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Research

Do entrepreneurial education and motivation relate to gender? A quantitative study from Indonesia

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Abstract

The increasing number of entrepreneurship programs, formal or nonformal, 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 in entrepreneurship education. This study analyzes the association between entrepreneurial education and entrepreneurial motivation. Furthermore, we also want to investigate whether the two variables mentioned above have a correlation with gender. Of 101 collected respondents, the results are generated using the Chi-square independence test for data analysis. We found no association between gender and entrepreneurial motivation, no association between entrepreneurial education and entrepreneurial motivation, and no association between gender and entrepreneurial education. Thus, entrepreneurial motivation is fundamentally subjective and does not consider gender. This result generates significant recommendations for the Indonesian government to improve entrepreneurial activities and motivation in the future.

Keywords: *entrepreneurship; education; motivation; gender*

INTRODUCTION

In 2018, a growing support from the Indonesian Government, both central and local, was implemented to increase the number of entrepreneurs [1]. One practical example of these supports is creating many entrepreneurship programs such as training, seminars, and funding in entrepreneurship to increase people's motivation [2]. Another policy is to reduce the tax proportion for micro, small and medium enterprises (MSMEs) in Indonesia. The ratio is reduced from 1% to 0.5% to increase competitiveness and generate a robust industrial structure [3]. This policy would attract people to start their own business and change lanes to full-time entrepreneurs. Aside from programs conducted by the Government, several universities in Indonesia established entrepreneurship programs to provide tertiary-level entrepreneurship degrees for young people to pursue entrepreneurship as their future occupation.

Indonesia comprises women for 50% of the total population in Indonesia, with 51% of the population age between 18–50 years [4], meaning that women of productive age comprise half of the overall population of women. Meanwhile, small businesses owned by women have a proportion of 51% and 34% in medium enterprises in Indonesia [5]. Unfortunately, the number of MSMEs is unknown. Being an entrepreneur is often the chosen occupation for women, as they have flexible time to take care of their family while generating additional income for the family [6]. However, being a woman has more obstacles to overcome, such as the trust of lenders to finance her business compared to their male counterparts [7].

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Although government policies for easing the bureaucracy and financial burden for MSMEs and universities have begun to trigger demands for entrepreneurship education, the results from these programs cannot be achieved if an enrolled person does not have a motivational spirit in entrepreneurship. Given the circumstances, there is an urgency to understand motivations to become an entrepreneur. Also, there is an urgency to know whether these programs, formal or nonformal, would have any association with reason to become entrepreneurs. The second problem is that women feel more encouraged to be entrepreneurs due to searching for additional income, but whether gender has any association with motivation to become entrepreneurs is still being questioned. Then, the association between gender and entrepreneurial education is also examined.

Therefore, this study has two purposes. The first is to investigate the association between entrepreneurial education and entrepreneurial motivation. The second is to analyze any association between gender and motivation for entrepreneurship. Both purposes are analyzed separately. The relationship between women and entrepreneurship has been increasingly researched in recent decades [8]. Women have the disadvantage of accelerating their businesses due to social attributes that have been in society for a very long time [8]. Currently, there is a higher proportion of women as entrepreneurs, for example, in the United States [9]. In terms of leadership and decision-making about strategic ventures, women and men do not differ [10], while women tend to be more risk-takers.

The educational background and motivation for having occupations are often discussed in research. By pursuing education, especially in entrepreneurship, people could increase motivation and spirit of entrepreneurship [11]. Other studies have also suggested the positive effects of entrepreneurial education and motivation to start a business [12][13]. However, in some cases, education does not significantly affect motivation to become entrepreneurs. An experiment [14] also concluded that there was no direct relationship between entrepreneurship training and the motivation to start a business. Hence, the study suggested that a further analysis of the relationship might use a qualitative approach [14].

Entrepreneurship education could be in the form of formal and non-formal education. Formal education means either vocational or university programs on entrepreneurship. Universities in the European region were one of the first that held entrepreneurship programs. As expected, the main foundation of having this program is the practical approach. It is also essential to spread education to rural universities to minimize the economic gap between metropolitan and non-metropolitan areas and the entrepreneurial skills used in small and medium companies and for managers in large companies [15]. A study in India [16] mentioned several factors influencing the willingness of students to start their own business. These factors were mainly their determination and personal characteristics. There were some debates about whether entrepreneurship should be taught. Another research [17] mentioned that entrepreneurship should be taught in education or training to better understand risks and entrepreneurship itself. At the same time, motivation is reversibly an essential factor in driving someone to decide to start a new business [18].

Gender and motivation to become an entrepreneur are correlated and are frequently discussed. There are several factors to categorize an entrepreneurial motivation [19][20]. The relationship also includes that there are significant effects of gender on entrepreneurial motivation. A study in Ireland [6] provided this conclusion. At the same time, there are other factors on the said gender on the motivations, since not all the same gender is raised and developed identically. Therefore, the environmental context may determine differences in the results.

RESEARCH METHOD

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

Data collection

Samples are collected through snowball sampling to people from various backgrounds and occupations. Snowball sampling is often used to increase the number of respondents from close respondents to trigger further spreads to others. The snowball sampling technique is primarily proper when taking a sample of a population group is difficult due to a large population [21]. This technique has been shown to be helpful in previous research, especially in social sciences [22]. 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 the respondents before conducting a statistical analysis. The number of respondents collected is greater than 30 samples; thus, we assume that 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 nonformal, entrepreneurship relation education. Lastly, the question on entrepreneurial motivation relates to whether respondents want to start their own business. The categories are divided into three answers: yes, no, and uncertain. Unfortunately, no respondent responds 'no' to motivation or motivation to open their own business. In this case, we simplify the answer to 'yes' and 'uncertain'.

Data analysis

This study uses a chi-square independence test for three associations, in addition to descriptive statistics analysis. Since this study only analyses the association between gender, entrepreneurial education, and entrepreneurship motivation, the chi-square independence test is sufficient to achieve its objectives. The Chi-square test was previously used to determine associations between variables associated with entrepreneurship, whether or not partly. Henry *et al*. [23] identified existing research that employed the chi-square test as a methodology. Previous studies used regression models, linear or logit, since the objectives were to comprehend the effects. For instance, Madhoushi *et al*. [24] used Structural Equation Model to understand the relationship between entrepreneurship orientation, knowledge management, and innovation performance in Iran. The chi-square was also used in part to analyze factors of internationalization and foreign trade activities [25]. Of the previous statistical analyzes, only a few used the chi-square test to assess the independence between variables. For example, some studies are constructed using the chi-square test alone [10][26]. According to the previous description, we construct three hypotheses.

H1 Gender and entrepreneurial motivation are not independent
H2 Entrepreneurship education and entrepreneurial motivation are not independent
H3 Gender and entrepreneurial education are not independent

FINDINGS AND DISCUSSION

Descriptive statistics

The survey results show that 58% of the respondents are women while the remaining 42% are men. The recorded respondents have a fairly good education: 40% have undergraduate degrees, while 38% have master's degrees. The remaining respondents are doctoral graduates, high school graduates, diplomas, and others.

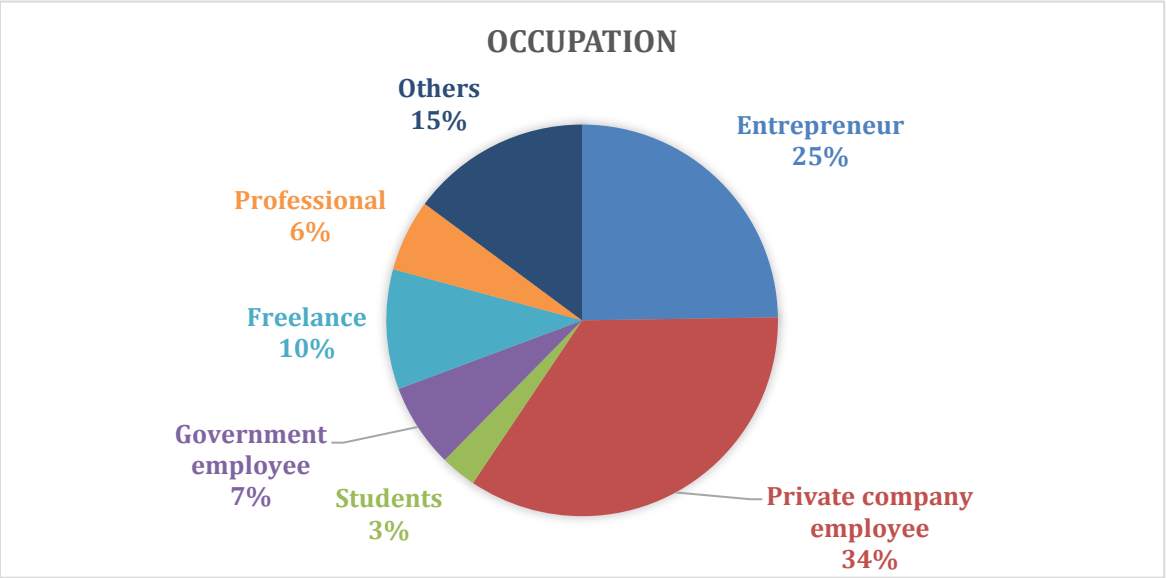

Figure 1. The proportion of occupations of the respondents.

Regarding the occupational information of the respondents, 34% of them claimed to be working in private companies, while 25% are currently entrepreneurs. The least chosen occupation was Students, indicating that the respondents have already been employed or conducting businesses. The following indication is the age of the respondents. In Figure 2, the age of the respondents is somewhat normally distributed. The highest proportion was between 28–33 years old and few outliers.

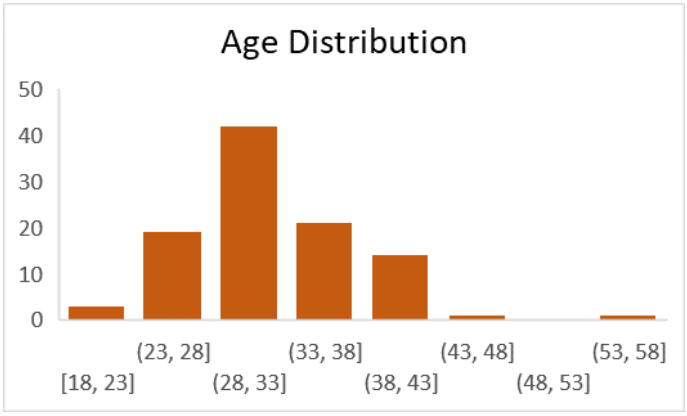

Figure 2. Respondents' age distribution

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Most of the 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 that of 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. Besides, West Java is the primary residency of most respondents, which could be the result of the snowball technique that generated similar characteristics by the primary respondents, including geographical information.

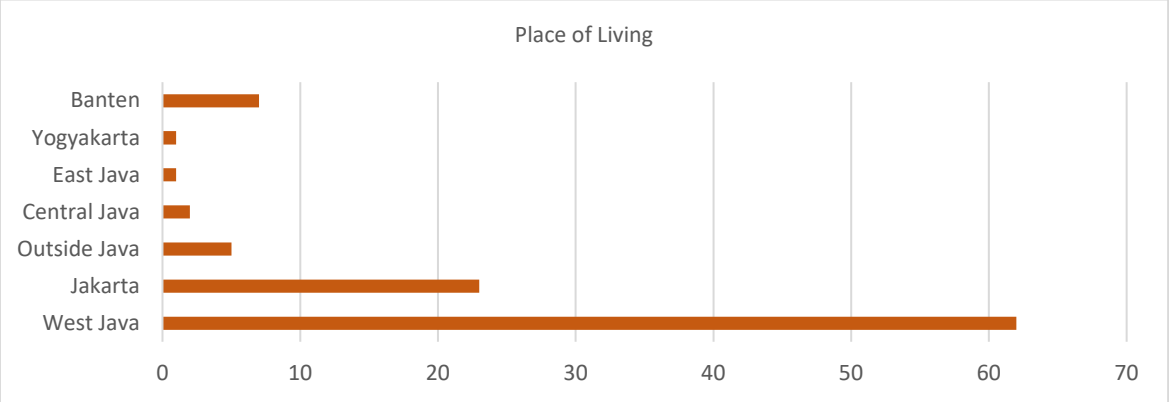

Figure 3. Respondent's place of residence

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

Chi-square test of independence

Three variables are analyzed for the chi-square test, *i.e.*, gender, entrepreneurial motivation, and entrepreneurial education. For entrepreneurial education, categories were only 'yes' or 'no', meaning that there is no bias in deciding whether a person had formal or nonformal entrepreneurship education. However, there were three answers available for entrepreneurial motivation (*i.e.*, 'yes', 'no', and 'undecided'/'unknown'). No one answered 'no'; thus, we needed to eliminate the 'no' answer and leave 'yes' and 'undecided' on the table. The last variable is gender, and there were only male or female options.

The 'undecided' motivation to become entrepreneurs covered 7% of the respondents, which indicated high entrepreneurial motivation. Forty men said 'yes' to being an entrepreneur now or in the future, and the remaining 54 women had similar interests. Of the respondents who wanted to become entrepreneurs, nearly half of them already had their businesses. Thus, they had worked to have additional income or passion even though the respondents claimed to be entrepreneurs.

Furthermore, more than 60% of the respondents had experienced an entrepreneurship education. People who participated in education, even in a small number, still had doubts about whether entrepreneurship is the right career path for them. The associations of gender-motivation and education-motivation did not indicate a more balanced answer. However, the association between gender and entrepreneurial education should also be discussed. Interestingly, almost two-

thirds of the respondents who had an education in entrepreneurship were women, while the remaining one-third were men. Then, more than half of male respondents did not have any entrepreneurial education background, while they were less than 50% of the female respondents.

According to the contingency table, the proportions of a combination of both categories are not well balanced. In terms of the association between gender and entrepreneurial motivation, existing research concluded a strong relationship between gender and entrepreneurial motivation in other areas. In Indonesia, the association seems unclear or not significant. In Table 1, the chi-square test generates high significance, set to 5% 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 entrepreneurial motivation.

Table 1. Chi-square table gender & entrepreneurship motivation

	Value	*df*	*Asymp. Sig. (2-sided)*	*Exact Sig. (2-sided)*	*Exact Sig. (1-sided)*
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 an expected count of less than 5. The minimum expected count is 2.91.
b. Computed only for a 2x2 table

Table 2. Chi-square table entrepreneur education & entrepreneurship motivation

	Value	*df*	*Asymp. Sig. (2-sided)*	*Exact Sig. (2-sided)*	*Exact Sig. (1-sided)*
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 an expected count of less than 5. The minimum expected count is 2.43.
b. Computed only for a 2x2 table

Table 3. Chi-square table gender & entrepreneurship education

	Value	*df*	*Asymp. Sig. (2-sided)*	*Exact Sig. (2-sided)*	*Exact Sig. (1-sided)*
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 an expected count of less than 5. The minimum expected count is 14.55.
b. Computed only for a 2x2 table

The second association seen is between entrepreneurial education and entrepreneurial motivation. Table 2 concludes that there is also no clear association between entrepreneurship education and entrepreneurial motivation. The significance level is still above 0.05, which means

that there is insufficient evidence that entrepreneurial education and entrepreneurial motivation are associated. Thus, the null hypothesis is not rejected.

The third association is between gender and entrepreneurial education (Table 3). In developing countries, women frequently become actors to start their own business in the family due to flexible time and deliver business ideas; therefore, they participated in entrepreneurial education to develop their own business more successfully. However, according to our survey, gender also has no association with entrepreneurship education; therefore, the null hypothesis is not rejected. Therefore, this result indicates that entrepreneurial education in Indonesia, or education in general, is accessible to all genders.

DISCUSSION & CONCLUSIONS

This research aims to determine the association between gender, entrepreneurial education, and entrepreneurial motivation 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 entrepreneurial motivation, both genders have similar motivations to establish their own business. The favorable condition in Indonesia because the government encouraged and supported citizens to become entrepreneurs and engage other citizens to raise economic welfare for the past few years. Therefore, men and women have the same motivation of building their businesses. Since education statistically does not have a significant association with entrepreneurial motivation, Indonesians' motivations to create their businesses are based purely on their wants and beliefs and without regard for 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 favorability 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 supportive environment for Micro, Small, and Medium Enterprises (MSMEs) without a loan shark or any unlawful business activities could also become a 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. An additional application of this research would be the effect of three variables. Most of the studies mainly discussed the impact of entrepreneurship education that has a greater influence on entrepreneurship motivation. Gender is also an exciting topic to discuss, especially in the developing world, on their economic welfare.

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

CONFLICT OF INTERESTS

The author(s) declares that they have no conflict of interest.

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