

The Effect of Locus of Control and Tolerance of Ambiguity on Entrepreneurial Intention

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ABSTRACT

The present research aimed at determining the effect of locus of control and tolerance of ambiguity on entrepreneurial intention. To analyze the data, the explanatory survey method was used. The research sample was taken from UPI (Indonesia University of Education) students as the population. The research population, by using the Isaac and Michael formula, was UPI students with a sample size of 377 respondents. The data were collected using a numerically scaled questionnaire. The data processing technique employed regression analysis intending to know the effect of the locus of control variable and tolerance of ambiguity upon entrepreneurial intention. The results showed that locus of control and tolerance of ambiguity had a positive effect on entrepreneurial intention. It is recommended to increase the indicator of the locus of the control variable, namely doing business. The variable can be improved by fostering prospective student entrepreneurs by using business incubators. The indicator that needs to be improved from the tolerance of ambiguity variable is to identify alternatives. It can be improved by increasing business opportunities through entrepreneurship lectures. In addition, the indicators of entrepreneurial intentions can be improved by planning to start a business through business feasibility analysis in entrepreneurship lectures in universities.

Keywords: *entrepreneurial; intention; locus of control; tolerance of ambiguity.*

1. INTRODUCTION

The current social phenomenon is unemployment. Therefore, entrepreneurship is highly important to be considered as a solution [1]. It is a fact that the number of unemployed people has an impact on the development and economic growth of a [2]. It is reasonable that entrepreneurship should foster innovation [3]. The current Covid-19 pandemic period has further reduced the economic growth of developing countries. This certainly makes stakeholders strengthen the need to develop an entrepreneurial culture as a solution for economic growth to create business opportunities. Prior studies have found that new ventures found by university alumni had a significant economic multiplier effect in terms of job creation and income [4]. Thus, universities are expected to play an important role in an ecosystem that fosters low entrepreneurial intention to high entrepreneurial intention. The increased innovation can serve psychological factors that encourage society to become successful entrepreneurs.

Ajzen's entrepreneurial intention model [5] was developed based on three background factors, namely personal, social, and information. One of the important background factors to be studied is the personal factor. In this sense, it is fruitful to consider the locus of control and tolerance of ambiguity. Locus of control is an internal and external part of humans that can control decisions and their lives that cannot be influenced by environmental factors [6]. Meanwhile, tolerance of ambiguity is the tendency to view situations without a clear outcome such as interest rather than a threat [7]. Both concepts, namely locus of control and tolerance of ambiguity as psychological characteristics, are important to study. Therefore, this study tried to re-examine the topic to be applied to UPI students. The present study also tried to see the difference in entrepreneurial intention from the gender aspect.

Based on the background of the problem, it is, therefore, crucial to analyze the factors that influence entrepreneurial intention. The research questions of this study are "do locus of control and tolerance of ambiguity

affect entrepreneurial intention?", and it is also important to notice "how is the difference in entrepreneurial intention from the gender aspect?"

Locus of control was first coined by [8]. Locus of control is an internal concept in which people believe that they can control their life or external. They believe that their decisions and lives are controlled by them and cannot be influenced by environmental factors, chance, or fate [6]. Locus of control is another personality trait influencing entrepreneurial intention [6]. Locus of control is an attribute that indicates an individual's sense of control over the results, rewards, successes, or failures of his life; in contrast, it is a person's beliefs about what controls his life [9]. According to [6] was the pioneer to suggest that internal and external locus of control existed as two opposite poles of the same phenomenon. External locus of control implies the belief that all events depend on luck, fate or external actor beyond individual control. Internal locus of control speaks to the belief that events are the result of behaviors or characteristics. Several studies have suggested that locus of control is related to entrepreneurial intentions and that people with an internal locus of control have increased entrepreneurial intention [10]. Individuals who can manage the company are those who have a higher locus of control [11]. In addition, [12] have highlighted that business success factors are supported by an internal locus of control.

According to [13], it is possible that when there is sufficient information to structure a situation, there is a situation that is said to be ambiguous. How individuals perceive ambiguous situations and organize information reflects their tolerance for ambiguity. If individuals have a high level of tolerance for ambiguity, they are said to consider challenging ambiguous situations and strive to cope with unexpected situations to work well. According to [14] stated that entrepreneurs not only operate in an uncertain environment but are also passionate about doing the unknown and actively managing uncertainty. Therefore, tolerance of ambiguity can be considered a characteristic of entrepreneurs. Those who are more entrepreneurial are expected to simultaneously display more tolerance for ambiguity than others. Tolerance of ambiguity is associated with the ability to handle uncertainty since, to build a sustainable business, it is important to make decisions by using conflicting information from various unknown sources. Therefore, tolerance of ambiguity is a significant factor influencing entrepreneurial intentions [15]. A study conducted by [16] showed that an individual with a tolerance of ambiguity was more likely to create a new venture. This finding is consistent with the study of [17] who found that tolerance of ambiguity was correlated with entrepreneurship. A study conducted by [18] showed that tolerance of ambiguity of youth in East Sarawak had a positive impact on entrepreneurial intentions among youth.

The influence of gender on a person's intention to become an entrepreneur has been widely studied [19]. As expected, male students have stronger intentions than women. In general, entrepreneurs are dominated by men. According to [19] proved that women tended to be less inclined to open new businesses than men. Similar findings were also conveyed by [20] who found that men's interest in entrepreneurship was more consistent than women's interest that changed over time. So, there was a significant difference in entrepreneurial success between women and men.

Based on the explanation above, it can be said that the higher the respondent's perception of locus of control and tolerance for ambiguity, the higher the entrepreneurial intention, and vice versa. Therefore the research paradigm is described in Figure 1 as follows

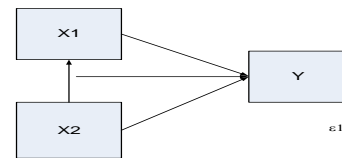


Figure 1. Model of the influence of locus of control and tolerance of ambiguity on entrepreneurial intentions.

Notes:

- X.1 = Locus of control
- X.2 = Tolerance of ambiguity
- Y = Entrepreneurial Intention
- e.1 = Other Unexplored Causal Variables

2. METHODS

The object of this research was the variable of entrepreneurial intention, locus of control, and tolerance of ambiguity. The research subjects were UPI students from 13 faculties and regional campuses. The subjects had attended entrepreneurship lectures. The study population consisted of 19,919 students. The research sample was calculated by using the Isaac Michael formula, which obtained a research sample of 366 respondents.

The variable measurement items were adopted from previous researchers, and the response to these items was an assessment on a 5-point scale from the highest positive to the lowest positive. Locus of Control (X.1) consists of these indicators: confident in their abilities, likes to work hard, does not like to try, and lacks initiative. The locus of control questionnaire used a numerical scale with five intervals.

Tolerance of ambiguity (X2) consists of these indicators: identifying alternatives, making choices, and determining priorities. The tolerance of ambiguity

questionnaire used a numerical scale with five intervals. In addition, the entrepreneurial intention consists of these indicators: own business path, a career as an entrepreneur, and planning to start a business sourced [21]

The data collection technique used a closed questionnaire and a numerical scale. Before collecting data, the research instrument was examined for the instrument, namely the validity and reliability test. Data analysis was carried out through variable description analysis and regression analysis. Variable description analysis used tools such as percentage calculations, tables, and graphs. It was interpreted by comparing the number of scores achieved with the number of ideal scores multiplied by 100%. The results are seen with the continuum in Figure 2 as follows.

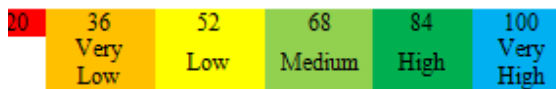


Figure 2. Continuum

The figure was adapted from Continuum Scales of Research Data.

Before testing the hypothesis, the assumptions were tested first, namely the data normality test, heteroscedasticity test, and autocorrelation test. Associative hypothesis testing was carried out using multiple regression analysis, while to test differences in entrepreneurial intention; a t-test was used with the help of SPSS.

3. RESULTS AND DISCUSSION

This is the profile of the respondents, from the aspect of gender, age, and regional origin. More details on demographic data are explained in Table 1 as follows

Table 1. Respondent Profile

Sex	F	Percentage
Male	127	34,7
Female	239	65,3
Total	366	100.00%
Age	F	Percentage
18 -21 adolescent	263	71,9
22- 25 Pre-adult	57	15,6
26-29 Adult	46	12,5
Total	366	100.00%

Table I shows the profiles of the respondents. They are mostly female (65.3%) and the rest are male (34.7%). The percentage of respondents from the most age is adolescent (71.9%), pre-adult (15.6%), and adult (12.5%). In terms of family background, respondents who are not from entrepreneurial families are 76.5% and

respondents who come from entrepreneurial families are 23.5%.

Table 2. Locus of control overview

Variables	%
Locus of Control	66,6%
Tolerance of Ambiguity	70,5%
Entrepreneurial Intention	83,2 %

Based on Table II, the locus of control variable in moderate condition has an average score of 66.6%. The tolerance of ambiguity score in the high condition is at 70.5% and the entrepreneurial intention in the high condition is at 83.2%. Entrepreneurial intention, as the highest variable, shows that the entrepreneurial learning process has been able to instill learning outcomes on the affective dimension, namely the embedded interest or intention. In other words, students have a high interest in entrepreneurship. The Table 3 following is a description of each indicator on the variables studied.

Table 3. Locun on control Indicators

Indicators	%
Confident in his abilities	71,7
Work hard	72,8
Experimentation	63,4
Lack of initiative	64,6
Average	66,6

Based on Table 3, locus of control is in moderate condition with an average percentage of 66.6%. The highest locus of control indicator “work hard” is at 72.8% and the lowest indicator “experimentation” is at 63.4%.

Tolerance of ambiguity indicator show by Table 4. as a follow

Table 4. Tolerance of ambiguity indicators

Indicators	%
Identifying alternative	53,8
Making a choice	69,4
Determining priorities	80
Average	70,5

Based on Table 4, tolerance of ambiguity is in high conditions with an average of 70.5%. The highest indicator of the tolerance of ambiguity is “determining priorities” with a percentage of 80%. The lowest indicator is “identifying alternative” with a percentage of 53.8%.

Entrepreneurial intention indicators show by Table 5. as a follow:

Table 5. Entrepreneurial Intention Indicators

Indicators	%
Own line of business	84,81

Career as entrepreneur	84,79
Planning to start a business	79,44
Average	83,22

Based on Table 5, the entrepreneurial intention is in moderate condition with an average of 83.22%. The highest indicator “own line of business” is at 84.81% while the lowest indicator “planning to start a business” is at 79.44%.

In the process of learning entrepreneurship, if someone has internalized aspects of interest, especially interest or entrepreneurial intentions, it can be seen as a positive learning outcome. Therefore, the results of learning are not only the cognitive aspect (knowledge) but also the affective aspect (especially in entrepreneurial learning). It should be specifically noted that the more positive a person's attitude is, the more positive the conative aspect will be. Therefore, entrepreneurship learning needs to be supported by student activities, such as student leadership exercises.

This research is intended to test the model. Therefore, the model needs to be tested to prove that the locus of control and tolerance of ambiguity affect entrepreneurial intention. Based on the calculation, the effect of locus of control (X1) and tolerance of ambiguity (X2) together on entrepreneurial intentions (Y) have obtained $R^2 = 0.169$, $F = 38.133$ ($P = 0.000$) with the significant test. This means that the locus of control and tolerance of ambiguity have an effect of 16.9% while the remaining 83.1% is influenced by other factors. This means that locus of control (X1) and tolerance of ambiguity (X2) have a positive effect on entrepreneurial intention (Y). Thus, the hypothesis that states the locus of control and the tolerance of ambiguity affect entrepreneurial intention can be accepted. The test results are shown in Table 6 as follows:

Table 6. Anova Test Result

Model	F	Sig	R	R Square
1	38.133	,000a	.412a	.169

The next stage is testing the magnitude of the effect of the locus of the control variable (X1) and tolerance of ambiguity (X2) on entrepreneurial intention (Y). Based on Table VI, the test results obtained $t = 5.152$, $p = 0.000$, which means that the effect is significant. This means that there is a positive influence of locus of control on entrepreneurial intentions of $Y = 45.117 + 0.492X_1$, meaning that the magnitude of locus of control on entrepreneurial intentions is if the locus of control is one (1), there will be an increase in entrepreneurial intention of 45,609; the more positive the locus of control, the higher the entrepreneurial intention.

The test results obtained $t = 3.388$, $p = 0.000$, which means that the effect is significant. This means that there

is a positive influence of tolerance of ambiguity on entrepreneurial intentions of $Y = 45.117 + 0.618X_1$. It means that the magnitude of tolerance of ambiguity on entrepreneurial intentions is if the amount of tolerance of ambiguity is one (1), there will be an increase in entrepreneurial intentions of 45,735; the more positive the tolerance for ambiguity, the higher the entrepreneurial intention. The detailed description is shown in table 7 as follows.

Table 7. The Effect of Locus of Control (X1) and Ambiguity Tolerance (X2) on Entrepreneurial Intentions (Y)

Variable Influence	Coefficient Regression	t count	Sig	Hypothesis Test
Locus of Control	.492	5.152	,000	H0 Rejected
Tolerance of Ambiguity	.618	3.388	,000	H0 Rejected

The results show that the highest locus of control indicator “work hard” is at 72.8% %. This means that the respondent has a high self-control personality that is felt by students. Likewise, the results of the study show that locus of control has a positive effect on entrepreneurial intention. This supports the TPB theory of [5] that locus of control has a positive effect on entrepreneurial intentions, meaning that respondents believe that their achievements depend on their behavior. Individuals consider that the achievement of goals or objectives depends more on their abilities and actions, rather than luck or the efforts of others [22]. This is also in line with the research conducted by some scholars [23]; [23]; [24] who stated that small entrepreneurs are more internally oriented than the population in general. This is also in line with [25] longitudinal study which showed a positive correlation between locus of control orientation and entrepreneurial success. In another study, [26] reinforced how locus of control distinguishes successful and unsuccessful entrepreneurs. In addition, [27] stated that internal control leads to a positive entrepreneurial attitude, and most students who accept entrepreneurial formation can develop higher levels of control skills and self-efficiency. Based on previous research exposure and hypothesis testing, it shows that the higher the level of control, the more positive the entrepreneurial intention.

The results show that the highest indicator of tolerance of ambiguity “determining priorities” is at the scale of 80%. This means that respondents feel the aspect of being able to think and express priorities in carrying out the work they face is important. Tolerance of ambiguity is positively related to entrepreneurial intention. This supports Ajzen's TPB theory [5] that tolerance of ambiguity for a prospective entrepreneur is an important factor since it supports the ability to deal with uncertainty. It is also highly important because business builders constantly make decisions by

considering conflicting information. Conflicts obtained from various unknown sources are significant factors that influence entrepreneurial intentions [15]. The importance of tolerance of ambiguity in creating new ventures is in line with the results of the study of [16] and correlated with entrepreneurship as conducted by [17] and [18] who found that tolerance of ambiguity had a positive impact on entrepreneurial intention among Dayak youth. Based on previous research exposure and hypothesis testing, it shows that the higher the tolerance of ambiguity, the more positive the entrepreneurial intention. Empirically, tolerance of ambiguity has the greatest influence on entrepreneurial intention, which is higher than locus of control. This is a finding that entrepreneurship intention is not only strengthened by locus of control, but also strengthened by other aspects of personality, namely locus of control.

The entrepreneurial intention of the gender factor is shown by statistical calculations using the independent sample t-test. The test was employed to see whether there is a similarity of variance between men and women through the F test for entrepreneurial intention, with the statistical hypothesis that “there is a difference in the average entrepreneurial intention of male and female students”. Based on calculations by using SPSS 23, the significance coefficient of the hypothesis is obtained. The difference between the average entrepreneurial intentions of male and female students is presented in Table VIII as follows.

Table 8. Free sample test of Entrepreneurial Intention from Gender

Independent Samples Test							
Levene's Test for Equality of Variances				t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Std. Error Dif
Score	Equal variances assumed	,162	,688	1,057	364	,291	,964
	Equal variances not assumed			1,053	254,25	,293	,968

From the test results, it is obtained a p-value of 0.688. Thus, the significance score is greater than 0.05. This means that H_0 is accepted. It can be interpreted that there is no significant difference in the entrepreneurial intention of male and female students. The results of this study contradict the studies conducted by [19], [28] [29], and [20]. The studies mostly argued that men were shown to have higher entrepreneurial intentions than women. This happens because of the condition factor as many

female students do business activities during teaching-learning activities.

4. CONCLUSIONS

Based on the results of the study, it can be concluded that descriptively the locus of control variable was in moderate condition, the ambiguity tolerance variable was in high condition, and the entrepreneurial intention variable was in high condition. Hypothesis testing showed that the locus of control and the tolerance of ambiguity had a positive and significant effect on entrepreneurial intention. There was no difference in entrepreneurial intention from the gender aspect between men and women. It is recommended to improve the indicators on the variables studied which are still low, namely the locus of control variable “experimentation”. It needs to be improved through increasing entrepreneurship practice activities on campus and increasing knowledge and skills. The indicator that needs to be improved from the tolerance of ambiguity variable is “identifying alternative” through increasing student organization activities in organizational management. Moreover, other researchers are advised to study the entrepreneurial intention of personality factors other than locus of control and tolerance of ambiguity.

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