



## Bravery, Persistence, Integrity, and Vitality on Adversity Quotient: Study on High School Students

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### ABSTRACT

**Purpose** – This study aims to describe and investigate the influence of bravery, persistence, integrity, vitality, and adversity quotient in adolescent high school students in Tarakan City.

**Methodology**–This study employs a correlational design with a quantitative approach. A total of 370 students were selected as the sample. The sampling method applied was proportionate stratified random sampling. Data were collected using a scale-based instrument. Reliability testing was conducted using Cronbach's alpha method for the Adversity Quotient, Bravery, Persistence, Integrity, and Vitality. Data analysis involved the use of descriptive statistics and multiple regression analysis, performed using SPSS version 26 for Windows.

**Findings** – The findings indicate a statistically significant correlation between the variables of Bravery, Persistence, Integrity, and Vitality with the Adversity Quotient (AQ) at a 5% level of significance. (1). bravery has a positive relationship with AQ. (2) Persistence has a significant effect on AQ. (3) Integrity also has a significant effect. (4) Vitality has a significant effect on AQ. When examined collectively, these four variables significantly contribute to the prediction of AQ, as indicated by an F-value of 206.475, which exceeds the F-table value of 2.396, with an R-squared value of 0.694. The model accounts for 69.4% of the variance in Adversity Quotient, while other unexamined factors may explain the remaining 30.6%. When examined collectively, these four variables significantly contribute to the prediction of AQ.

**Contribution** – This research is expected to enrich scientific insight in the field of guidance and counseling, particularly regarding its influence on high school students in Tarakan City, as well as the description of adversity quotient, bravery, persistence, integrity, and vitality.

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## INTRODUCTION

The adolescent phase is one of the stages of life. It is a transitional phase that can be guided towards healthy adult human development. This stage has a significant role in the overall development of the individual. According to Papalia, Olds, and Feldman (2009), adolescence is a transitional period between childhood and adulthood, typically beginning at age 12 or 13 and lasting into the late teens or early twenties.

Students in the adolescent period are very vulnerable to facing various problems. In this phase, adolescents also often experience emotional instability, such as anxiety and indecision, which must be faced with great effort for a better future and to achieve maturity (Oktariana, 2022). Thus, students' academic performance often decreases because they feel unable to overcome the problems that arise. To effectively carry out their duties as students, it is essential to possess the ability to face various challenges and obstacles. In this case, the adversity quotient (AQ) becomes important. Students need to overcome every difficulty and turn it into an opportunity to complete their education effectively. According to Mulyasari and Maryam (2023), AQ reflects a person's ability to face challenges and turn them into opportunities that can be overcome.

The results of preliminary interviews with Subject Teachers and Guidance and Counseling Teachers showed signs indicating low adversity quotient in students, most of whom did not show optimal performance in their learning process. They spend more time engaging in less productive activities, such as playing games or scrolling through social media, which can lead to a lack of motivation and procrastination. This act of delaying doing assignments causes students to be chased by teachers to complete their obligations. Another symptom observed was truancy behavior during class hours, indicating that students' persistence and vitality remain very low. For some students, the primary goal of attending school is to graduate without a desire to further develop their potential due to low self-confidence, pessimism, and a lack of vitality in asking and answering questions.

Previous research by Sugiarti, Nurlaili, and Febrian (2020) regarding the influence of adversity quotient on students' motivation to achieve at MTs Negeri 1 Semarang showed that students with high adversity quotient tend to be able to overcome the problems and challenges they face, which in turn encourages them to continue trying to achieve achievement. Conversely, students with a low adversity quotient tend to have low achievement motivation; they often give up easily, are pessimistic, and are less responsible. According to Stoltz (2004), the Adversity Quotient (AQ) is the primary foundation for various aspects of success. AQ can be used to predict various aspects of an individual's life, including performance, motivation, empowerment, creativity, productivity, energy, hope, happiness, vitality, joy, emotional health, physical health, persistence, endurance, behavior, longevity, and the ability to adapt to change. Individuals with high AQ will face life's challenges with bravery and discipline.

Bravery enables one to remain steadfast and not withdraw despite facing threats, challenges, difficulties, or pain in pursuit of their goals. In other words, courage allows one to do what needs to be done despite the fear that gets in the way. (Peterson & Seligman, 2004). Courage refers to the ability of students to face and overcome fear or discomfort in the learning process; without courage, students tend to avoid challenges. Having the bravery to act on one's ideas even if they are not well received, speaking honestly even if it offends others, and showing physical Bravery (Linley & Joseph, 2004).

The Adversity Quotient (AQ) helps individuals enhance their resilience and persistence in the face of daily challenges. Students who lack persistence tend to give up easily when faced with obstacles, which contributes to procrastination and a reluctance to complete tasks. Another symptom observed is truancy during class hours, indicating that students' persistence remains low. Persistence is the ability to persist in action and complete what has been started despite facing various obstacles and difficulties (Niemic & McGrath, 2019). Individuals with this character remain committed to completing tasks that have been started and demonstrate persistence despite obstacles. They carry out tasks with dedication and joy, even in challenging situations (Linley & Joseph, 2004; Peterson & Seligman, 2004).

Integrity is related to the consistency between the values held and actual actions. Students with low integrity tend to be less disciplined in their learning and less responsible for their assignments, often engaging in activities such as playing games or spending excessive time on social media, which can lead to laziness and procrastination. The act of delaying this assignment causes students to be chased by teachers to complete their obligations. Integrity in Latin means whole, something that is whole and untainted (Peterson & Seligman, 2004). Integrity involves speaking honestly, being sincere, acting with authenticity, not pretending, and being responsible for one's actions and feelings.

Vitality in learning encourages students to be actively involved in academic activities. A lack of vitality can lead students to lose motivation, as they often prefer activities that provide instant gratification, such as playing games or scrolling through social media. Vitality reflects an attitude of living life with full energy and vitality. Individuals with this character approach things wholeheartedly; instead, they enjoy life with a spirit of adventure, feel happy and active, and function optimally (Linley & Joseph, 2004; Peterson & Seligman, 2004). Hung, N. T., Tuan, N. V., Tien, L. T. T., Thanh, D. Q., & Thai, N. H. (2023) revealed that students with higher AQ scores tend to exhibit more positive expressions of English language competence. When they are aware of the importance of English, they will tend to make efforts to overcome challenges and improve their English skills. Research conducted by Damiyati, Dewi, Ardiningrum, Fathna, and Bangun (2023) on students from the Faculty of Psychology at Bhayangkara University, Jakarta Raya, explicitly focusing on 2021 students who tend to procrastinate, revealed that those who often procrastinate have a lower adversity quotient, which negatively impacts their motivation and productivity. Research by Jumareng and Setiawan (2021) reveals a positive relationship between self-esteem and adversity quotient (AQ), self-handicapping, and achievement goals. Additionally, AQ also exhibits a positive correlation with self-handicapping and achievement goals. However, it was found that self-handicapping was negatively correlated with achievement goals. These findings highlight the crucial role of self-esteem and AQ in facilitating optimal goal achievement within the context of physical education.

Based on the explanation above, bravery, persistence, integrity, and vitality are important characteristics in building an adversity quotient. In an era of rapid change and complex challenges like today, the ability to survive, face, and rise from difficulties is a skill that is highly valued, especially for high school students transitioning to adulthood. Overall, this study aimed to examine how courage, perseverance, integrity, and enthusiasm influence the adversity quotient among high school adolescents in Tarakan City.

## **METHODOLOGY**

### **Research Design**

The type of research used in this study is correlation research, commonly referred to as correlation research. According to Creswell (2014, p. 41), the researcher's goal in this study is to see how the independent variable affects the dependent variable. The purpose of this study is to describe the Adversity Quotient, courage, perseverance, passion, and integrity and to examine the extent to which these characteristics influence the Adversity Quotient of adolescents attending public high schools in Tarakan City. Through quantitative methods, this study will produce information regarding the significance of the relationship between variables or significant differences between the groups studied.

### **Participant**

The population includes all students attending public high schools in Tarakan City, totaling 4.416 students. Calculation using the Slovin formula at a 5% significance level yielded a total of 370 samples, which were used as subjects in this study. Proportionate stratified random sampling is a method used for sampling, which is used if the population contains members or elements that are not uniform and are divided into strata proportionally (Sugiyono, 2017). This method is used because the number of students in the public high school varies significantly, and it is hoped that by using this method, we can take a sample of the students from each school proportionally. The location of this study was a public high school in Tarakan City, North Kalimantan

Province. The research was conducted in the odd semester, from August to October 2024. The activities carried out included testing the research instrument, which was then followed by the collection of research data.

Data Collection

This study utilized data collection instruments that included Measures of Bravery, persistence, passion, integrity, and Adversity Quotient. The instrument to measure bravery, persistence, passion, and integrity is based on the theory of character strengths developed by Peterson and Seligman (2004). This instrument consists of 42 statement items. Meanwhile, the Adversity Quotient instrument refers to the theory put forward by Paul G. Stoltz (2004); this instrument consists of 42 statement items. Furthermore, this scale was designed using four alternative answers, namely STS (very inappropriate), TS (not appropriate), S (appropriate), and SS (very appropriate). Content validity was established by compiling an instrument based on existing theories and soliciting opinions from experts (expert judgment). Item validity was tested using SPSS 26 for Windows to analyze the Pearson Product Moment procedure. Field trials were conducted at SMAN 1 Tarakan in September 2024 with 60 students. Reliability test using Cronbach's Alpha formula.

Data Analysis

Statistical analysis is then used to examine the data collected in the field. Noor (2012:163) defines data analysis strategy as a procedure for processing research data, such as the use of statistical tools that are appropriate to the type of research. Descriptive statistics and multiple regression models are used in the analysis of this research data, with the following stages: (1) testing analysis requirements and (2) data analysis with hypothesis testing and regression testing. Hypothesis testing uses multiple linear regression analysis. The multiple regression equation is:

Y = α +b<sub>1</sub>X<sub>1</sub>+b<sub>2</sub>X<sub>2</sub>+ b<sub>3</sub>X<sub>3</sub>+ b<sub>4</sub>X<sub>4</sub>+e

With the descriptions are Y is Dependent variable (Adversity Quotient), α is Constant, X<sub>1</sub> is independent variable 1 (Bravery), X<sub>2</sub> is independent variable 2 (Persistence), X<sub>3</sub> is independent variable 3 (Integrity), X<sub>4</sub> is independent variable 4 (Vitality), b is regression coefficient, and e is standard error.

FINDINGS

Before conducting a hypothesis test that has been formulated, a series of prerequisite tests are required. The prerequisite tests in this analysis include normality tests, linearity tests, heteroscedasticity tests, and multicollinearity tests.

Table 1. Normality tests for the variables

		Unstandardized Residual
N		370
Normal Parameters <sup>b</sup>	Mean	0.0000000
	Std. Deviation	4.01654733
Most Extreme Differences	Absolute	0.043
	Positive	0.043
	Negative	-0.024
Test Statistic		0.043
Asymp. Sig. (2-tailed)		.093 <sup>c</sup>

Table 1 presents the results of the analysis of the data normality test for the variables of Bravery (X<sub>1</sub>), Persistence (X<sub>2</sub>), Integrity (X<sub>3</sub>), Spirit (X<sub>4</sub>), and adversity quotient (Y). Based on the table, the p-value is obtained = 0.093. Therefore, with the p-value of 0.093 ≥ 0.05, it can be concluded that the data is usually distributed. Thus, the assumption or requirement of normality in the regression model has been met.

**Table 2.** Normality tests for the adversity quotient

Variable			F	Sig.	Descriptions
Adversity Quotient	Between Groups	Deviation from	0.845	0.612	p 0,612 > 0,05
* Bravery		Linearity			
Adversity Quotient	Between Groups	Deviation from	1.390	0.111	p 0,111 > 0.05
* Persistence		Linearity			
Adversity Quotient	Between Groups	Deviation from	0.766	0.662	p 0,662 > 0.05
* Integrity		Linearity			
Adversity Quotient	Between Groups	Deviation from	1.339	0.208	p 0,208 > 0.05
* Vitality		Linearity			

Table 2 presents the results of the linearity test analysis for the adversity quotient about the variables of bravery, persistence, integrity, and vitality. Based on the analysis results, it is evident that the p-value is greater than 0.05, indicating a linear relationship between the two variables. This means that there is a significant linear relationship between the variables of bravery, persistence, integrity, vitality, and adversity quotient.

**Table 3.** Heteroscedasticity tests

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Beta	Beta			
1 (Constant)	-0.305	1.980	-	-0.154	0.878	
Bravery	0.055	0.053	0.059	1.025	0.306	
Persistence	-0.027	0.022	-0.064	-1.222	0.223	
Integrity	0.106	0.062	0.094	1.697	0.091	
Vitality	0.018	0.057	0.017	0.319	0.750	

The evaluation criteria state that the regression model does not exhibit heteroscedasticity if the significance value (Sig > 0.05) is greater than 0.05. Conversely, the regression model exhibits heteroscedasticity if the significance value (P < 0.05) is smaller than 0.05. Based on the results of the analysis in Table 3, it is evident that the significance value is higher than 0.05, indicating that there is no heteroscedasticity in the variables of bravery, persistence, integrity, and vitality.

**Table 4.** Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	Bravery	0.813	1.230
	Persistence	0.978	1.023
	Integrity	0.882	1.134
	Vitality	0.902	1.109
a. Dependent Variable: Adversity			

In Table 4 above, all variables analyzed – namely, bravery, persistence, integrity, and vitality – do not exhibit multicollinearity. This is evidenced by the Tolerance value, which is greater than 0.10, and the VIF value, which is less than 10.00 for each variable. Thus, it can be concluded that there is no excessive linear relationship between the independent variables in this study. Hence, the regression model used meets the assumption of being free from multicollinearity.

Based on the results of the prerequisite tests, which include the normality test, linearity test, heteroscedasticity test, and multicollinearity test, it can be concluded that the data meet the criteria to proceed to the T-test and F-test in hypothesis testing.

**Table 5.** Test of the significance of predictors partially with the T-test

Model	Unstandardized		Standardized	t	Sig.
	B	Beta	Beta		
1 (Constant)	117.463	3.277		35.849	0.000
Bravery	0.503	0.088	0.183	5.695	0.000
Persistence	-1.031	0.037	-0.818	-27.904	0.000
Integrity	0.264	0.103	0.079	2.558	0.011
Vitality	0.513	0.095	0.165	5.409	0.000
a. Dependent variable: Adversity					

Based on Table 5 above, it can be seen that the most significant contributors to the adversity quotient of high school students in Tarakan City are vitality (0.513), bravery (0.503), integrity (0.264), and persistence (-1.031).

**Table 6.** F Test of Bravery, Persistence, Integrity and Vitality on Adversity Quotient

Model	Unstandardized		Standardized	F	Sig.
	Sum of Squares	df	Mean Square		
Regression	13469.981	4	3367.495	206.475	.000 <sup>b</sup>
Residual	5952.949	365	16.309		
Total	19422.930	369			

Table 6 shows that the Fcount value is 206.475 with a significance level of 0.000, which indicates a significant influence together between  $X_1$  (Bravery),  $X_2$  (Persistence),  $X_3$  (Integrity), and  $X_4$  (Vitality) on Y because the significance value of  $0.000 < 0.05$ . The Ftable value with a significance of 5% is 2.396. Based on this comparison, it can be concluded that  $F_{count} \geq F_{table}$ , which is  $206.475 \geq 2.396$ , so  $H_0$  is rejected. Thus, it can be said that there is a significant influence between bravery, persistence, integrity, and spirit on the adversity quotient of high school students in Tarakan City. This means bravery, persistence, integrity, and vitality can predict the adversity quotient of high school students in Tarakan City.

**Table 7.** Summary of relative and effective

Variable	Standardized Coefficients Beta	Correlations	R Square	SE%	SR%
$X_1$ (Bravery)	0.183	0.149	69.4	2.73	4
$X_2$ (Persistence)	-0.818	-0.772		63.15	91
$X_3$ (Integrity)	0.079	0.090		0.71	1
$X_4$ (Vitality)	0.165	0.167		2.75	4
			Total	69.4	100%

Based on the table, it is evident that the effective contribution of bravery is 2.73%. The relative contribution is 4%, persistence is 63.15%, and the relative contribution is 91%. Integrity is 0.71%, and the relative contribution and vitality are 2.75%. Therefore, the total effective contribution is 69.4% to the adversity quotient. In comparison, 30.6% is influenced by other factors.

## DISCUSSION

The results of the F test show a calculated F value of 206.475, which is greater than the F table value of 2.396, with a significance level of 0.000 ( $p < 0.05$ ). This indicates that the variables of bravery, persistence, integrity, and vitality collectively have a significant impact on the adversity quotient of high school teenagers

in Tarakan City. This means that bravery, persistence, integrity, and vitality can predict the adversity quotient in high school teenagers in Tarakan City.

Persistence ( $X_2$ ) makes the most considerable effective contribution to the adversity quotient, accounting for 63.15%. Although persistence has a negative coefficient value (-0.818), its influence is still dominant. The relative contribution of persistence, at 91%, confirms that persistence plays the most significant role, although the direction of the influence is negative. Bravery ( $X_1$ ) makes an effective contribution of 2.73% to the adversity quotient, accounting for a relative contribution of 4%. This suggests that bravery makes a positive contribution to the adversity quotient of adolescents, albeit a relatively small one compared to persistence. Spirit ( $X_4$ ) has an effective contribution of 2.75% and a relative contribution of 4%. With a positive value in the regression coefficient (0.165), the spirit also contributes positively to the adversity quotient. Integrity ( $X_3$ ) makes a minor effective contribution, accounting for 0.71% of the total, with a relative contribution of 1%. Although its contribution is small, integrity still plays a positive role in increasing the adversity quotient.

Overall, the results of this study suggest that bravery, persistence, integrity, and vitality have a significant influence on the adversity quotient in adolescents. Bravery and vitality have a greater positive influence, while excessive persistence can cause pressure and inhibit the adversity quotient. The new findings from the four variables are the R-squared value of 0.694, indicating that bravery, persistence, integrity, and vitality contribute 69.4% to AQ, while other factors outside this variable influence the remaining 30.6%. Of the four variables, persistence makes the most considerable effective contribution to AQ, accounting for 63.15%, although it has a negative coefficient (-0.818). This indicates that persistence makes a significant contribution, but if excessive, it can lead to pressure that hinders the adversity quotient (AQ).

Of the four variables of bravery, persistence, integrity, and spirit studied, persistence showed the most considerable effective contribution to the adversity quotient (AQ), accounting for 63.15% and a relative contribution of 91%. However, the coefficient was negative (-0.818), indicating that excessive persistence can potentially cause stress and hurt the adversity quotient (AQ). This indicates that persistence is the most dominant predictor, although its influence can be counterproductive if not correctly managed. Meanwhile, bravery, spirit, and integrity made a positive contribution to the adversity quotient (AQ), with a smaller percentage. The results of the effective contribution of bravery were 2.73% and a relative contribution of 4%, the spirit was 2.75% with a relative contribution of 4%, and integrity was 0.71% with a relative contribution of 1%, so the total effective contribution was 69.4% and a relative contribution of 100% to the adversity quotient.

Overall, this study shows that bravery, persistence, integrity, and vitality have a significant influence on adolescents' adversity quotient in facing challenges, with persistence as the most dominant factor, although the direction of the influence is negative.

## CONCLUSION

This study reveals a significant positive correlation between bravery and the Adversity Quotient in students. At a significance level of 5%, the t-value of 5.695 and a significance value of 0.000 ( $p < 0.05$ ) indicate that the higher the level of bravery of students, the better their ability to face life's challenges and pressures.

Persistence has a significant effect on students' adversity quotient (AQ). With a t-value of -27.904 and a significance level of 0.000 ( $p < 0.05$ ), these results indicate that the greater the level of persistence of students, the greater their ability to face and overcome life's challenges. Integrity is proven to have a significant effect on students' adversity quotient (AQ). The calculated t-value is 2.558, which is greater than the t-table value (1.966) at a significance level of 5%. The significance value of 0.000 ( $p < 0.05$ ) indicates that the higher the integrity of students, the better their ability to face life's challenges.

Vitality is proven to have a significant positive influence on the adversity quotient (AQ) of high school students in Tarakan City. With a t-value of 5.409, which is greater than the t-table (1.966) at a significance level of 5% and a significance value of 0.000 ( $p < 0.05$ ), these results confirm that the alternative hypothesis ( $H_a$ ) is accepted. The higher the vitality of students, the higher their AQ, which means their ability to face and overcome challenges also increases. Vitality, as a character strength, plays a crucial role in enhancing students' resilience in facing various life challenges, making it a significant predictor of developing students' resilience

and promoting vitality. Bravery, persistence, integrity, and vitality collectively have a significant influence on the adversity quotient (AQ) of high school students in Tarakan City, which can be seen from the calculated F value of 206.475, which is greater than the F table (2.396) at a significance level of 5% ( $p < 0.05$ ). This shows that bravery, persistence, integrity, and passion can predict adversity quotient (AQ) in adolescents.

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