# Adversity Quotient on Mathematics Learning in Junior High School 

Jahring ${ }^{1 *}$, Sufri Mashuri ${ }^{2}$, Marniati ${ }^{3}$, Nasruddin ${ }^{4}$<br>Sembilanbelas November University, Kolaka, Southeast Sulawesi, Indonesia


#### Abstract

This research aimsto describe the adversity quotient of junior high school students in learning mathematics. The description is based on dimensions the adversity quotient, namely control (control), origin and ownership (origin proposal and recognition), reach (range), and endurance power hold). more carry-on described based on type adversity quotient, namely quitters, campers, and climbers. The research subjects consisted of 32 students of class VII SMP Negeri 1 Latambaga. The results of this research include: (1) an average adversity quotient student of 87.89; (2) there are 10 (31.25\%) students with type climbers, 15 (45.88\%) students with type camper, and 7 (21.88\%) students with type quitters; and (2) the average value of control (control) and origin and ownership (origin proposal and recognition) of 87.03 and 86.52 , the average reach value (range) of 87.97, and the average endurance value hold) of 90.04; and (3) adversity quotient student class VII SMP Negeri 1 Latambaga is the type camper with level Power high endurance.


Keywords: adversity quotient, quitters, campers, climbers
Date of Submission: 02-02-2023
Date of Acceptance: 14-02-2023

## I. Introduction

Regulation of the Minister of National Education of the Republic of Indonesia Number 22 of 2006 concerning Content Standards for Elementary and Secondary Education Units which state that the purpose of learning mathematics is for students' attitude value utilityof mathematics in life, (Permendiknas, 2006).Attitude value utility mathematics in question is to have a sense of wanting to know, being concerned, being interested learn math, attitude tenacious and believe yourself in solution problem, (Hidayat \& Sariningsih, 2018).More continued NCTM (Amir et al., 2017) explained that learning mathematics also aims to help the student develop trust that they are own ability math to solve the problem, and able to control failure or success themselves. This indicated that it is necessary to strengthen the aspect of psychology in the process of learning mathematics. One aspect of the psychological meaning in question is the adversity quotient, namely the intelligence of someone to face and overcome something problem, (Hidayat \& Sariningsih, 2018).

Stoltz (Baharun \& Adhimah, 2019; Hariandayani \& Nasution, 2021) explains that the adversity quotientis the intelligence possessed by a person in dealing with adversity situation problems in his life, and or method somebody feels, perceive, and relate as well as processproblem in his life become must challenge solved. More further that a diversity quotientis the ability of someone in understanding, face and overcome all problems and difficulties in his life to achieve success in his life with all its potential, (Pusparani \& Jannah, 2022).Because that, it can be said that a diversity quotientbecomesa factor determinant of somebody's capable endure, withdraw self, and even failed to face something problem, (Baharun \& Adhimah, 2019) .

The contribution of Adversity Quotient(AQ) makes the Intelligence Quotient(IQ) and Emotional Quotient(EQ) not again become factor dominant in determining the success of someone. Contribution third the aspects are the same as important in motivating and activating individuals in achieve goals, (Pusparani \& Jannah, 2022).This is caused because the balance between a good Intelligence Quotient(IQ) and Emotional Quotient(EQ) must accompanyAdversity Quotient(AQ) to deal with globalization and competition in all field sectors common life becomesan obstacle in the millennial era moment this achieves success live perfectly, (Baharun \& Adhimah, 2019) .

Adversity quotienthas three forms, namely: (1) adversity quotientis a conceptual framework that works to understand and improve all aspectsof success; (2) adversity quotient is a measure to determine the response to adversity; and (3) adversity quotient is set tools that have base science to improve response to adversity impact on prepare effectiveness personal, (Baharun \& Adhimah, 2019).Next, Stoltz divides a diversity quotient into 3 groups , namely: (1) quitters, namely groups of people who are deficient own willingness to accept the challenge
so his life only just to survive live; (2) camper, namely the group of people who have will face problem however they still No take risk scalable and safe, and stop at the problem; and (3) climbers, namely the group of people who own courage to face problems and risks so work they complete in accordance purpose , (Yanti \& Syazali, 2016) .

Adversity Quotient(AQ) can be calculated using the formula proposed by Stoltz (Biswas, 2018), namely:

$$
A Q=C+O_{2}+R+E
$$

with $\mathrm{CO}_{2} \mathrm{RE}$ is a dimension adversity quotient, namely control, origin, ownership, reach, and endurance. The fourth dimension the adversity quotient clearly explained by (Yanti \& Syazali, 2016), that: (1) control (control), namely the level of perceived control over the events that give rise to trouble. Measurement indicators for students form controlself-student moment feel exists trouble; (2) origin (origin proposal) and ownership (acknowledgement). Measurement indicator origin form acknowledgement of origin suggestion exists a difficulty, while measurement indicator ownership form acknowledgement of the occurrence trouble; (3) reach, namely the extent of difficulty deemed reachable other parts of life. Measurement of the indicator from confession students will be towards the extent of a difficulty deemed reachable to other parts of life; and (4) endurance (power hold). Measurement the indicator from presumption students will be how long the difficulty will last and how long cause difficulty it will last.


Figure 1. Dimensions Adversity Quotient
One indicator of learning success is producing behaviour positive about yourself,and appropriate students with the learning objectives that have been defined and planned before. For example, in learning mathematics perception students towards lessons mathematics itself, (Haidar \& Jahring, 2022), students are more motivated to follow the learning and complete problems mathematical, (Marniati et al., 2021), more believe self of ability himself, (Jahring et al., 2021) and of course, his learning outcomes also increase. because Therefore, learning reform is necessary built and developed to create a pleasant learning atmosphere, namely the atmosphere of interactions in the classroom can grow and develop well (between teachers and students as well as between fellow students ), (Miftachurohmah et al., 2022) .

Mathematics is eye difficult and scary lesson for art students, no except for students of SMP Negeri 1 Latambaga. Information initially obtained from the eye teacher lesson mathematics at SMP Negeri 1 Latambaga that most students looked lesson mathematics asdifficult lessons so less motivated to follow mathematics learning. because that, besides creatinga fun learning atmosphere for students, necessary considered aspect psychological student-related Power struggle to face difficulties and problems in learning mathematics. Students who have high adversityquotient more capable overcome difficulties encountered in learning, however, a student with level more adversity quotient low tend to consider problem or difficulty as the end of the struggle and cause student achievement low, (Fatchuroji,2020; Hidayat \& Sariningsih, 2018).Upon consideration here it is necessary to describe more carry-onadversity quotientof students in learning mathematics so that it becomes the foundation in learning mathematics as well as a reference in giving treatmentsin learning mathematics to achieve learning objectives.

## II. Research Methods

Research is descriptive research, observing and describing the research subject or problem without influence or manipulation variable, (Saputra et al., 2021) in students of SMP Negeri 1 Latambaga, Regency Kolaka, Southeast Sulawesi, Indonesia and involved 32 students from class VII SMP Negeri 1 Latambaga as the research subject. Adversity quotient data was collected using a questionnaire adversity quotient that has arranged previously loaded four dimensions adversity quotient as the indicators are control, origin and ownership, reach, and endurance. Furthermore, the data is described and presented, as well as represented.

## III. Results And Discussion

The questionnaire results in adversity quotient by 32 students from class VII SMP Negeri 1 Latambaga who became research subjects, were analyzed descriptively and the results are presented in Table 1.

Table 1. Analysis Descriptive Adversity Quotient Student

| Data Description | Mark |
| :---: | :---: |
| Lots of Data | 32 |
| Maximum Value | 90,91 |
| Min Value | 85,23 |
| Average | 87,89 |
| Standard Deviation | 1.70 |
| Variance | 2.88 |

Based on Table 1, it was found that the average adversity quotient value of 32 students of 87.89 with the lowest value of 85.23 and the highest value of 90.91 , as well as a standard value deviation of 1.70 and variance of 2.88 . The number indicated by the variance is a sufficient value small. So, the adversity results in student quotient are a good result. The more small coefficient of the variance increases good results, (Jahring \& Marniati, 2020; Zakiah et al., 2019) .

Next, adversity quotient data is categorized and presented. Categorization results presented in Table 2.
Table 2. Categorization Adversity Quotient Student

| Category | Frequency | Percentage |
| :---: | :---: | :---: |
| Very high | 4 | 12.50 |
| Tall | 6 | 18.75 |
| Currently | 15 | 46,88 |
| Low | 4 | 12.50 |
| Very Low | 3 | 9,38 |
| Amount | $\mathbf{1 0 0}$ | $\mathbf{1 0 0 \%}$ |

Based on Table 2, it can be said that the adversity quotient student class VII SMP Negeri 1 Latambaga are in the category currently with a percentage of $46.88 \%$ ( 15 people). The categorization is combined with the type or group adversity quotient mentioned by Stoltz, namely: quitters, campers, and climbers. The results of the analysis are presented in Figure 1.


Figure 1. Percentage Category Adversity Quotient
Based on Figure 1 above, obtained information that there are 10 (31.25\%) students with adversity quotient type climbers, there were $15(46.88 \%)$ students with adversity quotient type camper, and there were 7 ( $21.88 \%$ ) students with adversity quotient type quitters. because it can be said that students in class VII SMP Negeri 1 Latambaga are included in the type campers. The student with type camper Enough Good live learning all the time all something walks smoothly. However, if faces difficulties, such as assignments school felt weight, subject matter felt difficult, then the student will be frustrated and leave the task, even in the end resolved under what conditions exist. this is to Stoltz's theory (Huda \& Mulyana, 2018) that camper at least still respondsto level problemsin a certain course, and is considered a " success ".

Next, it is described student adversity quotient class VII SMP Negeri 1 Latambaga based on dimensions and indicators of adversity quotient. This is done for viewing the level of adversity quotient in learning mathematics on each indicator. The results description is presented in Table 3.

Table 3. Description Adversity Quotient Per Indicator.

|  | Average | Category |
| :---: | :---: | :---: |
| Indicator | 87.03 | Low |
| Control | 86.52 | Low |
| Origin and Ownership (Origin Proposal and | 87.97 | Currently |
| Confession | 90.04 | Tall |
| Reach |  |  |

Based on Table 3, obtained information that the indicator control and origin and ownership are indicators that are in the category of low. However, if seen from the average value, then the indicator origin and ownership is the lowest indicator between indicator others, and indicators endurance is the highest indicator between indicator others. This shows that the average student class VII SMP Negeri 1 Latambaga is Still Not yet capable understandsource difficulty that comes from outside himself and yet able to learn over error committed as a result of the difficulties encountered as well as fix it. However, their Power has high resistance in the face difficulty Because sure that the cause the difficulties he faced only characteristic while. this is in line with the opinion (Huda \& Mulyana, 2018) that the more tall Power stands someone, the more capable faces various difficulties he faced.

## IV. Conclusions And Recommendations

Based on the results of the analysis and discussion obtained the conclusion that class VII SMP Negeri 1 Latambaga is dominated by students with adversity quotient type camper. The domination still shows the presence of effort in the face of trouble, though only at the limit certain just and leave it as well as consider it as something success. On the other hand, students in class VII SMP Negeri 1 Latambaga own Power and strong resistance to face some problems.

The adversity quotient is one aspect that determines success in learning mathematics. because it is recommended teachers understand and train the adversity quotient owned by students. The relevant research scope adversity quotient is very broad, so researchers suggested to researchers further developing related research adversity quotient. For example, quantitatively compare the influence of adversity quotient and aspects other psychological effects on mathematics learning outcomes students, and several factors other.

## Bibliography

[1]. Amir, Z., Risnawati, Kurniati, A., \& Prahmana, RCI (2017). Adversity Quotient in Mathematics Learning (Quantitative Study on Students Boarding School in Pekanbaru). IJEME: International Journal on Emerging Mathematics Education , 1 (2), 169-176. https://doi.org/10.12928/ijame.v1i2.5780
[2]. Baharun, H., \& Adhimah, S. (2019). Adversity Quotient: Complementary Intelligence in Establishing Mental Endurance of Santri in Islamic Boarding Schools. Futura Islamic Scientific Journal, 19 (1), 128-143. https://doi.org/10.22373/jiif.v19i1.3502
[3]. Biswas, R. (2018). Adversity Quotient (AQ): A Review of Related Literature along with Literature Matrix. IJRAR: International Journal of Research and Analytical Reviews , 5 (4), 936-958. https://doi.org/10.1729/Journal. 23553
[4]. Fatchuroji, D. (2020). The Relationship between Adversity Quotient and Learning Readiness in PAI Subjects (Study of Class XII Students of MA Negeri 1 Serang Regency). Qathruna Journal, 7 (1), 19-42. https://doi.org/10.32678/qathruna.v7i1. 3028
[5]. Haidar, I., \& Jahring. (2022). Comparison of Students' Perceptions of Mathematics Education on Online, Offline and Blended Learning. Journal of Mathematics Education Work , 9 (2), 13-20. https://doi.org/10.26714/jkpm.9.2.2022.13-20
[6]. Hariandayani, E., \& Nasution, FZ (2021). The Relationship between Adversity Quotient and Achievement Motivation of Bani Adam As High School Students in Medan. FPSi Journal , 2 (1), 1-11
[7]. Hidayat, W., \& Sariningsih, R. (2018). Mathematical Problem Solving Ability and Adversity Quotient of Middle School Students Through Open Ended Learning. JNPM: National Journal of Mathematics Education, 2 (1), 109-118. https://doi.org/10.33603/jnpm.v2i1.1027
[8]. Huda, TN, \& Mulyana, A. (2018). The Effect of Adversity Quotient on Student Academic Achievement Class of 2013 at the Faculty of Psychology UIN SGD Bandung. Psympathic: The Scientific Journal of Psychology, 4 (1), 115-132. https://doi.org/10.15575/psy.v4i1.1336
[9]. Jahring, J., \& Marniati, M. (2020). The Effectiveness of the Inside Outside Circle (IOC) Learning Model on Mathematics Learning Outcomes for Junior High School Students. Journal of Mathematics Education Works, 7 (1), 22-26. https://doi.org/10.26714/jkpm.7.1.2020.22-26
[10]. Jahring, J., Nasruddin, N., Marniati, M., \& Tahir, T. (2021). Student Self-Efficacy in Differential Equation Lectures. EDU-MAT: Journal of Mathematics Education, 9 (2), 199-206. https://doi.org/10.20527/edumat.v9i2.10104
[11]. Marniati, M., Jahring, J., \& Jumriani, J. (2021). Analysis of Students' Mathematical Communication Ability in Solving Problems Based on Student Learning Motivation. AKSIOMA: Journal of Mathematics Education Study Program , 10 (2), 880-890. https://doi.org/10.24127/ajpm.v10i2.3523
[12]. Miftachurohmah, N., Nasruddin, Jahring, Sugiarto, A., \& Anasi, PT (2022). Implementation of the Creative Problem Solving (CPS) Learning Model Based on Information and Communication Technologies (ICT) to Improve Mathematics Learning Outcomes. Prisma Sains: Journal of the Study of Science and Learning of Mathematics and Natural Sciences , 10 (4), 872-880. https://doi.org/10.33394/j-ps.v10i4.5828
[13]. Permendiknas. (2006). Regulation of the Minister of National Education of the Republic of Indonesia Number 22 of 2006 concerning Content Standards for Elementary and Secondary Education Units. Ministry of National Education of the Republic of Indonesia.
[14]. Pusparani, PW, \& Jannah, M. (2022). Differences in Adversity Quotient Viewed from Gender Differences in Members of the Surabaya State University Nature Lovers Association. Character: Journal of Psychological Research , 9 (3), 43-54. https://ejournal.unesa.ac.id/index.php/character/article/view/45832
[15]. Saputra, N., Zanthy, LS, Gradini, E., Jahring, Rif'an, A., \& Arifin, A. (2021). Class Action Research . Muhammad Zaini Publishing Foundation.
[16]. Yanti, AP, \& Syazali, M. (2016). Analysis of Students' Thinking Processes in Solving Mathematical Problems Based on Bransford and Stein's Steps in View of the Adversity Quotient. Al-Jabar : Journal of Mathematics Education , 7 (1), 63-74. https://doi.org/10.24042/ajpm.v7i1.132
[17]. Zakiah, Oktaviani, DN, \& Isnani. (2019). Application of Geogebra Assisted Learning Start With A Question Learning Model in Mathematics Learning. Journal of Mathematics Education Work, 6 (2), 53-58. https://doi.org/10.26714/jkpm.6.2.2019.53-58

[^0]
[^0]:    Jahring. et. al. "Adversity Quotient on Mathematics Learning in Junior High School." IOSR Journal of Mathematics (IOSR-JM), 19(1), (2023): pp. 61-65.

