The Role of Gender in Fostering Interest in Entrepreneurship in Indonesia

Riyanto Efendi
Universitas Pendidikan Indonesia, Faculty of Economics and Business Education, Department of Economic Education, Isola, Sukasari, Bandung City, West Java 40154, Indonesia

Universitas Jember, Faculty of Teacher Training and Education, Department of Economic Education, Krajan Timur, Kab. Jember, East Java 68121

Hari Mulyadi
Universitas Pendidikan Indonesia, Faculty of Economics and Business Education, Department of Economic Education, Isola, Sukasari, Bandung City, West Java 40154, Indonesia.

Disman
Universitas Pendidikan Indonesia, Faculty of Economics and Business Education, Department of Economic Education, Isola, Sukasari, Bandung City, West Java 40154, Indonesia.

Imas Purnamasari
Universitas Pendidikan Indonesia, Faculty of Economics and Business Education, Department of Economic Education, Isola, Sukasari, Bandung City, West Java 40154, Indonesia.

Prisilia Angel Tantri
Universitas Insan Cendekia Mandiri, Faculty of Economics, Department of Management, Sukajadi, Bandung City, West Java 40162, Indonesia

1 Corresponding author, e-mail: riyantoeefendi@unej.ac.id; riyantoeefendi61@gmail.com
2 E-mail: harimulyadi@upi.edu
3 E-mail: disman@upi.edu
4 E-mail: imaspurnamasari@upi.edu
5 E-mail: prisilia.angel2804@gmail.com
ABSTRACT

Gender in entrepreneurship is an important issue. This research aims to determine the role of gender in the influence of entrepreneurial knowledge on entrepreneurial interest, which is mediated by entrepreneurial attitudes and subjective entrepreneurial norms. The respondents in this research were 156 active Strata-I students, 115 female students, and 41 male students. The research method used is quantitative with a Structural Equation Modeling (SEM) approach. The main limitation of this research is that it only examines the role of gender in the influence of entrepreneurial knowledge on entrepreneurial interest, which is mediated by entrepreneurial attitudes and subjective entrepreneurial norms. The research findings indicate that gender moderation is more pronounced among females, with females exhibiting a more positive and significant influence on hypotheses five through seven. The results of the hypotheses show that entrepreneurial knowledge does not significantly influence entrepreneurial attitudes. However, the second hypothesis demonstrates a positive and significant relationship between entrepreneurial knowledge and subjective norms of entrepreneurship. Additionally, the third hypothesis highlights the positive impact of entrepreneurial attitudes on entrepreneurial interest. Finally, the fourth hypothesis suggests that entrepreneurial subjective norms significantly influence interest in entrepreneurship.

KEYWORDS: gender, entrepreneurial knowledge, entrepreneurial interest, entrepreneurial attitudes, subjective norms of entrepreneurship

Introduction

Entrepreneurship in the last few decades has developed rapidly and has become an interesting topic to be discussed in depth (Allen et al., 2007; Morova et al., 2019; Slavinski et al., 2020). It occupies a significant role and has a positive influence as an important source of wealth, creativity, and job opportunities (Messikh, 2021). Several existing entrepreneurship studies show that entrepreneurship serves as a competitive advantage for developing countries, enabling them to survive and continue to progress in the competitive dynamics of globalization (Nastiti et al., 2010; Levie et al., 2014; Acs et al., 2017; Rahman et al., 2022; Antonijevic et al., 2023).

Research in the field of entrepreneurship is very relevant and promising because entrepreneurship can create new jobs and accelerate national economic development (Leff, 1978; Shane & Venkataraman, 2000; Sanyang & Huang, 2010). Indonesia, as a developing country, also encourages its
citizens, especially the younger generation, to become entrepreneurs by launching the National Entrepreneurship Movement starting in February 2011. The ratio of the number of available jobs, which is not in line with the number of graduates at all levels of education in Indonesia, causes high unemployment rates (Saiman, 2009; Bhasin & Venkataramany, 2010; Amalia & von, 2021).

Based on data from the Indonesian Central Statistics Agency (BPS), the open unemployment rate in Indonesia in February 2022 reached 5.83%, a decrease compared to February 2022, which was 5.45%. However, other facts show that the percentage of educated unemployment is increasing every year, especially in high school and vocational school education. Therefore, the government needs to make efforts to encourage the younger generation to open up entrepreneurial employment opportunities (Cole, 2007; Ridha & Wahyu, 2017).

Every year, around 3,355 universities operating in Indonesia produce more than 339,000 undergraduate graduates to enter the labor market (Susetyo & Lestari, 2014). Competition for job positions within organizations is increasing sharply. This condition is one of the main triggers for prospective university graduates to become oriented toward career choices to become entrepreneurs (Schulte, 2004; Iglesias-Sánchez et al., 2016). A number of universities in Indonesia plan entrepreneurship as part of their academic programs by involving certain courses and designing curricula to provide comprehensive entrepreneurship education programs. However, the results of existing studies show that entrepreneurship education in various universities in Indonesia has not been implemented optimally, especially in providing life skills for graduates (Wiratno, 2012; Mulyadi, 2019).

In preparation for entrepreneurship, you must first know the factors that influence interest in entrepreneurship. Interest in entrepreneurship is influenced by various factors, one of which is entrepreneurial knowledge (Wilson et al., 2007; Linan et al., 2011; Hattab, 2014; Firman & Putra, 2020; Saputra et al., 2021). Another factor that influences interest in entrepreneurship is gender (Wilson et al., 2009; Sullivan & Meek, 2012; Wheadon & Duval-Couetil, 2021; Manjaly et al., 2022). Subjective norms also influence entrepreneurial interest (Muliadi et al., 2021; Santoso, 2021). Another factor that influences interest in entrepreneurship is entrepreneurial attitude (Fenech et al., 2019; Aditya, 2020). Therefore, the main aim of this research is to determine the role of gender in the influence of entrepreneurial
knowledge on entrepreneurial interest, which is mediated by entrepreneurial attitudes and subjective entrepreneurial norms.

**Theoretical Foundations and Hypothesis Development**

This research is based on the research model proposed by Linan et al. (2011), which considers the role of gender as an individual difference that moderates the relationship of several variables in the model, as proposed by Diaz-Garcia and Jimenez-Moreno (2010) and Bae et al. (2014). The existence of previous empirical research showing differences in interest in entrepreneurship between men and women encourages the examination of a model of interest in entrepreneurship that is moderated by gender.

The research model proposed by Linan et al. (2011) has also been tested empirically both by the researcher concerned and by other researchers, as done by Hattab (2014). In their model, Linan et al. (2011) integrate two major theories, The Theory of Entrepreneurial Events/TEE (Shapero & Sokol, 1982) and The Theory of Planned Behavior/TPB (Ajzen, 1991), which is then added with elements of entrepreneurial knowledge that a person obtains through education. The two theories (TEE and TPB) are similar in presenting the factors that explain the formation of entrepreneurial interest.

In the TPB perspective (Ajzen, 1991), interest in entrepreneurship involves three influencing motivational factors, namely 1) perceived behavioral control, which is defined as the perception of the ease or difficulty of carrying out certain behavior, 2) entrepreneurial attitude towards entrepreneurial behavior, namely regarding the positive or negative assessment that a person has regarding this behavior, 3) perceived subjective norms (entrepreneurial subjective norms), which measure the perceived social pressure to carry out entrepreneurial behavior.

Referring to TEE theory (Shapero & Sokol, 1982), interest in entrepreneurship is explained by entrepreneurial desire and perceived feasibility, as well as the tendency to act on existing opportunities. Entrepreneurial passion is defined as an interest in starting a business. Entrepreneurial desire can be understood as a combination of personal attitudes towards entrepreneurial behavior and perceived subjective norms. Perceived feasibility refers to the individual's level of confidence or belief in their capability to accomplish a task, indicating their inclination or readiness.
to act on the decisions they make. In the literature in the field of psychology, perceived worthiness is associated with self-efficacy.

By integrating these two theories, Linan et al. (2011) propose that entrepreneurial attitudes and subjective norms combine to shape perceived desirability for entrepreneurship, where the perceived desirability for entrepreneurship is influenced by self-efficacy. Moreover, the amalgamation of these elements contributes to fostering an interest in entrepreneurship, which is further influenced by individuals' entrepreneurial knowledge acquired through education. This study takes into account the significant role of gender in entrepreneurial interest, as supported by various studies (Wilson et al., 2009; Diaz-Garcia & Jimenez-Moreno, 2010; Shinnar et al., 2012; Maes et al., 2014; Bae et al., 2014; Wheadon & Duval-Couetil, 2021). In their research, Diaz-Garcia and Jimenez-Moreno (2010), Shah et al. (2020), and Zhuang et al. (2021) tested the significant moderating role of gender in the influence of entrepreneurial subjective norms and entrepreneurial attitudes on entrepreneurial interest. The moderating role of gender on the influence of entrepreneurial knowledge on entrepreneurial interest was tested in research (Bae et al., 2014; Hassan et al., 2020; Zhao et al., 2021).

Based on the explanation of the theoretical study above, the researcher proposes the following research hypothesis.

**H1:** Entrepreneurial knowledge has a positive effect on entrepreneurial attitudes.

**H2:** Entrepreneurial knowledge has a positive effect on entrepreneurial subjective norms

**H3:** Entrepreneurial attitude has a positive effect on interest in entrepreneurship

**H4:** Entrepreneurial subjective norms have a positive effect on entrepreneurial interest

**H5:** Gender moderates the influence of entrepreneurial knowledge on entrepreneurial interest (women are stronger)

**H6:** Gender moderates the influence of subjective norms of entrepreneurship on entrepreneurial interest (women are stronger)

**H7:** Gender moderates the influence of entrepreneurial attitudes on entrepreneurial interest (women are stronger).
Method

This research aims to describe explanatory causality relationships through survey data collection techniques in a cross-sectional time dimension (Cooper et al., 2011: 140; Neuman et al., 2011: 26). The research is cross-sectional because research respondents are observed at a certain time and measurements of the variables are carried out at the time of the research. A purposive sampling technique was used to select a total of 156 active Strata-1 students, comprising 115 female students and 41 male students. Respondents are students from the Faculty of Economics and Business Education at the Indonesian Education University who have passed the Entrepreneurship course. The measurement of research variables includes entrepreneurial knowledge, entrepreneurial attitudes, entrepreneurial subjective norms, and entrepreneurial interest. Statement indicators are assessed using a numerical scale of 1-5. The analysis technique uses the Structural Equation Modeling (SEM) technique.

Findings and Discussion

Research Validation

In the research, validity and reliability tests were conducted to validate the measurement instrument. Confirmatory factor analysis was used to
assess the validity of the measurement instrument, employing AMOS 16. The results of the validity and reliability tests are presented below:

Table 1: Validity and Reliability Test Results

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator</th>
<th>Standardized Loading(λ)</th>
<th>Cronbach's Alpha (α)</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Knowledge (EK)</td>
<td>EK1</td>
<td>0.736</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EK2</td>
<td>0.594</td>
<td>0.816 (Reliable)</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EK3</td>
<td>0.663</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EK4</td>
<td>0.771</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EK5</td>
<td>0.728</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Entrepreneurial Attitude (EA)</td>
<td>EA1</td>
<td>0.694</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EA2</td>
<td>0.721</td>
<td>0.826 (Reliable)</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EA3</td>
<td>0.728</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EA4</td>
<td>0.746</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Entrepreneurial Subjective Norms (ESN)</td>
<td>ESN1</td>
<td>0.615</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>ESN2</td>
<td>0.725</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>ESN3</td>
<td>0.816</td>
<td>0.892 (Reliable)</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>ESN4</td>
<td>0.716</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>ESN5</td>
<td>0.846</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>ESN6</td>
<td>0.876</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Entrepreneurial Interest (EI)</td>
<td>EI1</td>
<td>0.732</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EI2</td>
<td>0.795</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EI3</td>
<td>0.728</td>
<td>0.856 (Reliable)</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EI4</td>
<td>0.597</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EI5</td>
<td>0.734</td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>EI6</td>
<td>0.744</td>
<td></td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Authors

The minimum factor loading value for each item or indicator that is statistically significant is 0.5 (Hair et al., 2010), indicating good convergent validity. Based on the factor loading values in Table 1, it can be seen that all measurement indicators show good convergent validity.

Next, testing the internal consistency reliability of the measurement instrument is based on Cronbach's Alpha (α) value. A minimum α value of 0.7 for each construct indicates good internal consistency reliability (Hair et al., 2010). The α value of each research construct is in the range of 0.8 so
that the measurement instrument, apart from meeting the validity test, is also declared reliable.

**Hypothesis Test**

After analyzing the measurement model, where the measurement instrument is declared valid and reliable, the next step is to test the hypothesis by running a structural model. The structural model test in this research was carried out using the maximum likelihood estimation technique. The suitability of the model to the empirical data is measured by the goodness of fit (GOF) index. According to Hair et al. (2010), generally, three to four GOF indices are sufficient to provide evidence regarding the suitability of the model. At a minimum, researchers must report at least one incremental index and one absolute GOF index. The GOF value of the structural model shows $\text{Cmin/df} = 1.993$, $\text{GFI}=0.786$, $\text{RMSEA}=0.081$, $\text{CFI}=0.841$, and $\text{IFI}=0.843$, which is relatively good because it is at marginal fit. Table 2 presents the results of the structural model.

**Table 2: Hypothesis test results in the structural model**

<table>
<thead>
<tr>
<th>Relationships Between Constructs</th>
<th>Standardized Estimated Value</th>
<th>Critical Ratio</th>
<th>P-value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>EK $\rightarrow$ EA</td>
<td>0.102</td>
<td>1.033</td>
<td>0.207</td>
<td>H1 not supported</td>
</tr>
<tr>
<td>EK $\rightarrow$ ESN</td>
<td>0.349</td>
<td>3.497</td>
<td>***</td>
<td>H2 supported</td>
</tr>
<tr>
<td>EA $\rightarrow$ EI</td>
<td>0.360</td>
<td>3.092</td>
<td>0.002</td>
<td>H3 supported</td>
</tr>
<tr>
<td>ESN $\rightarrow$ EI</td>
<td>0.659</td>
<td>6.018</td>
<td>***</td>
<td>H4 supported</td>
</tr>
</tbody>
</table>

***Significant coefficient on P-value < 0.001
*   Significant coefficient on P-value < 0.1

Source: Authors

**Table 3: Hypothesis test results in the structural model with gender moderation**

<table>
<thead>
<tr>
<th>Structural Relationships Between Constructs</th>
<th>Standardized Estimated Value $\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>P-value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>EK $\rightarrow$ EI</td>
<td>-0.222</td>
<td>15.346</td>
<td>9</td>
<td>H5 supported</td>
</tr>
<tr>
<td>ESN $\rightarrow$ EI</td>
<td>0.215</td>
<td>22.733</td>
<td>10</td>
<td>H6 supported</td>
</tr>
<tr>
<td>EA $\rightarrow$ EI</td>
<td>0.236*</td>
<td>12.657</td>
<td>10</td>
<td>H7 not supported</td>
</tr>
</tbody>
</table>

** Significant coefficient on P-value < 0.001
*   Significant coefficient on P-value < 0.1

Source: Authors
Discussion

Referring to the hypothesis test results shown in Table 2 and Table 3, there are two hypotheses that were not supported (H1 and H7) out of the seven hypotheses tested. Research data shows that entrepreneurial knowledge has no effect on entrepreneurial attitudes (H1). This is in line with entrepreneurial knowledge not being a factor that influences a person's entrepreneurial attitude (Scuotto & Morellato, 2013; Kourilsky & Walstad, 1998) and contradicts the findings of Wijayati et al. (2021) and Packham et al. (2010) where entrepreneurial knowledge has a positive effect on entrepreneurial attitudes.

The second hypothesis is that entrepreneurial knowledge has a positive effect on subjective norms of entrepreneurship. The results of this second hypothesis are not in line with the findings of several researchers, Awang et al. (2016) and Santos and Liguori (2020), where subjective entrepreneurship acts as a moderator variable. The third hypothesis is that it is known that entrepreneurial attitudes have a positive effect on interest in entrepreneurship, so it is in accordance with the findings of research conducted (Schwarz et al., 2009; Chen & Lai, 2010; Jena, 2010). The fourth hypothesis shows that entrepreneurial subjective norms have a positive effect on entrepreneurial interest. This is supported by research conducted (by Wazni et al., 2023, and Utami, 2017) and contradicts the findings of Fenech et al. (2019), where subjective entrepreneurial norms do not significantly influence entrepreneurial interest.

Even though entrepreneurial knowledge has no influence on attitudes, it appears that entrepreneurial attitudes have a positive influence on entrepreneurial interest. In simple terms, entrepreneurial attitudes encourage interest in entrepreneurship, but entrepreneurial attitudes are not generated by the influence of entrepreneurial knowledge obtained through education, but rather by other factors. Research data also shows the significant moderating role of gender on the direct influence of entrepreneurial knowledge on entrepreneurial interest. (H5), where the positive and meaningful influence is felt more strongly by female respondents and women who receive greater benefits (Nowiński et al., 2019). Gender significantly moderates the influence of entrepreneurial subjective norms on entrepreneurial interest (H6), which can be seen from Table 3; the meaningful and strong positive influence is felt more by female students and is supported by the findings of Bagheri and Lope Pihie (2014), where the
gender role of women is stronger in the influence of subjective norms of entrepreneurship on entrepreneurial interest. Furthermore, female gender moderates the influence of entrepreneurial attitudes on interest in entrepreneurship and is supported by the findings of Bagheri and Lope Pihie (2014) who state that women have a large role in the influence of entrepreneurial attitudes on interest in entrepreneurship.

Conclusion

The conclusions obtained from the results of this study show that the moderating role of gender is more evident in the female gender, where the female gender is more positive and has a greater influence on hypotheses five to the seventh hypothesis. The results of other hypotheses show that entrepreneurial knowledge does not significantly influence entrepreneurial attitudes. The second hypothesis indicates that entrepreneurial knowledge has a positive and significant impact on subjective norms related to entrepreneurship. The third hypothesis illustrates the positive influence of entrepreneurial attitudes on entrepreneurial interest. Finally, the subsequent hypothesis demonstrates that entrepreneurial subjective norms significantly influence interest in entrepreneurship. Based on the results of this research, we can see the factors that have a significant influence as well as those that have less impact within the boundaries of the tested research variables. Therefore, in the future, this research can be used as a basis for similar research with different variables. The implications of this research can be used for universities or parties with an interest in entrepreneurship, particularly in addressing the gender disparity observed in entrepreneurial participation.

References


*Article history:  Received:  September 11th, 2023  
Accepted:  March 19th, 2024*