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The Influence of Self-Regulated Learning on Resilience Among Senior High School Students of Tunas Harapan Mandiri Rantau Prapat

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ABSTRACT
This study aims to examine the influence of self-regulation in learning on students' resilience at SMA Tunas Harapan Mandiri Rantau Prapat. A quantitative method was used, with 166 students selected through random sampling from a total population of 200. The results showed a significant positive effect of self-regulation on student resilience, with a coefficient of rx2y = 18.072 and p = 0.000 (p < 0.01). The coefficient of determination (R^2) was 0.870, indicating that 67.10% of students' resilience is influenced by their self-regulation in learning. Additionally, a significant positive relationship was found between self-regulation and peer social support on resilience (r = 0.894; p = 0.000). These findings suggest that the better students' self-regulation, the higher their resilience in facing academic challenges.

Keywords : Self-Regulation, Resilience, High School Students, Social Support, Learning

INTRODUCTION

The progress of a developing country can be seen from how fast and effective it is (Oktavianatun & Nugraheni, 2024). Indonesia has three stages of education, namely elementary school (SD), middle school (SMP), and high school (SMA). Education has a goal that becomes the basis and foundation for creating a learning method that can be used with an understanding of the educational theory that influences students to be optimal in producing quality tourism and can benefit the surrounding environment, not only around the place of residence but also the work environment. Education is the process of changing the attitudes and behavior of a person or group in an effort to mature humans through teaching and training efforts. Education plays a role in improving critical thinking skills and instilling new values so that students can become agents of change in social life (Jember, 2024).

Education is one of the means to develop independent learning in learners, but in the process, it is not appropriate, especially in the adolescent phase (junior and senior secondary education). School is the largest system that can affect most children and their families. Children spend most of their time at school or doing assignments given by school. Similarly, parents generally view school as a necessary institution for their children's future. Moreover, after the state enacted compulsory education that requires all school-age children to attend school up to the senior high school level, education is a systematic effort to motivate, develop, assist, and guide individuals to develop their potential so as to achieve a better

quality of self. Achievement is one of the academic benchmarks, measuring educational progress by looking at the learning outcomes achieved by students.

Resilience is starting to be widely accepted and understood as a very useful psychological concept, especially in helping children and adolescents grow up well and cope with the stress of schooling that many experience. Resilience is the ability of individuals to survive and adapt well in facing academic challenges such as school assignments and other problems in order to achieve maximum learning achievement. This is because some resilience factors can come from individual strengths and from individual social strengths. Students need the ability to survive, overcome, and even develop in the midst of changes and difficulties, especially in facing difficulties at school. This ability is called resilience, in the academic context this ability is called academic resilience, where this ability is needed by students to fail and achieve success despite difficult circumstances. Associated with students where, resilience is an ability possessed by the students themselves who do not give up easily when facing learning pressures and problems.

Resilience enables individuals to adapt effectively when faced with difficult or unpleasant situations. It also supports the development of social, academic, and vocational skills, even when under the high levels of stress that are part of modern life. In the context of education, this ability to persevere is known as resilience. In general, the concept of resilience is a relatively new idea in (Ichsano et al., 2024). Resilience is a concept derived from modern thinking in psychiatry, psychology, and sociology, which explains how individuals - both adolescents and adults - are able to recover and survive when facing stress, trauma, and life risks. Individuals who are resilient usually show good intellectual abilities because they are mentally protected when facing various challenges and making behavioral decisions. Students with high levels of resilience tend to be more motivated, which in turn contributes to increased academic resilience and learning achievement (Syam & Yusri, 2023). Students can be resilient if they have positive traits, including a high level of activeness and positive responses to others, self-development in learning to remain calm within themselves even though they face many problems, motivation to achieve, support, and good social relationships from family, teachers and peers, enjoy coming to school and are more involved in school activities, have a good learning self with a positive view of school and the system, teaching at school has a feeling and a resilient student family, having this is called resilience in academics. It reflects the strength and resilience of an individual to rise up and out of the stress that comes their way during the learning process.

Resilience helps a person become more resilient in life. With resilience, individuals are able to deal with unpleasant situations, as well as develop social, academic, and vocational skills. However, there are still many students who have low levels of resilience. When facing problems, they easily feel down. Some of them are unable to cope with pressure in the academic world, which in turn can affect their physical, mental, and social relationships (Rahmawati & Armiati, 2023).

High resilience will enable them to face the problems faced, control themselves, and manage stress well by changing their way of thinking when facing problems. The academic demands faced by students trigger various problems. The problem that often arises from the many academic demands is the stress experienced by students so that it becomes a factor that

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affects resilience. Resilience as a psychological construct tries to describe how individuals can escape from pressure to become resilient individuals. In this case, there are many factors that affect resilience, but there are at least two factors, and this factor is what the author then makes the independent variable in this study, namely self-regulation in learning and social support from peers.

In school students, the ability to self-regulate the learning process plays an important role in academic achievement. The relationship between self-regulation and student engagement in the school environment also impacts learning outcomes, even when other cognitive factors are controlled (Theobald, 2021).

Research on resilience is often linked to the ability of self-regulation in the learning process. According to Greenberg, self-regulation refers to an individual's capacity to evaluate, manage, cope, and express themselves appropriately in order to achieve emotional balance. Individuals with a good level of self-management tend to recover more quickly from adverse conditions (Nota et al., 2004). Resilience refers to a person's ability to adapt positively in the face of various challenges, which contributes to improving student behavior, achievement, and the quality of social relationships. This individual resilience also determines the extent to which students are able to face and overcome various life difficulties, which are often influenced by surrounding environmental factors (Etgar & Amichai-Hamburger, 2017). Students who have a high level of resilience tend to be able to adjust to the environment, manage emotions effectively, and see the situations they face in a more positive way. Conversely, students with low resilience often have difficulty adapting, are less able to control their emotions, and tend to have a negative view of the problems faced, making it difficult to find solutions (Yang et al., 2024). (Yang et al., 2024). Resilience is influenced by two main elements, namely risk factors and protective factors. Protective factors play a role in reducing the negative impact of unfavorable environmental conditions, as well as strengthening individual resilience. These protective factors include personal characteristics, family environmental conditions, and the broader social context around the individual (Goodyear, 2020).

It can be concluded that the level of individual self-regulation is still low because they have not been able to organize themselves well or remain calm even though they actually have this ability. Students' impulse control is also low, as they struggle to resist impulses and delay gratification. In terms of optimism, students show high optimism, which allows them to be positive in various situations. However, in terms of cause-and-effect analysis, students have difficulty or are even unable to identify the cause of their problems correctly. Regarding empathy, some students showed a sense of empathy, but only to their close friends, not to lesser-known friends.

In the aspect of students' self-efficacy, their level of self-confidence is high, even though their achievements are still low. Various challenging situations make students need resilience to be able to adapt and continue to develop themselves according to their competencies. An individual's ability to survive, rise, and adapt to difficult conditions serves as a protector against the negative impact of the difficulties faced. This kind of resilience is very important for every individual to have (Ganotz-Steinborn & Schwab, 2025).

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Students show a high level of self-confidence in terms of self-efficacy, even though their achievements are still relatively low. Various challenges and situations faced require students to have resilience to be able to adapt and continue to develop themselves well according to their competence. The ability of individuals to survive, rise, and adjust to difficult conditions can protect them from the negative impact of the difficulties faced. This kind of resilience is crucial for every individual (Abdolrezapour et al., 2023).

The researcher also interviewed the guidance and counseling teacher at SMA Tunas Harapan Mandiri Rantau Prapat to collect preliminary data related to self-regulation and student resilience at the school. The results of the interview revealed that the level of resilience of students at SMA Mandiri Rantau Prapat needs to be improved, considering that several problems arise due to the low ability of students to resist. These problems appear in all classes, both science and social studies. One of the most commonly seen problems is students' difficulty in following lessons and discussing with their friends, which causes them to be reluctant to go to school. According to the guidance and counseling teacher at SMA Tunas Harapan Mandiri Rantau Prapat, factors that influence students' low resilience ability include students' tendency to give up easily and their lack of confidence that they can overcome difficult situations. In addition, external factors also affect students' level of resilience, especially the support from people around them, such as parents, friends, teachers, and other close people.

Therefore, based on the background of the problems raised, the author is interested in conducting research with the title. "The Effect of Self-Regulation in Learning on Resilience of Tunas Harapan Mandiri High School Students in Rantau Prapat."

METHOD

This research uses quantitative methods, which focus on collecting and analyzing numerical data to understand the phenomenon under study. In this study, data were collected using the scale method, which involves giving questions or statements to respondents that are measured using a certain scale. This scale aims to describe the level or intensity of a variable being studied, such as the level of resilience or self-regulation in students. This quantitative approach allows researchers to obtain data that is more structured and can be analyzed statistically, providing a clear picture of the relationship between the variables under study.

This additional explanation aims to provide further understanding of the rationale for using the quantitative approach and scale method in this study, as well as how these methods function to measure the variables that are the main focus of the study.

RESULTS AND DISCUSSION

The influence of self-regulation in learning on resilience

There is a significant influence between self-regulation in learning and resilience, as seen from the coefficient value tx2y = 18.072 with p = 0.000. The p-value, which is smaller than 0.01, indicates that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. This means that self-regulation in learning has a significant influence on resilience, which indicates a strong relationship between the independent and dependent variables in this study.

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Test Results of Measuring Tools

Before the main measuring instrument is used in research, the first step is to prepare the measuring instrument to be used. The measuring instruments prepared for this study include the preparation of a peer social support scale, a self-regulation scale in learning, and a resilience scale.

1. Self-regulation in learning scale

   In this study, the scale used includes several subscales, one of which is the self-regulation scale in (Erdogan & Senemoglu, 2016). Researchers used the results of measuring instrument testing previously conducted by (Erdogan & Senemoglu, 2016). Based on the results of the analysis, the correlation coefficient for each item on the self-regulation scale in learning ranged from 0.260 to 0.736. In addition, the Cronbach's Alpha coefficient value obtained is 0.959, which indicates that this scale has excellent reliability, with a consistency level reaching 95.9%.

   The following is a table of the distribution of self-regulation scale items in learning after the trial which can be seen as follows:

Table 1. Self-Regulation Scale

Aspect	Indicator	Item Number			
		Accepted	Total	falls	Total
1. Intrinsic Goal Orientation	Task analysis	2,3	2	1	1
2. Extrinsic goal orientation	Self motivational belief	7,8	2	4,5,6	3
3. Task value	Expectation of outcome	9,10, 11,12,13, 14,16,17	8	15, 18, 19	3
4. Control Of Learning belief	Internal attraction	20,21,22, 23,24,25, 27,28,29	9	26	1
5.Metacognituve self regulation	Goal orientation	30,31,32, 33,34,35	6		
6. Time and study environtmrnt	Imagination	36	1	37, 38, 39	4
7. Effort Regulation	Self-control	40	1	41	1
8. Help seeking	Self reaction	42	1		
			28		14

After testing the self-regulation scale in learning, it was found that 28 items were acceptable, while 14 other items were canceled. The reliability of the scale in this study, namely the self-regulation scale in learning, can be seen in the following table. Based on the results of the reliability test using Cronbach's Alpha (α) formula, the results of

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instrument reliability are then interpreted in accordance with existing guidelines. If the r value is greater than 0.60, then the instrument is considered reliable. Conversely, if the r value is less than 0.60, then the instrument is considered unreliable. It is known that the self-regulation scale in learning with an Alpha value of 0.870 is declared reliable and can be used for research data collection.

2. Resilience Scale

The results of the analysis of reliability and discrimination power on the resilience scale on self-regulation in learning show that the reliability of measuring instruments, based on trial data calculated using the Statistical Program for Social Science (SPSS) 20.0 for Windows computer program, obtained an alpha coefficient (α) of 0.923. The results of the calculation of the reliability index are then compared with the Guilford Masidjo (1995) criteria listed in the table below. Based on the results of these calculations, it can be concluded that the questionnaire is included in the category with very high qualifications.

Table 2. Resilience

Aspect	Indicator	Item Number			
		Accepted	Total	falls	Total
1.Emotion Regulation	Controlling emotions, thoughts and behaviors	1, 22, 29	3	8, 15	2
2.impuls Control	Controlling emotions, thoughts and behaviors	2, 16, 30	3	9, 23	2
3.Optimism	Seeing a bright future, believing in a better change accompanied by effort	3, 10, 31	3	17, 24	2
4.Causal analyst	Flexible, able to analyze the cause of problems, not blaming others for mistakes made	12, 33	2	5, 19, 26	3
5.Empathy	Able to read other people's emotional and psychological conditions, sensitive to non-verbal signs, able to put themselves in other people's shoes	4, 11, 32	3	18, 25	2

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6. self efficacy	Able to organize and implement actions to achieve desired results, able to solve problems	6, 20, 27, 34	4	13	1
7. reaching out	Able to increase positive aspects in life, able to see opportunities in life	28	1	7, 14, 21, 35	4
Total			19		18

After testing the resilience scale, there were 19 accepted items while 18 items were declared invalid. reliability on the resilience scale.

Cronbach's Alpha	N of Items
.897	19

Mean	Variance	Std. Deviation	N of Items
52.0241	86.109	9.27947	19

Figure 1. Resiliency scale reliability

Furthermore, based on the results of the reliability test using the Cronbach's Alpha (α) formula, after obtaining the instrument reliability value, the results are interpreted according to the predetermined guidelines. If the r value is greater than 0.60, then the instrument is considered reliable. Conversely, if the r value is less than 0.60, the instrument is declared unreliable. It is known that the Self-Regulation in Learning Scale with an Alpha value of 0.897 is considered reliable and can be used for data collection in research.

Normality Test

Normality test is conducted to evaluate whether the distribution of variable scores (self-regulation in learning) and resilience in students is normally distributed. This normality test was carried out on research data using the random sampling method. The rule applied is if the significance value is greater than 0.05, then the data is considered normally distributed. Conversely, if the significance value is less than 0.05, the data is considered not normally distributed (Setyawan, 2021).

Table 3. The Results Of The Calculation Of The Normality Of The Distribution

NORMALITY TEST OF VARIABLES AND RESIDUES X_1X_2Y

	MEAN	SD	K-S	pvalue	DESCRIPTION
Self-regulation	65.283	10.042	1.064	0.287	normally distributed
Resilience	48.711	9.135	1.112	0.082	normally distributed
Residual X_1X_2Y			1.203	0.111	normally distributed

Relationship Linearity Test

The linearity test is used to determine whether there is a linear relationship between the

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independent variable and the dependent variable. This test aims to determine whether the relationship between the two variables can be analyzed correlationally or not. The decision is taken based on the P-value, where if the P-value <0.01, then the relationship between the independent and dependent variables is considered linear. Conversely, if the P-value > 0.01, then there is no linear relationship between the two variables. The results of the linearity test between self-regulation in learning and resilience can be seen in the following table.

Table 4. Linearity of Self-Regulation scale

LINIERITAS	F Difference	p Difference	Criteria	DESCRIPTION
$X_{1,2} - Y$	323.817	0.000	P<0.01	Linier
$X_1 - Y$	107.518	0.000	P<0.01	Linier
$X_{,2} - Y$	549.418	0.000	P<0.01	Linier

$X_{1,2}$ = Predictor, self-regulation
$X_2 - Y$ = Self-regulation
Y = Resilience
F BEDA = Coefficient of linearity
p BEDA = Proportion of chance of error

Multicollinearity Test

The multicollinearity test of this study is to see whether or not there is a correlation between the independent variables (Ghozal, 2016). The way there is or is not multicollinearity is by looking at the tolerance value and the variance inflation factor (VIF) value. Tolerance value measures the variability of the selected independent variables that cannot be explained by other independent variables. To see that there are no symptoms of multicollinearity if the tolerance value> 0.100 and the VIF value <10.00, as seen in the following table

Table 5. Multicollinearity Test

	Koef Tolerance	Koef VIF	Criteria	Description
Self-regulation	0.690	1.448	VIF<10.00	Multikolinieritas

Heteroscedasticity test

The multicollinearity test in this study aims to determine whether there is a correlation between the independent variables. The way to identify the presence of multicollinearity is to check the tolerance value and Variance Inflation Factor (VIF). The tolerance value measures the variability of the independent variable that cannot be explained by other independent variables. To ensure the absence of multicollinearity symptoms, the tolerance value must be greater than 0.100 and the VIF value must be less than 10.00, as can be seen in the following table.

Table 6. Heteroskedasticity Test

	F	pvalue	Criteria	Description
X1X2 vs abs_res	0.431	p>0,05	there is no tendency of homoscedasticity	

Hypothesis Test Results

Based on the results of the analysis using the multiple regression method that has been calculated, the results of the hypotheses that have been determined, namely the main effect and interaction effect, are obtained:

1. There is a significant influence between self-regulation in learning and resilience, where the coefficient tx2y = 18.072 and p = 0.000, meaning p <0.01, so the results obtained Ho is rejected and Ha is accepted. The conclusion is that each variable of self-regulation in learning has an influence on resilience, which means that there is a significant influence between the two variables, namely the independent variable and the dependent variable.
2. For the interaction effect obtained, there is a significant effect of self-regulation in learning simultaneously on resilience where the coefficient F = 323.817 with a value of p = 0.000, which means p < 0.010, where Ho is rejected, and Ha is accepted, where there is an influence between one independent variable on the dependent variable.

There is a significant influence between self-regulation in learning and resilience, with coefficient tx2y = 18.072 and p = 0.000, which shows that p < 0.01, so Ho is rejected and Ha is accepted. This concludes that each variable, namely social support and self-regulation in learning, has an influence on resilience separately, which means that there is a significant influence between the independent variable and the dependent variable.

Research conducted by Greenberg on resilience is always associated with self-regulation. Self-regulation is an individual's ability to assess, manage, cope, and express themselves appropriately in order to achieve balance (Greenberg et al., 2017). Good self-management skills allow individuals to quickly rise from the problems they face (Goleman, 2017)

CONCLUSION

This study shows that self-regulation in learning has a significant effect on student resilience. The better self-regulation students have, the higher their resilience level in facing academic challenges. The regression analysis results show that self-regulation contributes positively to resilience with a significant coefficient (p < 0.01). In addition, peer social support is also an important factor that strengthens the relationship. Overall, self-regulation and social support are proven to shape students' mental resilience to survive, rise, and thrive in the face of learning pressure.

REFERENCES

Abdolrezapour, P., Ganjeh, S. J., & Ghanbari, N. (2023). Self-efficacy and resilience as predictors of students' academic motivation in online education. *PLoS ONE*, *18*(5 May), 1–12. https://doi.org/10.1371/journal.pone.0285984

Erdogan, T., & Senemoglu, N. (2016). Development and validation of a scale on self-regulation in learning (SSRL). *SpringerPlus*, *5*(1). https://doi.org/10.1186/s40064-016-3367-y

Etgar, S., & Amichai-Hamburger, Y. (2017). Not all selfies took alike: Distinct selfie motivations are related to different personality characteristics. *Frontiers in Psychology*, *8*(MAY), 1–10. https://doi.org/10.3389/fpsyg.2017.00842

Ganotz-Steinborn, T., & Schwab, S. (2025). What makes students strong? A student's voice

E-ISSN : 2598-8026
ISSN : 2088-3633

study on resilience. *Journal of Research in Special Educational Needs , August 2024*, 1–13. https://doi.org/10.1111/1471-3802.70001

Goleman, D. (2017). *Emotional Intelligence: Why It Can Matter More Than IQ*. Bantam.

Goodyear, V. (2020). Narrative Matters: Young people, social media and body image. *Child and Adolescent Mental Health*, *25*(1), 48–50. https://doi.org/10.1111/camh.12345

Greenberg, M. T., Domitrovich, C. E., Weissberg, R. P., & Durlak, J. A. (2017). Social and emotional learning as a public health approach to education. *The Future of Children*, *27*(1), 13–32. https://doi.org/10.1353/foc.2017.0000

Ichsano, A., Mayangsari, A., Nayla, N., Christcanti, R., Zahra, S. F., & Rizkyanfi, M. W. (2024). Bahasa Indonesia Dan Resiliensi Psikologis: Peran Bahasa Meningkatkan Ketahanan Mental Individu Dalam Menghadapi Tantangan Hidup. *PAEDAGOGY : Jurnal Ilmu Pendidikan Dan Psikologi*, *4*(2), 206–218. https://doi.org/10.51878/paedagogy.v4i2.3138

Jember, U. (2024). *Peran pendidikan dalam membangun pengetahuan masyarakat*. *8*(12), 91–96.

Nota, L., Soresi, S., & Zimmerman, B. J. (2004). Self-regulation and academic achievement and resilience: A longitudinal study. *International Journal of Educational Research*, *41*(3), 198–215. https://doi.org/https://doi.org/10.1016/j.ijer.2005.07.001

Oktavianatun, A., & Nugraheni, N. (2024). Analisis Perkembangan Pendidikan Berkualitas Sebagai Upaya Mewujudkan Tujuan Pembangunan Berkelanjutan (SDGs). *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, *1*(10), 113–118.

Rahmawati, W., & Armiati. (2023). Pengaruh Resiliensi Akademik terhadap Hasil Belajar Siswa Kelas XI SMKN 1 Painan. *Jurnal Pendidikan Tambusai*, *7*, 21898–21905.

Setyawan, D. A. (2021). Petunjuk Praktikum Uji Normalitas & Uji Homogenitas Data dengan SPSS. In *Paper Knowledge . Toward a Media History of Documents*. https://poltekkes-solo.ac.id/cni-content/uploads/modules/attachments/20210902152251-2-Buku Petunjuk Praktikum Uji Normalitas dan Homogenitas Data.pdf

Syam, F. M., & Yusri, F. (2023). Hubungan Resiliensi Diri Dengan Prestasi Belajar Siswa. *Jurnal Bikotetik (Bimbingan Dan Konseling: Teori Dan Praktik)*, *7*(1), 56–62. https://doi.org/10.26740/bikotetik.v7n1.p56-62

Theobald, M. (2021). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology*, *66*, 101976. https://doi.org/https://doi.org/10.1016/j.cedpsych.2021.101976

Yang, Y. Di, Zhou, C. L., & Wang, Z. Q. (2024). The relationship between self-control and learning engagement among Chinese college students: the chain mediating roles of resilience and positive emotions. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1331691