted by (Ismail, 2022; Iwu et al., 2021; Lewicka & Bollampally, 2022). These results imply that competence, in this case lecturers, is important for generating intention and realizing the goal of turning students into entrepreneurs (Brauer, 2021).

Based on these results, it is clear that EE and lecturer competency have a positive and significant influence in determining the readiness of the young generation of students to become entrepreneurs. Evaluations that can be taken are, first, education about entrepreneurship and lecturer competency, which must be further developed in higher education. The main aim is to foster “entrepreneurial knowledge, entrepreneurial attitudes, and entrepreneurial goals and to educate students for entrepreneurial roles.” (Saptono et al., 2020). Second, the findings of this study can provide educational institutions and the government with information on how to boost the likelihood that students will pursue careers as entrepreneurs (Handayati et al., 2021).

However, it should be noted that this research still involved respondents on a small scale, so the findings from this research cannot be generalized. Second, the weakness of this research is that it only uses a quantitative approach. This approach can be expanded using mixed methods and longitudinal models to provide a more comprehensive understanding of entrepreneurial readiness and intention (Saptono et al., 2020). However, it cannot be ignored that this research still brings benefits, especially for stakeholders who want to increase students’ intention in entrepreneurship.

**CONCLUSION**

Ultimately, this research confirms EE and LPC’s positive and significant influence on SEI. These results are essential for stimulating students' intention to become young entrepreneurs. These results make it increasingly convincing and supportive that education about entrepreneurship and lecturer competency must be developed further in higher education. The main aim is to foster “entrepreneurial knowledge, entrepreneurial attitudes, and entrepreneurial goals and to educate students for entrepreneurial roles.” Second, this research can offer educational institutions and governments information on increasing students' entrepreneurial intentions. On the other hand, this study suggests that both the mixed methods approach and longitudinal models should be expanded to provide a more thorough knowledge of the readiness of individuals to engage in entrepreneurial enterprise.

**REFERENCES**


