

Research

Do the Entrepreneurship Education and the Entrepreneurship Motivation Have a Relationship with the Gender? A Quantitative Study from Indonesia

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Abstract

The increasing number of entrepreneurship programmes, formal or non-formal, intends to increase the number of entrepreneurs in Indonesia. However, the number of entrepreneurs may not be associated with whether a person had been enrolling on entrepreneurship education. This study analyses the association between enrolling in entrepreneurship education and entrepreneurship motivation. Furthermore, we also want to investigate whether the two abovementioned variables have correlation with the gender. From 101 respondents collected, the results are generated by utilizing the Chi-square test of independence for data analysis. We found out that there is no association between gender and entrepreneurship intention; no association between entrepreneurship education and entrepreneurship intention, and no association between gender and entrepreneurship education. Thus, entrepreneurship motivation is a fundamentally subjective and does not consider gender. This result generates significant recommendations for the Indonesian Government to enhance entrepreneurial activities and motivation in the future.

Keywords: *Entrepreneurship, Education, Motivation, Gender*

INTRODUCTION

Rising support from the Indonesian Government, both central and local, to increase the number of entrepreneurs has been implemented since 2018 (Rahayu, 2017). One practical example of these supports is the creation of entrepreneurship programmes such as training, seminars, and funding schemes to increase people's motivation to start a business (Iqbal, 2018). Another policy is to reduce the tax proportion for micro, small, and medium enterprises (MSMEs) in Indonesia from one per cent to 0.5% in order to increase competitiveness and generate a robust industrial structure (Lavinda, 2018). These policies are expected to attract people to start their own businesses and shift towards full-time entrepreneurship. In addition to government programmes, several universities in Indonesia have established entrepreneurship departments and degree programmes to provide formal entrepreneurship education for young people.

Indonesia comprises women by 50 per cent of its population, and 51 per cent of the female population are in the productive age group of 18–50 years old (Badan Pusat Statistik, 2008). Women-owned businesses represent 51% of small enterprises and 34% of medium enterprises in Indonesia (Japhta et al., 2016). Entrepreneurship is often a preferred occupation for women because it allows flexible time management and the opportunity to contribute additional income to their families, compared to men who more frequently pursue entrepreneurship for higher income generation (Humbert & Drew, 2010). However, women face additional challenges, including lower trust from lenders compared to men (Alsos et al., 2006).

While policies may ease bureaucracy and financial burdens, the effectiveness of entrepreneurship programmes—whether formal or non-formal—depends heavily on the

individual's motivation to become an entrepreneur. Given this situation, there is an urgency to understand what motivates individuals to pursue entrepreneurship and whether entrepreneurship education is associated with these motivations. Another key concern is whether gender plays a role in shaping entrepreneurial motivation, particularly since women often enter entrepreneurship for different reasons compared to men. This study also examines whether gender is associated with participation in entrepreneurship education.

Therefore, this study has two purposes: (1) to investigate the association between entrepreneurship education and entrepreneurship motivation, and (2) to analyze whether gender has an association with entrepreneurship motivation. Both purposes are examined separately.

LITERATURE REVIEW

1. Women and Entrepreneurship

The relationship between women and entrepreneurship has been increasingly researched in recent decades (Sullivan & Meek, 2012). Women often face disadvantages in accelerating their businesses due to long-standing social attributes and structural constraints (Sullivan & Meek, 2012). Despite these challenges, the proportion of women entrepreneurs has increased in various countries, such as the United States (Wilson et al., 2007). Research also suggests that in terms of leadership and strategic decision-making, men and women do not differ significantly, and women may even demonstrate higher tendencies toward risk-taking (Sonfield et al., 2001).

2. Entrepreneurship Education and Its Effects on Motivation

Education background and occupational motivation have been widely examined in entrepreneurship studies. Pursuing education—particularly entrepreneurship education—has been shown to increase entrepreneurial motivation and spirit (Burke et al., 2002). Several studies indicate that entrepreneurship education positively influences motivation to start a business (Farhangmehr et al., 2016; Hsu et al., 2014). However, findings are not uniform. Some studies have reported no significant effect of entrepreneurship education on entrepreneurial motivation. An experiment by Byabashaija and Katono (2011), for example, concluded that entrepreneurship training had no direct effect on the intention to start a business and recommended qualitative approaches for further analysis.

Entrepreneurship education may take the form of formal or non-formal learning. Formal education includes university or vocational programmes specializing in entrepreneurship. Europe was among the first regions to introduce entrepreneurship programmes in universities, emphasizing practical learning approaches. Research also stresses the importance of expanding entrepreneurship education to rural universities to reduce economic disparities and support entrepreneurship development in both small businesses and large company managerial contexts (Dana, 1992).

Studies from different countries highlight multiple factors contributing to entrepreneurial motivation. Bhandari (2006) found that students' willingness to start their own business was influenced by determination and personal traits. Debates also continue regarding whether entrepreneurship should be taught. Eijdenberg and Masurel (2013) argue that entrepreneurship education is essential for helping individuals understand risks and entrepreneurial processes. Motivation itself remains a central element pushing individuals to start new ventures (Barba-Sánchez & Atienza-Sahuquillo, 2012).

3. Gender and Entrepreneurship Motivation

Gender has been consistently linked to entrepreneurship motivation, as shown in categorization frameworks by scholars such as [Baron and Henry \(2011\)](#) and [Mitchell \(2004\)](#). Numerous studies have identified significant effects of gender on motivation to engage in entrepreneurship. A study conducted in Ireland by [Humbert and Drew \(2010\)](#) found such effects. However, motivation varies not only by gender but also by individual background and social context. People of the same gender are not raised or developed identically; thus, contextual and environmental factors may lead to different motivational outcomes.

RESEARCH METHOD

Since many previous pieces of research mainly discussed the effects of gender and entrepreneurship education on entrepreneurship motivation, this study's objective is to understand the association first, contextually, in Indonesia. While studying other countries' cases and the theoretical foundation of the variables, contextual results are needed to comprehend whether the theory could be supported.

Data collection and design

Samples are collected through a snowball sampling to people from various backgrounds and occupations. Snowball sampling is often used to increase the number of respondents by respondents close to authors and to spread to other people. Snowball sampling technique is primarily proper when taking a sample of a population group is difficult due to a large population ([Baltar & Brunet, 2012](#)). This technique has been proven helpful in previous research, especially in the social science discipline ([Cohen & Arieli, 2011](#)). However, using the snowball sampling technique also has many downsides; the main concern is that respondents' demography might not cover all the targeted population since the population is vast and hard to reach. Therefore, it is crucial to understand the demography of respondents before conducting statistical analysis. The number of respondents collected is above 30 samples; thus, we assume the data is normally distributed and used for statistical analysis.

In gender criteria, there are two categories, male and female. For entrepreneurship education, the categories are whether respondents have been attending, formal or non-formal, entrepreneurship relation education. Lastly, entrepreneurship motivation's question is whether respondents want to start their own business. Categories are divided into three answers: yes, no, and uncertain. Unfortunately, no respondent answer 'no' to motivation or intention to open their own business. In this case, we simplify the answer to 'yes' and 'uncertain'.

Data analysis

This study uses a chi-square test of independence for three associations, aside from descriptive statistics analysis. Since this study only analyses the association between gender, entrepreneurship education, and entrepreneurship motivation, the chi-square test of independence is sufficient to achieve its objectives. The Chi-square test was previously used for determining associations between variables associated with entrepreneurship, whether partly or not. [Henry et al. \(2016\)](#) identified several previous studies with the chi-square test as methodology. Previous studies used regression models, linear or logit since the objectives were to comprehend the effects. For instance, [Madhoushi et al. \(2011\)](#) used Structural Equation Model to understand the

relationship between entrepreneurship orientation, knowledge management, and innovation performance in Iran. Partly chi-square was also used to analyze the internationalization factors and foreign trade activities (Dubravka et al., 2015). Of previous statistical analyses, only a few used the chi-square test to assess the independence between variables. For instance, studies constructed by chi-square test only are conducted by McHugh (2013) and Sonfield et al. (2001).

According to the previous description, we construct three hypotheses:

- H1: Gender and entrepreneurship motivation are not independent
- H2: Entrepreneurship education and entrepreneurship motivation are not independent
- H3: Gender and entrepreneurship education are not independent

FINDINGS AND DISCUSSION

Descriptive statistics

Survey results show that 58 per cent of respondents are women while the remaining 42 per cent are men. Respondents recorded have rather good education: 40 per cent have bachelor degrees, while 38 per cent have master degrees. The remaining respondents are Doctoral graduates, high school, diplomas, and others.

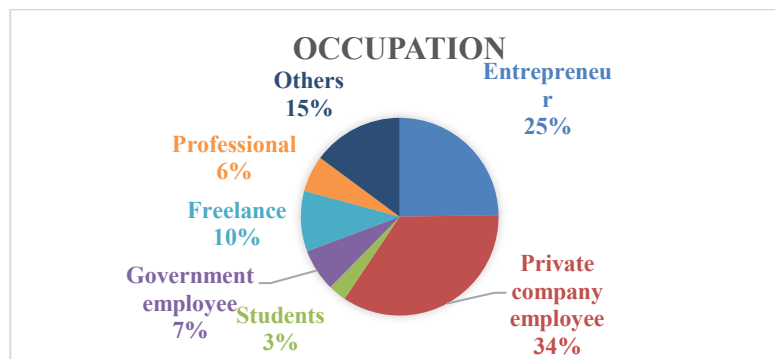


Figure 1. The proportion of respondents' occupations

As for respondents' occupation information, 34 per cent of respondents claimed that they were working in a private company as employees, while a quarter showed respondents becoming entrepreneurs. The least occupation chosen was students. It indicates that respondents already have current employment or business. The following indication is respondents' age. From figure 2, respondents' age is normally distributed: the highest proportion was between 28 – 33 years old and consisted of few outliers.

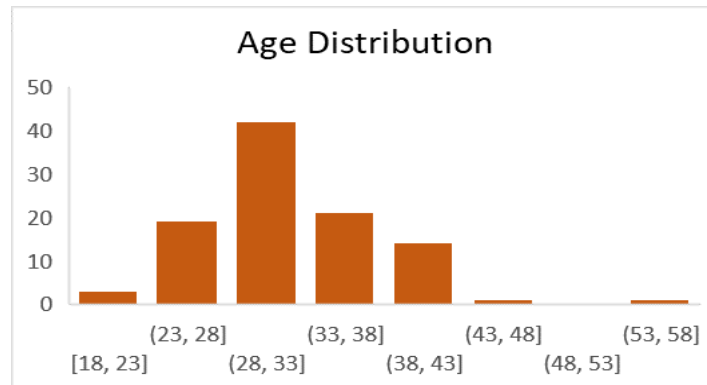


Figure 2. Respondents age distribution

Most respondents live in West Java, mainly in its capital city, Bandung. The second highest residency is in Jakarta Province. West Java's population is higher than Jakarta and other provinces due to constant development and a large construction area, meaning the opportunity to create a business is still developing compared to Jakarta. The second reason why respondents live in West Java province is that having snowball technique could generate similar characteristics by primary respondents, including the geographical information.

We then asked respondents about their satisfaction with their current employment, which may lead to plans. According to our respondents, 51 per cent show they were satisfied with their current employment. While 27 per cent of respondents were neutral, and 15 per cent were extremely satisfied. The rest of the respondents showed their dissatisfaction with their current occupation or employment. On average, the respondents tend to be satisfied rather than neutral. Thus, it implies that while respondents were employees, they were mostly satisfied with their current occupation.

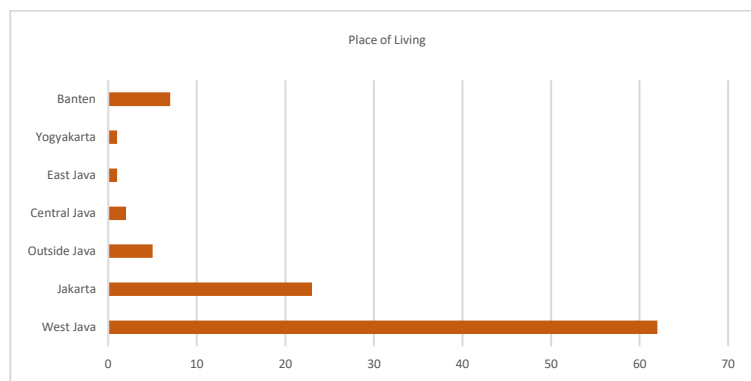


Figure 3. Respondent's place of residency

The rest of the respondents showed their dissatisfaction with their current occupation or employment. On average, the respondents tend to be satisfied rather than neutral, meaning that while respondents were employees, they were mostly satisfied with their current occupation.

Chi-square test of independence

There are three variables analyzed for the chi-square test: entrepreneurship education, entrepreneurship intention, and gender. For entrepreneurship education, categories were only yes or no, which means there is no bias in deciding whether a person had formal or non-formal entrepreneurship education. However, there were three possible answers in entrepreneurship intention: yes, no, and undecided or unknown. Not one respondent answered no; thus, we needed to eliminate the 'no' answer and leave 'yes' and 'undecided' on the table. The latest variable is gender, and there were only male or female options.

Undecided intention to become an entrepreneur is 7 per cent of total respondents. It means that entrepreneurship intention becomes high these days. Forty men said yes to be an entrepreneur currently or in the future, and the remaining 54 women had similar interests. From respondents who wanted to become entrepreneurs, nearly half of them already had their businesses. Thus, even though respondents claimed themselves, entrepreneurs, they had worked to have additional income or passion.

More than 60 per cent of respondents had experienced entrepreneurship education. People who participated in the education, even in small number, still had doubts about whether entrepreneurship is the correct career path for them. The associations of gender with entrepreneurship intention and entrepreneurship education and entrepreneurship intention did not indicate a more balanced answer. However, the association between gender and entrepreneurship education should also be discussed. Interestingly, almost two-thirds of respondents who had entrepreneurship education were female, while the remaining one-third were male. Also, from male respondents, more than half of them did not have any entrepreneurship education background, whereas they were less than 50 per cent of the total female population.

According to the contingency table, the proportions of a combination of both categories are not well balanced. First is the association between gender and entrepreneurship intention. Many previous pieces of research concluded that there is a strong relationship between gender and entrepreneurship intention in other areas. In Indonesia, the association seems to be unclear or not significant. In table 1, the chi-square test generates high significance, set five per cent as the significance level. The significance level is 0.469, which means that there is insufficient evidence that there is an association or dependency between gender and entrepreneurship intention.

Table 1. chi-square table gender & entrepreneurship intention

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2-sided)</i>	<i>Exact Sig. (2-sided)</i>	<i>Exact Sig. (1-sided)</i>
Pearson Chi-Square	.524 _a	1	.469		
Continuity Correction ^b	.107	1	.744		
Likelihood Ratio	.546	1	.460		
Fisher's Exact Test				.696	.380
N of Valid Cases	101				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.91.

b. Computed only for a 2x2 table

The second association seen is between entrepreneurship education and entrepreneurship intention. Table 2 can conclude that there is also no clear association between entrepreneurship education and entrepreneurship intention. The significance level is still above 0.05, which means there is insufficient evidence that entrepreneurship education and entrepreneurship intention are associated. Thus, the null hypothesis is not rejected.

Table 2. chi-square table entrepreneur education & entrepreneurship intention

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2- sided)</i>	<i>Exact Sig. (2- sided)</i>	<i>Exact Sig. (1-sided)</i>
Pearson Chi-Square	1.378 ^a	1	.240		
Continuity Correction ^b	.581	1	.446		
Likelihood Ratio	1.578	1	.209		
Fisher's Exact Test				.417	.230
N of Valid Cases	101				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.43.

b. Computed only for a 2x2 table

The third association is between gender and entrepreneurship education. In developing countries, women frequently become the actors for starting their own business in the family due to flexible time and deliver business ideas; therefore, they participated in entrepreneurship education to develop their own business more successfully.

Table 3. chi-square table gender & entrepreneurship education

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2- sided)</i>	<i>Exact Sig. (2- sided)</i>	<i>Exact Sig. (1-sided)</i>
Pearson Chi-Square	1.076 ^a	1	.299		
Continuity Correction ^b	.681	1	.409		
Likelihood Ratio	1.071	1	.301		
Fisher's Exact Test				.396	.204
N of Valid Cases	101				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.55.

b. Computed only for a 2x2 table

However, according to our survey, gender also has no association with entrepreneurship education; thus, the null hypothesis is not rejected. Therefore, this result indicates that entrepreneurship education in Indonesia, or education in general, is accessible for every gender.

DISCUSSION & CONCLUSIONS

This research aims to determine whether there is an association between gender, entrepreneurship education, and entrepreneurship intention in Indonesia. This finding is not common compared to regions other than Indonesia. There are several conclusions and types of

policies that the Government could consider. First, since there is no association between gender and entrepreneurship intention, both genders have similar intentions to establish their own business. The favourable condition in Indonesia because the Government encouraged and supported citizens to become entrepreneurs and engage other fellow citizens to raise economic welfare for the past few years. Therefore, both men and women have the same intention to build their businesses.

From the second result, since education statistically does not have a significant association with entrepreneurship intention, the intentions of Indonesians to create their businesses are purely based on their wants and beliefs and with no regard to whether they had education related to entrepreneurship. The last result also indicates that there is no association between gender and entrepreneurship education. It defines that there is no favourability of gender to receive education in general.

One policy recommendation from this result could increase opportunity by providing support for citizens to build a legitimate and registered business. Creating a safe and supporting environment for Micro, Small, and Medium Enterprises (MSMEs) without a loan shark or any unlawful business activities could also become one policy recommendation for the Government. In the final association, we could recommend opening more opportunities for both genders to achieve education so that everyone has the same access to education.

Further application of this research would be the effect of three variables. Most frequent studies were mainly discussing the impact of entrepreneurship education that has more influence on entrepreneurship motivation. Gender is also an exciting topic to discuss, especially in third world countries on their economic welfare.

This study's first limitation is the sample collection process using a snowball technique since using simple random sampling would be very timely and costly. Another limitation is geographical demography of respondents are primarily on Java Island, which could generate biased opinions compared to other parts of Indonesia.

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