# Applied of Statistics to Building Entrepreneurship Intention through Self Efficacy, Adversity Quotient, and Need for Achievement in Students of the Faculty of Economics and Business, Labuhanbatu University

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### Abstract

The purpose of this study is to find out the effect of self-efficiency, adversity quotient and need for achievement in building entrepreneurial intentions in students. Collecting data in this study through research with a type of quantitative research in the form of distributing questionnaires. This research uses descriptive analysis, classical assumption test, multiple linear regression test and partial test. Respondents in this study were 65 students of the Faculty of Economics and Business, Labuhanbatu University. The results of this study state that self-efficacy, adversity quotient and need for achievement have a positive and significant effect on building entrepreneurial intentions in students of the Faculty of Economics and Business, Labuhanbatu University. The coefficient of determination obtained is 0.678, it indicates that self-efficacy, adversity quotient and need for achievement owned by students of the Faculty of Economics and Business, Labuhanbatu University, have presented a contribution of 67.8% in building entrepreneurial intentions. The remaining 32.2% was used as a contribution from outside this study which was not examined by researchers.

Keywords: self efficacy, adversity quotient, need for achievement.

# 1. Introduction

In this modern era, entrepreneurship is the main attraction in dealing with the Indonesian economy. The lack of entrepreneurial intention among young people, especially students, has triggered a decline in interest in entrepreneurship. Entrepreneurs must have a courageous attitude and a strong mentality in taking steps to rise on their own in setting up a business. But the fear of failure always surrounds one's interest in entrepreneurship. This context is due to the trigger of student self-efficiency which is still not ideal. Confidence in oneself to be able to complete the assigned task tends to decrease due to one's lack of expertise in business strategy. Adversity quotient (AQ) is also a trigger in entrepreneurship (Nasution et al., 2022).

Entrepreneurship is the process of starting and running a business, and it requires a high level of motivation, determination, and resilience (Pratiwi, 2021). One key factor that influences an individual's intention to become an entrepreneur is their level of self-efficacy, or their belief in their own abilities to succeed. Self-efficacy plays a critical role in an individual's decision to take on the challenges and risks associated with entrepreneurship (Setyowati et al., 2023).

In addition to self-efficacy, an individual's adversity quotient (AQ) is another important factor that can influence their entrepreneurship intention. AQ is a measure of an individual's ability to overcome obstacles and challenges in their life, and it is closely related to their level of resilience and perseverance. Individuals with a high AQ are more likely to see obstacles as opportunities for growth, rather than as insurmountable barriers, and are therefore more likely to pursue entrepreneurial ventures (Pohan, 2022).

Finally, an individual's need for achievement is another important factor that can influence their entrepreneurship intention need for achievement refers to an individual's desire to accomplish goals and achieve success. Individuals with a high N-Ach are more likely to take on challenging tasks and pursue goals aggressively, which can make them well-suited for entrepreneurship (Prayoga & Pohan, 2022).

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The level of intelligence will be a benchmark in carrying out tasks where if the AQ is relatively low it will make it difficult for someone to overcome difficulties. In deciding what steps to take, it will confuse him to do so. The nature of easily giving up and surrender to what will happen is the main factor for the adversity quotient to be low. The next trigger is the need for achievement that arises from within. The attitude of self-confidence that is owned will be a big influence in entrepreneurship. However, this is different from the feeling of insecurity that will boomerang within us to achieve success (Sumantri et al., 2013).

In the explanation above, the formulation of the problem in this study can be recapitulated, namely how do students actually describe self-efficiency, adversity quotient and need for achievement? The formulation of the next problem is whether partially and simultaneously self-efficiency, adversity quotient and need for achievement affect entrepreneurial intentions? The last formulation of the problem is how much contribution is generated by self efficient, adversity quotient and need for achievement in forming entrepreneurial intentions (Sumantri et al., 2013).

In accordance with the formulation of the problem above, the objectives of this study can be described, namely to find out the true picture of self-efficiency, adversity quotient and need for achievement in students, to determine the partial and simultaneous effect of self-efficiency, adversity quotient, and need for achievement on entrepreneurial intentions, and finally to find out how much contribution is generated by self efficient, adversity quotient and need for achievement in forming entrepreneurial intentions (Limbong et al., 2021).

# 2. Literature Review

## 2.1. Entrepreneurial Intention

Entrepreneurial intention (Wijaya et al., 2015)is the will of a person to carry out entrepreneurial behavior in accordance with the will from within him. This is motivated by encouragement from certain sources to do something. This intention illustrates the desire to perform a consciously recognized action. Entrepreneurial Intention Indicators according to (Hendrawan & Siren, 2017), there are three: will, faith, and persistence.

# 2.2. Self-Efficacy

Self-efficacy (Unud, 2016) is a person's belief in completing a task based on his abilities. Capabilities that will bring benefits from every condition and situation to be overcome. This self-efficacious attitude can provide an assessment for ourselves about whether or not we can do something. According to (Study et al., 2012), there are three indicators of self-efficacy namely: generality, magnitude and strength.

# 2.3. Adversity Quotient

Adversity quotient (Merianah, 2019)is the skill of someone thinking to take steps in solving a problem that is a little wrong will lead to a downturn. So high intelligence is needed to be able to get through challenges and achieve success. Adversity quotient indicators according to (Nursidiq, 2021), namely: control, ownership and roach.

# 2.4. Need For Achievement

Need for achievement (Fatika et al., 2022) is the behavior of someone who tries to show his abilities that he believes are more proficient and skilled as proof of confidence in order to achieve success. Someone with a high need for achievement will usually choose objects that are complicated and have a higher risk. According to the need for achievement indicators (Belay, 2022), namely: need, willingness and ability.

# 3. Method

Researchers conducted research on the Labuhanbatu University campus which is located at Jalan Sisingamangaraja No. 126 A KM 3.5 Aek Tapa, Bakaran Batu, Kab. Labuhanbatu, North Sumatra. The population in this study were all students of the Faculty of Economics and Business. While the sample in this study was the final semester students of the Faculty of Economics and Business with 65 respondents. This study uses a qualitative data approach, namely an approach through direct surveys to the field and a qualitative approach by distributing questionnaires. Testing the hypothesis in this study with the help of the IBM SPSS Statistics application.

# 4. Results and Discussion

# 4.1. Instrument Validity Results

Table 1. Instrument Validity Test Results

Variable	Indicator	Value rcount validity	rtable	Information
	Question 1	0.746	0.202	Valid
Entrepreneurial Intention (Y)	Question 2	0.887	0.202	Valid
	Question 3	0.816	0.202	Valid
	Question 1	0.855	0.202	Valid
Self Efficacy (X1)	Question 2	0.931	0.202	Valid
	Question 3	0.864	0.202	Valid
	Question 1	0.841	0.202	Valid
Adversity Quotient (X2)	Question 2	0.800	0.202	Valid
	Question 3	0.776	0.202	Valid
	Question 1	0.807	0.202	Valid
Need For Achievement (X3)	Question 2	0.843	0.202	Valid
	Question 3	0.830	0.202	Valid

In accordance with the results of the determination of the validity test of the instrument, it was revealed that all the questions asked to the respondents had a value far the rtable of 0.202. It indicates that the whole question is declared valid.

# 4.2. Instrument Reliability Test

Table 2. Instrument Reliability Results

Variable	Reliability rcount value	Critical Point	Information
Entrepreneurial Intention (Y)	0.832	0.6	Reliable
Self Efficacy (X1)	0.857	0.6	Reliable
Adversity Quotient (X2)	0.829	0.6	Reliable
Need For Achievement (X3)	0.836	0.6	Reliable

According to the results of the determination of the instrument reliability test (Table 2), it states that the value of rount reliability is greater than the crisis point of 0.6, which means that the values of the four variables can be declared reliable.

# 4.3. Classical Assumption Test

**Table 3.** Classical Assumption Results

# One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals
N		65
Manual Danamatana I	Means	0E-7
Normal Parameters, b	std. Deviation	.76138816
	absolute	.221
Most Extreme Differences	Positive	.176
	Negative	221
Kolmogorov-Smirnov Z	-	1,783
asymp. Sig. (2-tailed)		.336

a. Test distribution is Normal.

In the stimulated normality test from table 3, it shows a probability value (sig) of 0.336 > 0.1 which indicates that the data used in this study has a normal distribution, in other words, data normalization is fulfilled.

b. Calculated from data.

## 4.4. Heterocedastisity Test

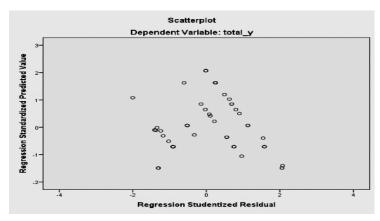


Fig. 1. Heterocedastisity Results.

In accordance with thethe results of the heteroscedasticity test (Figure 1), that the heteroscedasticity test uses the scatter plot graphic method. Based on the picture above, it can be seen that the dots form a certain pattern and spread above and below the zero (0) on the Y axis, so that in the regression model to be assembled there are no heteroscedasticity violations. It can be illustrated that the data examined by the author did not find any heteroscedasticity problems.

# 4.5. Results of Multiple Linear Regression Equations

**Table 4.** Results of Multiple Linear Regression Equations

# Coefficients<sup>a</sup>

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	std. Error	Betas		
	(Constant)	5,403	1,396		3,870	.000
1	Self_Efficacy	.285	.103	.104	1823	024
	Adversity_Quotient	.267	.127	.283	2.103	040
	Need_For_Achievement	.193	099	.266	1952	056

a. Dependent Variable: Entrepreneurial Intention

Based on Table 4, the multiple linear regression equation model can be described as follows:

$$Y = 5.403 + 0.285X1 + 0.267X2 + 0.193X3 + e$$

The multiple regression equation is described as follows:

- a) Constant (a) is positive, namely 5.403. This value indicates a positive or unidirectional influence between the independent variable and the dependent variable. This value states that if the variable self-efficacy (X1), adversity quotient (X2), and need for achievement (X3) is 0 or does not change, then the entrepreneurial intention is 5.403.
- b) The coefficient X1 (b1) has a value of 0.285. This value states that if the self-efficacy variable (X1) increases by one unit, the entrepreneurial intention will increase by 0.285.
- c) The coefficient X2 (b2) has a value of 0.267. This value states that if the adversity quotient variable (X2) increases by one unit, the entrepreneurial intention will increase by 0.267.
- d) The coefficient X3 (b3) has a value of 0.193. This value states that if the variable need for achievement (X3) increases by one unit, the entrepreneurial intention will increase by 0.193.

### 4.6. Partial Test

The t test is believed to be a material to prove that each independent variable has a partial or no effect on the dependent variable by comparing the tount obtained from SPSS and the value of ttable =  $t (\alpha/2; nk-1) = t (0.1/2; 65 - 4-1) = (0.05; 60) = 1.670$ .

The decision making criteria are:

- H0 is accepted if tcount< t table at  $\alpha = 0.05$
- Ha is accepted if thought the transfer at  $\alpha = 0.05$

**Table 5.** Results of Multiple Linear Regression Equations

# Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	std. Error	Betas		
1	(Constant)	5,403	1,396		3,870	.000
	Self_Efficacy	.285	.103	.104	1823	024
	Adversity_Quotient	.267	.127	.283	2.103	040
	Need_For_Achievement	.193	099	.266	1952	056

a. Dependent Variable: Entrepreneurial Intention

In line with the results of the table 5, it is broken down as follows:

- a) In the self-efficacy variable, there is a tount value of 1.823 and a significant level of 0.024. That way the tount (1.823) > ttable (1.670) with a significant level of 0.024 < 0.1. This means that partially self-efficacy has a positive and significant effect on building entrepreneurial intentions in students.
- b) In the adversity quotient variable, there is a tount value of 2.103 and a significant level of 0.040. That way the tount (2.103) > ttable (1.670) with a significant level of 0.040 <0.1. This means that partially the adversity quotient has a positive and significant effect on building entrepreneurial intentions in students.
- c) In the need for achievement variable, there is a tount value of 1.952 and a significant level of 0.056. That way the tount (1.952) > ttable (1.670) with a significant level of 0.056 <0.1. This means that partially the need for achievement has a positive and significant effect on building entrepreneurial intentions in students.

# 4.7. Coefficient of Determination

Table 6. Coefficient of Determination

# Summary model<sup>b</sup>

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.833a	.693	.678	.719

a. Predictors: (Constant), Need\_For\_Achievement, Self\_Efficacy, Adversity\_Quotient

With regard to the Table 6, analyzed from the Adjusted R Square column, it can be seen that the value of R2 is 0.678. Regarding the values listed, it means that the independent variables in this study actually have an influence on the dependent variable which is 67.8%. The remainder of this value, namely 32.2%, is used as the influence of variables outside this study.

# 5. Conclusion

From the results of the analysis and discussion that have been described, the conclusions of this study can be elaborated, namely:

a) the multiple linear regression equation illustrated is as follows: Y = 5.403 + 0.285X1 + 0.267X2 + 0.193X3 + e. So from the results of this equation it defines that self-efficacy, adversity quotient and need for achievement possessed by students have a positive effect on building entrepreneurial intentions,

b. Dependent Variable: total\_y

- b) self efficacy partially has a positive and significant effect on building entrepreneurial intentions in students with tcount (1.823) > ttable (1.670) and a significant level of 0.024 < 0.1,
- c) adversity quotient partially has a positive and significant effect on building entrepreneurial intentions in students with tcount (2.103) > ttable (1.670) and a significant level of 0.040 < 0.1,
- d) need for achievement partially has a positive and significant effect on building entrepreneurial intentions in students with tcount (1.952) > ttable (1.670) and a significant level of 0.056 < 0.1,
- e) the ability of self-efficacy, adversity quotient and need for achievement possessed by students of the Faculty of Economics and Business, Labuhanbatu University, has presented a contribution of 67.8% in building entrepreneurial intentions. The remaining 32.2% was used as a contribution from outside this study which was not examined by researchers.

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