


# Analysis Of Adversity Quotient On Problem Solving Skills Of Students Guidance and Counseling FKIP Sriwijaya University

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**ABSTRACT:** *This research is based on the development of students not always running smoothly, in the development, students experiencing obstacles and difficulty. The purpose of the research is to produce and analyze the data of adversity quotient and problem solving skill and see the effect of adversity quotient on problem solving skill of Guidance and Counseling Students, Sriwijaya University. This type of research is quantitative research using survey methods as well as data analysis techniques using regression analysis. The sample in this study of 142 students consisted of three generations of 2017, 2018 and 2019 Guidance and Counseling Study Program, Faculty of Teacher Training and Education Sriwijaya University. Sampling techniques using Proportional Random Sampling. The instruments in this study used likert scale which has been tested validity and reliability. The conclusion is that there is an influence adversity quotient on problem solving skill of Faculty of Teacher Training and Education students of Sriwijaya University, its mean the higher adversity quotient of students in then the higher the problem solving skill owned by students of Guidance and Counseling Study Program, Faculty of Teacher Training and Education, Sriwijaya University. The implications of this research are used as input in the creation of guidance and counseling service programs.*

**KEYWORDS:** *management stress, emotional management, student anxiety*

## INTRODUCTION

The educational process not only develops intellectual abilities, but also develops traits that support the formation of independent personalities. This refers to efforts to establish the personality of optimal learners, so as to succeed in education and success in achieving their goals or life goals. The ability of students to process information and apply their knowledge into new conditions will help students to be able to direct students to be able to solve the problems faced. Problem solving skills are one of the competencies that students are trying to achieve in the education process. In problem solving it takes the ability to be able to think and analyze every possibility that can be a solution. Problem solving skills are one of the competencies that students are trying to achieve in the education process. In problem solving it takes the ability to be able to think and analyze every

possibility that can be a solution. In this case, individual intelligence is necessary to be able to go through difficult conditions or challenges and constraints that exist in the process of life. An individual's ability to overcome difficulties and obstacles is one form of intelligence that called *adversity quotient*.

Stoltz (2009) explains *that adversity quotient (AQ)* is a person's intelligence in the face of obstacles or difficulties on a regular basis. Adversity quotient helps individuals strengthen their abilities and perseverance in the face of the challenges of daily life. One's intelligence in dealing with obstacles and *difficulties (adversity quotient)* is closely related to the ability of individuals in *solving problems*. Stoltz (2009) explains a person's success in living life is primarily determined by the level of quotient adversity. The adversity quotient manifests in three forms: 1) A new conceptual framework for understanding and improving all facets of success, 2) A measure for knowing a person's response to adversity, and 3) A set of tools to improve a person's response to adversity. When individuals have a positive Adversity Quotient (AQ) individuals will believe in their own abilities and strengths, so are able to take consideration and be independent in all their actions. Because in the absence of *positive adversity quotient (AQ)* individuals will hesitate in any action not even dare to do anything.

Napi's research (2019) entitled *Adversity Quotient Student Analysis in Solving Physics Problems On Dynamic Electrical Materials* that students who have adversity quotient can help in the process of solving physics problems. Each student has a *different adversity quotient* profile, enabling different physics problem solving skills. High adversity Quotient in students influences good physics problem solving skills. Students with *high quotient adversity* if not optimal in problem solving, it could be due to the lack of initial knowledge. In contrast, students who have *low quotient adversity*, but have considerable physics problem solving achievements. This is because students who have basic knowledge and sufficient experience, so can do physics problem solving well. The results of a study by Hae Young and Jung Hee (2015) entitled *The Factors Affecting the Adversity Quotient of Nurses and Office Worker* that nurses have lower levels of emotional intelligence and laziness quotient than office workers; the higher the level of emotional intelligence, the higher the public quotient in both groups. These results imply that emotional intelligence is an important factor for taking into account the laziness quotient and that it is necessary to develop intervention strategies that can increase emotional intelligence by occupied groups and increase the difficulty quotient with the aim of improving personal and work performance and improving quality of life.

Problem solving is a process that requires logic in order to find a solution to a problem. Problem solving skills can be possessed by students if the teacher teaches them effectively. Polya (in Tambunan 2014) explains the problem solving capabilities there are 4 stages, namely; (1) *Understood the Problem*, (2) *Device a Plan*, (3) *Carry Out the Plan* (4) *Look Back*. Research from Nova Nurhanifah (2019) titled *Analysis of Mathematical Problem Solving Skills of Junior High School Students Based on Adversity Quotient (AQ)* obtained the results that there are students in the category quitter who have learning barriers are less likely to be ready to follow the learning process. When understanding the problem, student have difficulty to determine what is known and asked, incomplete writing down the known of the question.

Students have difficulty in determining what can be used to solve problems in planning problem solving. Students with camper categories on the mathematical problem solving process of students do not try to give more than what is requested. Students are easily satisfied with the answers

that have been written. Students have difficulty implementing problem solving plans. And students category climber in mathematical problem solving students do not have difficulty, students claim that some solutions are produced when solving mathematical problems that are from thinking based on logic then remembered how to solve the problem. Students have no problems, in mathematical problem solving skills are good. The results of research by Sudirman et.al (2017) entitled Improving Problem Solving Skills and Organizing Self-Learning High School Students through the scientific approach uses the Quantum Learning strategy that observes the study of observations and literature as described above, scientific learning through the Quantum Learning strategy applied to mathematics learning in the classroom can optimize student learning abilities so that students are able to form problem-solving abilities and Self Regulated Learning in order to obtain mathematics learning outcomes optimal and they can achieve the learning objectives as desired. Students often have difficulty in various ways, both in personal, social, learning and in terms of achievement and achievement to build a successful and successful future. The lack of ability to facing obstacles and the problem solving facilities that students have is influenced by several factors, one of which is the ability factor in facing *obstacles or adversity quotient* (AQ) owned by students.

The phenomenon that exists in the field that researches observe in July 2019-June 2020 there are still many conditions that occur in the academic process of students difficult in dealing with challenges or clashes when faced with difficult conditions, students lack the ability to solve problems that are being experienced with positive measures. Condition that occurs, students will find it difficult to be able to face the obstacles and challenges that exist d natural life processes that can arise in the fulfillment of developmental tasks as well as interaction with the environment, always hesitant and afraid to step up or act in efforts to solve problems. Guidance and Counseling is a top priority in helping students to provide guidance and counseling services to be able to utilize and *develop adversity quotients* (AQ) that can improve student problem solving skills.

The implementation of Guidance and Counseling starting with *Need Assessment*, will be very helpful which is the results of the assessment will be the basis for the preparation of Guidance and Counseling program. In order to provide guidance and counseling services to students, researchers want to analyze and *identify adversity quotient* and *problem solving skills* in students of the Guidance and Counseling Study Program. The purpose of this research is to analyze and identify *adversity quotient problem solving skills* in guidance and counseling students.

## METHODOLOGY

This type of research is quantitative research. Quantitative research is a systematic research method of parts and phenomena and their relationships (Sugiyono, 2017). The method used in this research is a survey method, which aims to analyze the indralaya class of guidance and counseling students of FKIP Sriwijaya University. Population in this study numbered 234 students from three generations 2017, 2018 and 2019 Guidance and Counseling Study Program, Faculty of Teacher Training and Education, Sriwijaya University The sample numbers in this study were 142 students from three generations, namely 48 students from the class of 2017, 47 students from the class of 2018 and 47 students from the class of 2019 Guidance and Counseling Study Program, Faculty of Teacher Training and Education, Sriwijaya University Determination of research sample based on the number of students in level two, level three and level four, with the consideration of students has gone through the process of adaptation during the lecture and adjustment with the

campus environment. Determination of the number of samples using the Slovin formula with an error rating of 0.05, which is 142 students. Sampling in this study using *Probability Sampling*.

The instruments used in this study used the Likert scale form. In this study, the test of the validity of the instrument was carried out using content validity through logical validation process. This validity test is conducted based on the opinion of experts (*expert judgement*) and used to know the validity level of the item is done by counting techniques using the *Product Moment Correlation formula*, and the item validity test is done with the help of *statistical product service solution (SPSS)* program 20.00. *Adversity Quotient Scale Validation* of 33 research statements made, 30 statements declared valid and 3 invalid statements. The validity of the instrument variable *Adversity Quotient statement* is said to be valid when  $r \text{ count} \geq r \text{ table value}$  of 0.361 is tested with the number of respondents  $N = 30$  and the validity of the instrument. Scaling Validation troubleshooting capabilities, of the 40 statements that are made, 35 statements are declared valid and 5 statements are invalid. The validity of the variable problem solving skill statement instrument is said to be valid when  $r \text{ calculate} \geq r \text{ table value}$  of 0.264 trials with the number of respondents  $N = 40$ . The reliability calculation in the study was done with alpha *cronbach value* from the calculation results by utilizing *spss* program version 20.00. Based on the results of the analysis, alpha cronbach value is obtained for *Adversity Quotient scale* of 0.887 and for *Problem Solving Skill Scale* of 0.915.

The instrument's reliability  $r$  has been in the range of good instrument reliability coefficients. Thus the reliability of the instrument has been in the range of the coefficient of reliability of good instruments for *the Scale of Adversity quotient* and *Problem Solving Skill*. Furthermore, the data collection process is carried out using *adversity quotient scale* and *Problem Solving Skill scale*. The collected data is analyzed by calculating the average score of each variable. After the description of data on *Adversity quotient* and *problem solving skills of* students, calculated the range of data or intervals so that the norms of categories are classified with the criteria in the following table.

**Table 1 : Respondent Achievement Level Formula**

Range	Description
$\geq ST - I$	Very High (ST)
$ST - 2I \text{ to } ST - I$	High (T)
$ST - 3I \text{ to } ST - 2I$	Medium (SD)
$ST - 4I \text{ to } ST - 3I$	Low (R)
$\leq ST - 4I$	Very Low (SR)

Description:

ST : Maximum Score/Ideal score

I : Interval (Maximum Score – Minimum Score): k

SR : Lowest Score

K : Number of Classes

Steering after *adversity quotient based* on category norms is classified with criteria namely: very high, high, medium, low, and very low. The total value of the average score with the following score interpretation benchmarks. For the interpretation of the Percentage Score, the range 0-20% is very low, 21-40% is low, 41-60% is medium, 61-80% is high and 81-100% is very high. (Riduwan, 2008: 15) Then after problem solving skill based on category norm classified with criteria namely: very high, high, sufficient, low, and very low. The total average score with the benchmark of the percentage interpretation of the score, the following.

## RESULT AND DISCUSSION

Based on the results of the administration of instruments from Sriwijaya University Guidance and Counseling students as many as 142 students. In this research there are two variables *Adversity Quotient* and *Problem Solving Skill*. The data description in this study variables *the Adversity Quotient* as follows:

Aspec control with 142 respondents, 5 students were in a very low category with a percentage of 3.52%, then 13 people in the low category with a percentage of 9.15%. A further 13 people in the moderate category with a percentage of 9.15%, then 25 students were in the high category with a percentage of 17.6% and 86 students were at a percentage of 60.57% with a very high category.

At origin and ownership there are 3 students who are in a very low category with a percentage of 2.11%, then 26 students who were in the low category with a percentage of 18.32, then 67 students who were in the moderate category percentage 47.18%, then 39 students were in the high category with a percentage of 27.46%, and 7 students were in a very high category with a percentage of 4.93%.

Aspec of Reach obtained data as many as 13 students who are in a very low category with a percentage of 9.15%, then 35 students who were in the low category with a percentage of 24.65%, then 64 students who were in the moderate category 45.07% percentage, then 25 students were in the high category with a percentage of 17.61%, and 5 students were in a very high category with a percentage of 3.52%.

Aspec of *Endurance* obtained data as many as 2 students who are in a very low category with a percentage of 1.4%, then 7 students who are in the low category with a percentage of 4.94%, then 19 students who are in the moderate category percentage 13.38%, then 20 students are in the high category with a percentage of 14.8%, and 94 students are in a very high category with a percentage of 66.2%. Based on the calculation of measurement results *on the Variable Adversity Quotient*, *the Adversity Quotient* categorizes the score as follows:

Table 2 : Adversity Quotient Score Category

Score Interval	Category	Frequency (f)	(%)
175 – 161	Very High (ST)	0	0
160 – 146	Height (T)	0	0
145 – 131	Medium (SD)	16	11,27
130 – 116	Low (R)	56	39,44
The 115 ≤	Very Low (SR)	70	49,29
Total		142	100

To find out *the student Adversity Quotient*, the instruments used are 30 statement items. Furthermore, based on the calculation of the ideal *adversity quotient* score of 145 students, the highest score is 86 and the lowest score is 86. Based on the table above the frequency of *achievement of Adversity Quotient* students varies from fairly, low and very low categories. Based on the above seen that the category is very high and the category is high nil or worth 0 from all respondents, then as many as 16 students in the moderate category with a percentage of 11.27%, then 56 students in the low category with a percentage of 39.44% then 70 students in the very low category with a percentage of 49.29%. The results of the study with variable problem Solving capabilities are as follows:

### Aspects of Confidence in Problem Solving

Aspects confidence in problem solving with the number of respondents 142 students, 4 students are at a moderate level with a percentage of 2.82%. 91 students are at a high level with a percentage of 64.08%. 47 students are at a percentage of 33.1% with a very high category.

### Aspects of Problem Approaching Pattern

The approaching pattern aspect of the problem is that there are 2 people who are at a moderate level of 1.41%, 90 at a high level with a percentage of 63.38%, and are very high with a percentage of 35.21% as many as 50 people.

### Aspects of Personal Control

The personal control aspect of 2 people is at a moderate level with a percentage of 1.40%, 103 people are at a high level with a percentage of 72.53%, and at a very high level with a percentage of 26.05% as many as 37 people.

To find out *the student Adversity Quotient*, the instruments used are 30 statement items. Furthermore, based on the calculation of the ideal adversity *quotient* score of 145 students, the highest score is 86 and the lowest score is 86. Based on the table above the frequency of *achievement of Adversity Quotient* students varies from fairly, low and very low categories. Based on the above seen that the category is very high and the category is high nil or worth 0 from all respondents, then as many as 16 students in the moderate category with a percentage of 11.27%, then 56 students in the low category with a percentage of 39.44% then 70 students in the very low category with a percentage of 49.29%. The results of the study with variable problem Solving capabilities are as follows:

To find out the *description of problem solving* skills students, the instruments used amount to 35 statement items. Furthermore, based on calculations obtained the ideal score of *Problem Solving Skill* students at 175, the highest score of 172 and the lowest score of 93. Based on the calculation of measurement results on the variable *Problem Solving Skill*, maka then *Problem Solving Skill* categorization score as follows:

Table 3 : Problem Solving Skill *Score Category*

Score Interval	Category	Frequency (f)	(%)
175-148	Very High (ST)	26	18.3
147-118	Height (T)	106	74.6
117-89	Medium (SD)	10	7.01
88-51	Low (R)	0	0
50-23	Very Low (SR)	0	0
Total		142	100

Based on the table above the frequency of *achievement of Problem Solving Skill* students in universities varies from very high, high, sufficient, low and very low categories. Based on the above seen that the category is very high as many as 26 people with a percentage of 18.3%, then a high category of 106 people with a percentage of 74.6% then a moderate category of 10 orang dengan persentase people with a percentage of 7.01%, then in the low category of categories very low frequency nil or worth 0 of all respondents.

Table 4 : Adversity Quotient *Regression* on Problem Solving Skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.035(a)	.001	-.006	14.15305

Based on the calculation obtained regression value (R) of 0,35 thus it can be concluded that *adversity quotient* has a positive influence on *problem solving skills* of FKIP UNSRI students, it means the higher the *Adversity quotient* students in then the higher *the Problem Solving Skill* owned by Guidance and Counseling Student. Based on the test results outlined, there is an aspect of confidence in problem solving with 142 respondents, 16 students at moderate level, 56 students are at low level and 70 students berada in very low category. Individual that have positive *adversity quotient* (AQ) will believe in their own abilities and strengths, so as to be able to take consideration and be independent in all their actions. Because in the absence of *positive adversity quotient* (AQ) individuals will hesitate in any action not even dare to do anything.

This is supported by the opinion of Stoltz (2009) explaining several *factors forming adversity quotient* such as: 1) competitiveness. If *adversity quotient* then there is no competitiveness when facing difficulties and no opportunity created in dealing with it. 2) Productivity. instructive responses conducted by individuals will provide good performance. On the contrary, destructive responses will result in low performance against adversity. 3) Motivation. If the motivation is strong then the individual will try in resolving the difficulty. 4) Take risks. Individuals that have high *adversity quotient* will be more daring to risk the actions taken. 5) Improvement. Individuals with *high quotient adversity* will always try to overcome adversity with concrete steps. 6) Perseverance. Individuals who respond well to difficulties will always be able to stand with 7) Learning. Individuals who are optimistic responses will learn and perform more than individuals who have pessimistic patterns. In terms of control, 5 students are in a very low category, 13 students are in the low category, 13 students are in the moderate category, 25 students are in the high category, and 86 students are in a very high category.

In terms of origin and ownership or foregoing there are 3 students in the very low category, 26 students are in the low category, 67 are in the moderate category, 39 students are in the high category and 7 students are in the very high category. In the reach aspect there are 13 students who are in the very low category, 35 people in the low category, 64 students are in the moderate category, 25 students are in the high category and 5 students are in the very high category.

Furthermore in the endurance aspect obtained there are 2 students who are in the very low category, 7 students in the low category, 19 students in the moderate category, 20 students in the high category and 94 students in the very high category. In line with Stolit'z (2000) that a person's success in living life is primarily determined by *the level of Adversity Quotient*. *The adversity quotient* manifests in three forms: 1) A new conceptual framework for understanding and improving all facets of success, 2) A measure for knowing a person's response to adversity, and 3) A set of tools to improve a person's response to adversity. Based on the results of the study measuring *variable problem solving skills* there is an aspect of confidence in problem solving with the number of respondents 142 students, 4 students are at a moderate level, 91 students are at a high level and 47 students are in a very high category.

The problem solving capabilities that individuals have can help individuals to deal with internal needs, conflicts, tensions and frustrations and to make ends meet with the demands of the environment in which the individual is located. Each individual has the ability to solve different problems. As well as students, there are students who are able and have good problem solving skills but there are also students who do not have good problem solving skills. The aspect of confidence in problem solving is the main basis that individuals must have. With the belief in the individual, it will grow the motivation of the individual to be able to respond and solve every problem that arises in the process of his life. This belief arises because the individual knows and understands all the potential that is in him. Therefore, when an individual experiences a problem he will optimize all the potential that exists in order to help him in solving the problem.

This is supported by Rakhmat's opinion (in Abdul, 2009) explaining several factors that affect the troubleshooting process such as: 1) Motivation. Low motivation distracts. High motivation limits flexibility; 2) Wrong beliefs and attitudes. Assumptions that can be misleading. Defensive attitudes, for example, because of lack of self-confidence will tend to reject new information, rationalize mistakes and complicate solutions. 3) Habits. The tendency to maintain a particular mindset, or view problems from one side only, or excessive and uncritical belief in authority opinions, inhibits efficient problem solving. In the aspect of the pattern of approaching the problem there are 2 people who are in a moderate level, 90 at a high level and 50 people are at very high levels.

Individuals have patterns of approaching and avoiding problems. The general tendency in a person to approach or avoid problem solving activities. Any normal individual has the ability to think, the maturity of thinking owned by the individual will be taken into use when the individual is faced with a problem. In line with Polya's opinion (in Yusuf, 2018) mentions *that problem solving is based on cognitive processes that are the result of finding ways out of trouble and ways to get around obstacles*. Problem solving is part of the thought process. According to the implications of Piaget theory (in Slavin, 2011) explains that learning is centered on the thought process or mental process and there is a belief in self-ability.

In terms of personal control 2 people are at a moderate level, 103 people are at a high level and at a very high level as many as 37 people. The personal control aspect focuses on a person's belief in controlling emotions and behaviors when solving problems. In line with Rakhmat's explanation (in Abdul, 2009) that emotion is one of the elements that affects an individual's problem-solving abilities. In dealing with a situation, unwittingly we are often emotionally involved. Emotions color our way of thinking. We can't think really objectively. As whole human beings, we cannot put emotions aside. Getting there, emotion is not the main obstacle. However, when that emotion reaches such a high intensity that it becomes stressful, then we find it difficult to think efficiently.

The result of calculating regression value (R) of 0.35 can thus be interpreted that *Adversity quotient has a positive influence on problem solving skills* of Faculty of Teacher Training and Education, Sriwijaya University students, it means *the higher students's adversity quotient then have an insignificant influence on Problem Solving Skill* students BK FKIP UNSRI. From the data obtained can be analyzed that one's intelligence in bloating obstacles and difficulties (*adversity quotient*) is closely related to the ability of individuals in solving problems. The opportunities that individuals gain during learning are able to build knowledge in cognitive processes and foster motivation to be able to solve problems, acquire everything that is useful to themselves, and work



hard to realize their ideas, develop creativity, be able to apply their knowledge and produce work that is in use. This is in accordance with one of the educational objectives is to improve critical thinking, logical response, and develop problem solving skills (in Dogru, 2008).

Hema & Gupta (in Mifta hulaikah et al, 2020) in the journal *International Journal of Instruction* explained that the Adversity quotient will perform optimally when students face difficulties or difficult things. and also Sheimaili (in Mifta hulaikah et al, 2020) in the journal *International Journal of Instruction*, Through experiential learning, most students change their personality and increase their level of optimism. Students can cope with success with difficulty and believe that negative events are temporary, limited in scope and manageable even when receiving poor grades on exams or projects.

Supardi, (2013) explains that students' success in learning depends on how students overcome their difficulties. How to overcome each person's difficulties varies. Similarly, a person's level of intelligence is relatively different. Intelligence in the face of a difficulty includes one type of *adversity quotient*. *Adversity quotient* is an individual's intelligence in overcoming any difficulties that arise. *Adversity quotient* is often indented with fighting power to fight difficulties. *Adversity quotient* is considered to be very supportive of students' success in improving learning achievement. Students who have high *quotient adversity are* certainly better able to overcome the difficulties that are being faced. The ability of a person to change and process a problem or difficulty that occurs in his or her life and make the problem a challenge that must be solved best known as *Adversity Quotient (AQ)*. This capability can be used to resolve relevant issues. The more problems a person can solve, the more he or she will have the ability to help him or her to live

## CONCLUSION

Based on the findings and discussion of the results of the study, it can be concluded, that *student adversity quotient* varies from category to sufficient, low and very low. Based on the above seen that the category is very high and the category is high nil or worth 0 from all respondents, then as many as 16 students in the moderate category with a percentage of 11.27%, then 56 students in the low category with a percentage of 39.44% then 70 students in the very low category with a percentage of 49.29%. *Problem Solving Skills* students are in a high category. Measuring from 142 students who were respondents, the score of problem solving skills obtained data as many as 106 students was in the high category with a percentage score of 74.6%. a further 26 students are in a very high category with a percentage score of 18.3%. and 10 students are in the moderate category with a percentage score of 7%. Based on the calculation obtained regression value (R) of 0,35 thus it can be concluded that *Adversity quotient* has a positive influence on *problem solving skills* of FKIP UNSRI students, artinya *higher adversity quotient* students then has the influence of *problem solving skill* of students Guidance and Counseling Study Program, Faculty of Teacher Training and Education, Sriwijaya University

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