

The Role of Mindset on Adversity Quotient in Psychology Students at a Private University

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Abstract: In college life, students will always face various obstacles and difficulties, both academic and non-academic, which sometimes if they cannot overcome, will make it difficult for them to withstand. Everyone has a different way of dealing with difficulties. However, this striking difference makes the researchers classify students into two categories based on how they solve problems: the unyielding and the desperate. What distinguishes these differences in behavior is the type of Mindset. One way to measure unyielding and desperate behaviors is the Adversity Quotient, which according to Stoltz, is a good predictor of success. This study aims to examine the role of Mindset on Adversity Quotient in psychology students at the university "X". The assumption or hypothesis in this study is that mindset has a role in predicting the Adversity Quotient level of students. This quantitative predictive study will be conducted on 163 male and female students of the "X" university, aged 18 to 25 years majoring in psychology. Data were collected using a stratified random sampling technique. The results of the analysis show that the Growth Mindset has a contribution of 9.6% to the Adversity Quotient (R Square 0.096) with a positive correlation ($R = 0.310$). On the other hand, the Fixed Mindset is not proven to play a role as a predictor of Adversity Quotient ($\text{Sig} > 0.05$). Therefore, this study concludes that one way to improve students' ability to survive difficulties or challenges is to train themselves to develop a growth mindset.

1 INTRODUCTION

In college life, students will always face various obstacles and difficulties, both academic and non-academic. As someone who studies at the university level, college students must be more responsible for themselves. They will also face various kinds of obstacles which sometimes if they cannot overcome, will make it difficult for them to withstand. Changes in learning methods, organization activities, more workloads, courses that must be retaken, and demands to fulfill certain credits to graduate can make students feel stressed and overwhelmed. The researcher, as a student, experienced obstacles during the lecture period too and on several occasions, saw a phenomenon that occurred to college students when facing these

difficulties.

The phenomenon found in "X" University psychology students is that several students complain about physical and psychological problems caused by online learning (Sulaeman, 2022). The survey conducted on 174 students showed that 29.9% of students admitted to having physical problems during online lectures, and the percentage who claimed to experience psychological problems during online lectures was 48% of students. The leading cause of the obstacles faced is that students receive many assignments. However, the learning process was considered not optimal, so students did not understand the material. In addition to stress, some students also complained of anxiety, procrastination, demotivation, and sleep disturbances. As a result, as many as 12% or about 78 psychology students at "X" University have

low academic performance and are categorized as underachiever students.

Everyone has a different way of dealing with difficulties. However, this striking difference makes the researchers classify students into two categories based on how they solve problems: the trying student group and the resigned student group. This group difference is due to the researcher observing that there are students who try to overcome these difficulties. On the other hand, some students seem resigned to their situation and decide not to do anything because they feel unable. Obstacles that these students cannot overcome will cause pressure, and if they cannot survive, they tend to end up expelled, dropping out of college, or resigning. Data in 2019 showed that the number of students who graduated was recorded at 1,535,074 people, while the number of dropouts was 602,208. The numbers included are extensive, with a ratio of 2:5 (PDDikti, 2020).

One way to measure unyielding behavior or desperate behavior is the Adversity Quotient. An adversity Quotient is a form of intelligence that can explain how well we can survive adversity and the ability to overcome it (Stoltz, 1997). In his book *Adversity Quotient: Turning Obstacles into Opportunities*, Stoltz explains that the adversity quotient is a good predictor of success. It can predict a person's ability to overcome difficulties and predict individuals who will exceed expectations or fail. Stoltz classifies individuals based on three types of levels when a person faces difficulties: quitters, campers, and climbers. Quitters are people who decide to give up, avoid obligations, back off and quit. Campers are people who have put in the effort to a certain extent and feel that it is sufficient, comfortable, and satisfying. Meanwhile, climbers are people who always try and are motivated to accept challenges. According to Stoltz, four aspects of the Adversity Quotient are control, origin and ownership, reach, and endurance. From the description of the phenomenon above, it is concluded that psychology students at the University of "X" will be required to have a high adversity quotient to overcome the difficulties they face to succeed in academic studies.

According to the researcher, one of the factors that cause differences in behavior in dealing with obstacles is the mindset or mindset. For decades, Dweck's research has shown that one's view of oneself dramatically influences one's way of life. It can determine if a person can achieve a desire or thing of value to him. In her book *Mindset: The New Psychology of Success*, Dweck (2016) states that mindset is a belief

in which strong beliefs in one's mind can influence behavior. Dweck divides the mindset into two types, growth mindset and fixed mindset. A growth mindset is based on the belief that an individual's basic qualities can be developed through one's efforts and strategies, and help from others. Individuals with a growth mindset believe that one's true potential is unknown and unknowable. Each individual can develop and change through perseverance and experience regardless of differences in terms such as abilities, talents, interests, and temperaments. A fixed mindset is based on the belief that the basic qualities of an individual are permanent and cannot be changed. Individuals with a fixed mindset believe that if someone has a certain amount of intelligence, a particular personality, and a specific moral character, they will continue to be driven to prove themselves.

From the description above, it is concluded that individuals with a growth mindset tend to want to develop and expand themselves by learning new things. An effort is what makes someone intelligent and talented. For the growth mindset, not growing is a failure. It means individuals are not fulfilling their true potential by not achieving the things that are of value to them. While individuals with a fixed mindset usually tend to validate themselves. Success is about proving that they are smart or talented. Setbacks are failures. Poor grades, losing a race and getting fired and rejected mean they are not smart or talented. For fixed-mindset individuals, the effort is a bad thing. Just like a failure, effort means they are neither intelligent nor talented. If they are talented, they do not have to try.

When facing an obstacle in lectures, for example, failing to pass a course, students with a fixed mindset will feel that they have failed and are unable and do not try to do anything. This does not mean they have low self-esteem or are pessimistic. On the contrary, they will feel great and optimistic, like people with a growth mindset, when they are not faced with failure. On the other hand, even in a stressful situation, individuals with a growth mindset do not label themselves as failing or giving up. On the contrary, they are willing to take risks, face challenges, and continue to strive in these challenges so that students with a growth mindset will think to study harder so that there will be no more failed courses in the future. It can be concluded that students with a Growth Mindset will consider abilities as skills that can be honed. Meanwhile, those who think intelligence is inherent and cannot be changed will make less effort to achieve results and have a fixed mindset

(Hochanadel and Finamore, 2015). This statement is in line with the findings of Murner and Hessler (2020), which showed that individuals with a growth mindset would try longer before giving up on unsolvable problems than those with a fixed mindset.

This study aims to determine the role of Mindset on Adversity Quotient in psychology students at the University of "X". The assumption or hypothesis in this study is the role of Mindset in predicting the Adversity Quotient level of students. Based on previous research by Yazon, Ang-Manaig, and Adrian (2021), it is concluded that there is a significant correlation between Mindset and Adversity Quotient. Furthermore, several other studies related to Mindset and Adversity Quotient, namely Chrisantiana and Sembiring (2017). They examined the Effect of Growth and Fixed Mindset on Grit on Psychology Students at University "X" Bandung. They concluded that the growth mindset significantly affected Grit (31, 8%) and had a significant positive correlation. A Fixed Mindset also significantly affects Grit (23.9%) but has a significant negative correlation. A correlational study conducted by Ramadhani (2020) entitled The Relationship between Adversity Quotient and Achievement Motivation in Students Taking SPP-SKS at SMPN 1 Sedati Sidoarjo concluded that there was a positive and significant correlation (0.697) between Adversity Quotient and Achievement Motivation. Although the variables in the research above intersect, these two studies are correlational, so it is not certain whether there is a role between these variables.

2 METHODS

This study examined the role of Mindset and the level of Adversity Quotient in Psychology students at "X" University. Therefore, this research design is predictive and quantitative. The role test was carried out to see the role of variable X on variable Y. This study's Predictor Variable (X Variable) was Mindset, and the Criterion Variable (Y Variable) was Adversity Quotient. Data collection was carried out using a questionnaire survey method using the google form platform.

The total population in this study was 647 psychology students at the "X" University. The sample selection was a probability-stratified random sampling technique. The researcher decided to use the sampling technique because every stratum of "X" University psychology students had the same opportunity to participate in the study, so the number of samples was

evenly distributed across all strata. The participants in this research were 163 active students from the "X" University for the 2021/2022 academic year. Male and female, 18 to 25 years old, majoring in psychology. The researcher divided the participants into four strata: the Class of 2022, 2023, 2024, and 2025.

The Mindset measuring instrument used is the Dweck Mindset Instrument (DMI). This measuring tool was developed by Dweck in 2008. This Mindset measuring tool consists of 16 items divided into eight fixed mindset items and eight growth mindset items. Participants rated themselves on the items using a six-point scale ranging from strongly disagree to agree strongly. Assessment for the growth mindset item is done by giving 0 points for the answer "Strongly disagree"; 1 point for the answer "Disagree"; 2 points for the answer "Simply Disagree"; 3 points for the answer "Simply Agree"; 4 points for the answer "Agree"; and 5 points for the answer "Strongly Agree". While the assessment for the fixed mindset item applies the opposite, namely 0 points for the "Strongly Agree" answer to 5 points for the "Strongly Disagree" answer. Scoring is done by adding up the points from all items. Categories 61-80 points include "Strong Growth Mindset"; The 41-60 point categories include "Growth Mindset with some Fixed Ideas"; The 21-40 point categories include "Fixed Mindset with some Growth Ideas"; and Category 0-20 points including "Strong Fixed Mindset".

The Adversity Quotient measuring instrument used is the Adversity Response Profile (ARP). This measuring tool was developed by Stoltz in 1992. This instrument can assess the Adversity Quotient of respondents through 4 indicators, namely Control, Ownership, Reach, and Endurance. Each dimension consists of 5 items with a total of 20 items. Participants rated themselves on the items using a semantic differential scale of 1 to 5. A scale of 1 represents a low Adversity Quotient to a scale of 5 represents a high Adversity Quotient. Scoring is done by adding up the total value of each item and then multiplying by two. The higher the score owned by the participants, the higher the Adversity Quotient value they have.

Before the data collection process, the researcher divided the categories of participants into four strata based on generation, namely 2022, 2023, 2024, and 2025. After the strata placement, the researcher determined the sample sizes taken from each stratum, about 40 participants. Then, in each stratum, the researcher randomly selected participants using a simple

random sampling method until the number of participants was reached.

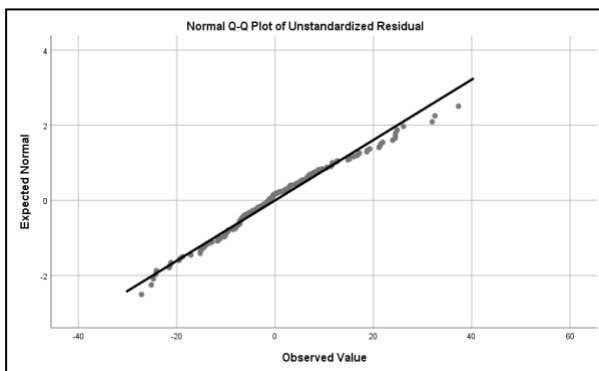
The collected data is processed using JASP, Ms. Excel, and SPSS software. The researcher first conducted several classical assumption tests to ensure the regression model was valid and unbiased. Next, the analysis carried out is normality, linearity, and heteroscedasticity tests. Finally, hypothesis testing was carried out using a simple linear regression method. The researcher also conducted a descriptive analysis to obtain additional information about the Mindset and Adversity Quotient descriptions of Psychology University "X" students.

The linearity test was conducted to see the linear relationship between the predictor and criterion variables in the regression model. In table 1, the Deviation from the Linearity value shows significance at 0.630 (Sig>0.05). Therefore, it can be concluded that Mindset and Adversity Quotient have a linear relationship.

Table 1. Linearity Test

No	Variable	Between Groups	F	Sig
1	Adversity Quotient*Mindset	Deviation from Linearity	.906	.630

Figure 1. Unstandardized Residual Normality Graph

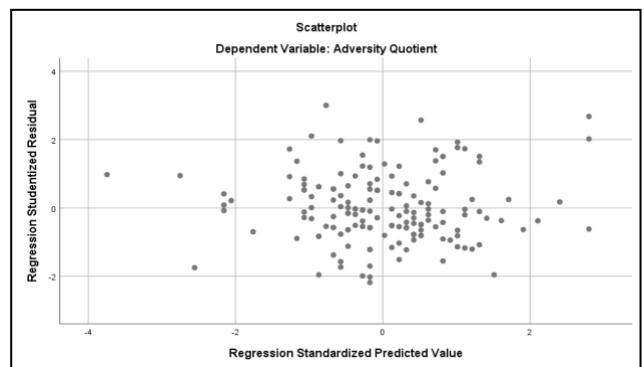


A normality test is conducted to see whether the data is distributed normally. The researcher tested the normality of each variable and the unstandardized residuals' normality to see the data distribution based on the regression model. Based on Figure 1, it can be seen that the distribution of residual data follows a straight line, so it can be stated that the regression model above meets the assumption of normality, and the linear regression analysis can be performed.

A heteroscedasticity test was conducted to test

whether residual variance was similar to the regression model. A good regression model must meet the requirements of a homogeneous residual variance (Homoscedasticity). Based on Figure 2, the data are spread evenly above and below point 0 on the X- and Y-axis, forming no visible pattern. So it can be concluded that the residual variance in the regression model is homogeneous, so there are no heteroscedasticity symptoms.

Figure 2. Heteroscedasticity Scatterplot Graph



The reliability test results on the Dweck Mindset Instrument showed high reliability ($\alpha = 0.884$). Based on the item-rest correlation analysis on the adversity quotient measuring instrument, the researcher removed the Control dimension, which consisted of 5 items (item numbers 1, 7, 13, 15, 17). This is because the value of the item-rest correlation dimension is too low. Before the Control dimension was removed, the Cronbach Alpha value of the Adversity Response Profile measuring instrument was 0.660. After removing this dimension, the analysis showed that the measuring instrument had higher reliability than before ($\alpha = 0.705$). The advance validity test was conducted by peer review, and the content validity test was carried out based on the supervisor's assessment of the items.

Table 2. Demographic Data

Demographic	Details	N	%
Age (years old)	18	20	12.3
	19	32	19.6
	20	38	23.3
	21	45	27.6
	22	21	12.9
	23	5	3.1
	24	2	1.2
Campus	Bekasi	26	16
	Kemanggisan	137	84
Class	2022	42	25.8
	2023	44	27.0
	2024	39	23.9
	2025	38	23.3
Total		163	100

3 RESULTS

A total Of 163 participants were randomly selected from a population of 647. Participants are active University "X" students for the 2021/2022 academic year. Participants were divided into four strata based on generation, namely 2022, 2023, 2024, and 2025. Table 2 shows the demographics of the participants in this study. Participants are teenagers with an age range between 18-24 years. The average age of participants in this study was 20 years. More participants came from the Kemanggisan campus (84%) compared to the Bekasi campus (16%). This is because no batches of 2022 and 2023 carry out the lecture process on the Bekasi campus. The 163 participants were spread relatively evenly across each stratum. The class with the highest number of participants is 2023 (27%), and the batch with the least number of participants is 2025 (23.3%).

Table 3 shows a descriptive analysis of the Mindset variable in "X" University Psychology Students. Based on the output of the DMI measuring instrument, a comparison of the number of students between Growth and Fixed Mindset shows that the Growth Mindset student group is more than the Fixed Mindset student group. The percentage of students in the Strong Growth Mindset category is 16%, students in the Growth Mindset category are 76%, students in the Fixed Mindset category are 7.4%, and students with a Strong Fixed Mindset are 0.6%. Based on the standardization of the Mindset average value in each batch, it can be concluded that most "X" University Psychology students are in the Growth Mindset category.

Table 4 shows a descriptive analysis of the Adversity Quotient variable on "X" University Psychology Students. The average value obtained is 105.89, with a standard deviation of 13.112. Based on

this number, the researcher divided the Adversity Quotient of the participants into High, Low, and Moderate. In the Psychology Department of "X" University, 73% of students have a Moderate Adversity Quotient, 14% are in the High Adversity Quotient category, and 13% are in the Low Adversity Quotient category. So it can be concluded that most Psychology students at the University of "X" have a Moderate Adversity Quotient.

Table 3 Subjects Mindset by Class

Class	Mindset Category	Number
2022	Strong Fixed Mindset	1
	Fixed Mindset	6
	Growth Mindset	30
	Strong Growth Mindset	5
2023	Strong Fixed Mindset	0
	Fixed Mindset	2
	Growth Mindset	31
	Strong Growth Mindset	11
2024	Strong Fixed Mindset	0
	Fixed Mindset	2
	Growth Mindset	33
	Strong Growth Mindset	4
2025	Strong Fixed Mindset	0
	Fixed Mindset	2
	Growth Mindset	30
	Strong Growth Mindset	6
Total		163

Table 4 Subjects Adversity Quotient by Class

Class	Adversity Quotient Category	Number
2022	Low	7
	Moderate	26
	High	9
2023	Low	3
	Moderate	35
	High	6
2024	Low	5
	Moderate	31
	High	3
2025	Low	6
	Moderate	27
	High	5
Total		163

Table 5 Hypothesis Test Results

Variable	R	R ²	F	Sig
Growth Mindset	.310	.096	15.790	.000
Fixed Mindset	.335	.112	1.391	.263

Table 5 shows the result of hypothesis testing using the Linear Regression method on the Growth Mindset and Adversity Quotient variables, the correlation between the two variables is quite significant ($R = 0.310$) with a coefficient of determination of 0.096. So it can be concluded that a 9.6% Growth Mindset has a role in the Adversity Quotient. The results of the F test ($1,148 = 15,790$; Sig. < 0.05) proves that the Growth Mindset acts as a predictor of the Adversity Quotient. Based on these results, it is stated that $H0.1$ is rejected and $H1.1$ accepted, namely the role of Growth Mindset on Adversity Quotient at Psychology University "X" students. The linear equation to predict the Adversity Quotient based on the Growth Mindset is as follows:

$$AQ = 80,026 + (0,491 * \text{Growth Mindset})$$

This means that 80,026 is a constant value of the Adversity Quotient when the Growth Mindset does not influence it. Then the value of 0.491 means that for every 1% increase in the Growth Mindset, the Adversity Quotient will increase by 0.491. The significance value on the Fixed Mindset is 0.263 (Sig > 0.05), so $H1.2$ is rejected and $H0.2$ is accepted. So it can be stated that the Fixed Mindset is not proven to predict the Adversity Quotient in Psychology University "X" students.

4 DISCUSSION

The analysis results in testing the first hypothesis ($H1.1$) show that the Growth Mindset is proven to have a role in the Adversity Quotient of psychology students at "X" University. So it can be concluded that the more the student's Growth Mindset, the higher the Adversity Quotient score. The contribution of the Growth Mindset to AQ is 9.6%. This means that 90.4% of other factors not explained in this study contribute to the Adversity Quotient. However, research conducted by Syarafina et al. (2019), shows that other variables such as optimism and self-awareness can also affect a person's Adversity Quotient.

Although students with a Growth Mindset are assumed to have a higher AQ level, it does not mean that

students with a Fixed Mindset have a low AQ level. This is because the second hypothesis test ($H1.2$) shows that $H0$ is accepted or Fixed Mindset did not play a role in the Adversity Quotient. So the second conclusion in this study is that the Growth Mindset contributes significantly to AQ while the Fixed Mindset is not proven to contribute to AQ. Dweck (2016) explains that what distinguishes the Fixed and Growth Mindset is that the Fixed Mindset hinders development and change, while the Growth Mindset is the starting point for change. However, having a growth mindset does not mean individuals always want to achieve something. Mindset tells them that their skills can be developed. On the other hand, People with a Fixed Mindset prefer success without effort, and This is because it is the best way to prove themselves. Therefore, Fixed Mindset becomes insignificant in predicting Adversity Quotient.

Related to previous research by Yazon et al. (2021), this study shows findings that support the results of previous studies where there is a positive correlation between Mindset and Adversity Quotient. This study also provides an overview of the Mindset and Adversity Quotient of psychology students at "X" University. Descriptive analysis shows that the student's Mindset is in the Growth Mindset category. Therefore, it can be concluded that psychology students at "X" University see their talents, abilities, or intelligence as the starting point and that their true potential can be developed through effort and hard work. However, in some instances or situations, there are still fixed doubts. Participants also obtained a Moderate score on the Adversity Quotient, which can be interpreted that the "X" University Psychology student being in the Campers category according to Stoltz's classification. Students tend to be able to survive difficulties and have the motivation to overcome these challenges. However, they will stop when they are bored or boredom point. Campers' group easily feels safe, comfortable, and satisfied when they have tried to a certain point.

The benefit obtained through this research is the finding of how big the role of Growth and Fixed Mindset on Adversity Quotient, which information was not found in previous research. In addition, the researcher also obtained additional information regarding the description of Mindset and Adversity Quotient from Psychology students of "X" University. Nevertheless, on the other hand, there are also weaknesses and limitations in this study. According to the researcher, one of the limitations that had an impact on the results of this study was the low validity of several items on the Adversity Quotient

measuring instrument, so the researchers removed one dimension (Control), which consisted of five items. The non-representation of one dimension in the measurement of the Adversity Quotient variable can undoubtedly affect the level of AQ obtained by Psychology University "X" students. In addition, the number of participants from the Fixed Mindset group in this study is minimal compared to the Growth Mindset group, so the difference in the amount of data that is too many between the Growth Mindset and Fixed Mindset student groups causes the Fixed Mindset group to be under-represented.

CONCLUSION

This study concludes that one way to improve students' ability to survive difficulties or challenges is to train themselves to develop a growth mindset (Growth Mindset). This is because the growth mindset has a significant role in predicting the adversity quotient. However, the fixed mindset has not been proven to play a role in the adversity quotient. Then the university psychology student "X" has a growth-type mindset with a moderate score on the adversity quotient, meaning that students survive difficulties and tend to overcome obstacles.

Some researchers' suggestions for further research are to ensure that all measuring instruments used have met the validity so that the measured variables will be more accurate and represent each dimension in the variable. To obtain items with a high validity value, further researchers can obtain the assistance of linguists in translating measuring instruments and carry out an expert judgment process to obtain expert judgments regarding the variables being measured. In addition, the next researcher can divide the participants into two groups, namely the Growth Mindset group and the Fixed Mindset group, provided that the proportion of participants in the two groups is balanced. This is done so that there is no inequality in the number of participants in Growth and Fixed Mindset.

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