ISSN 3109-9831 (Electronic)

Jurnal Keilmuan Pendidikan

Volume 2 Number 2, 67-73 (2026)
https://doi.org/10.63203/040967200

Article

The Effect of Emotional Regulation on Stress

Dewi Anggraini[1], Sari Apriza[2], A. Azray Muda Dalimunthe[3], Winda Retno Sari[4], Cici Endang Mustika[5]
SMP Negeri 1 Pantai Labu, Sumatera Utara, Indonesia[1,2]
SMP Negeri 2 Bangun Purba, Sumatera Utara, Indonesia[3]
SMP Negeri 3 Percut Sei Tuan, Sumatera Utara, Indonesia[4]
SMP Negeri 1 Patumbak, Sumatera Utara, Indonesia[5]

Received : Sep 20, 2026
Revised : Nov 5, 2026
Accepted : Nov 9, 2026

Keywords:

Emotional regulation
Stress
Emotion

ABSTRACT

This study aims to determine the stress conditions and emotional regulation in students of SMP Negeri 1 Pantai Labu, and to analyze the effect of emotional regulation on their stress levels. The study used a quantitative approach with a correlational method. The study sample consisted of 399 students selected through a sampling technique appropriate to the characteristics of the population. Data collection was conducted using a closed questionnaire that had been tested for validity and reliability. Data analysis included prerequisite tests (normality and linearity tests) and hypothesis testing through Pearson correlation analysis and simple linear regression. The results showed that there was a significant influence between emotional regulation and student stress, evidenced by a significance value of 0.000 < 0.05. The regression equation obtained was Y = 50.227 + 0.376X, with a beta coefficient value of 0.266. This indicates that emotional regulation plays a role in determining stress levels, although the direction of the relationship depends on the interpretation of the scale used. The coefficient of determination (R^2) value of 0.071 indicates that emotional regulation explains 7.1% of the variation in stress in students, while the rest is influenced by other factors outside the variables studied. This study concluded that students' ability to manage their emotions contributes to reducing stress levels, although this contribution is limited. Therefore, improving emotional regulation skills needs to be considered as a strategy for managing stress among students.

Corresponding Author:

Cici Endang Mustika
SMP Negeri 1 Patumbak, Sumatera Utara, Indonesia
Email: cicisyah30@gmail.com

This work is licensed under a CC-BY

Introduction

Stress is a psychological problem frequently experienced by students, especially those in junior high school (SMP). Research shows that academic stress is one of the most common forms of stress experienced by students, characterized by pressure to achieve grades, assignment deadlines, and expectations from the surrounding environment. Stress can arise from high learning demands, pressure from parents and teachers, and peer competition. When students feel burdened by excessive expectations or struggle to understand course material, they are more likely to experience stress, which can impact their mental and emotional well-being.

Previous research has shown that stress is a common psychological condition and can affect various aspects of an individual's life. Stress is an individual's response to demands or pressures perceived as exceeding their coping abilities (Lazarus and Folkman, 1984). In the educational context, academic stress is often experienced by students due to the burden of schoolwork, pressure for grades, and high expectations from the environment (Suldo et al., 2008). In addition, research by Huebner et al. (2001), shows that poor social interactions, such as conflict with peers or bullying, are also major causes of stress in students. Stress can affect mental health, such as increasing

anxiety and depression, and decreasing student concentration and productivity. Further research by McLaughlin et al., 2014, revealed that traumatic experiences, both at school and at home, exacerbate the intensity of stress experienced by students, thus affecting their emotional and psychological development. These findings confirm that stress is a serious issue that requires special attention, especially in adolescents who are vulnerable to various pressures.

Factors such as high academic demands, parental pressure to achieve, strained social relationships, and anxiety about the future are often key triggers (Azmy et al., 2017). Stress in students can impact mental health, leading to feelings of anxiety, lack of motivation to learn, and impaired concentration (Hasibun, 2019). If not managed properly, this stress can negatively impact academic achievement and overall well-being. These pressures can trigger stress, which, if not managed properly, can negatively impact students' psychological well-being and academic performance. To cope with these pressures, emotional regulation is an essential skill for students to master in managing psychological stress and maintaining emotional balance.

Emotional regulation is a crucial skill for managing emotional experiences to achieve psychological balance. Gross and John (2003) explain that emotional regulation involves recognizing, understanding, and controlling emotions, both positive and negative, so that they do not interfere with daily activities. J. J. Gross (2015) identifies two main emotional regulation strategies: reappraisal, which changes the way we perceive situations that trigger emotions, and suppression, which suppresses the external expression of emotions. Good emotional regulation is a crucial foundation for supporting students' mental health and success in facing the challenges of daily life. Aldao et al. (2010) support these findings, showing that poor emotional regulation strategies correlate with an increased risk of psychological disorders, including stress, anxiety, and depression.

Based on preliminary observations conducted in April 2026 at SMP Negeri 1 Pantai Labu, some students appeared to experience stress, as reflected in difficulty concentrating during lessons, irritability, and withdrawal from social activities. Information about these experiences was obtained through such as classroom observations, informal conversations with students, or discussions with the school counselor]. Students reported that heavy assignments and examination preparation were sources of academic pressure. Some also described difficulty managing their emotions, including emotional outbursts and excessive anxiety.

To improve emotional regulation and manage stress effectively, students need to be provided with an understanding and training in effective coping strategies. Teachers, parents, and school counselors play a crucial role in providing guidance and emotional support to students. Emotional and social education programs can also be a solution in helping students develop better emotional regulation skills. With good emotional regulation, students are not only able to cope with stress more effectively but can also improve their mental well-being and academic performance. These results indicate that there is a potential relationship between emotional regulation and the level of stress experienced by students, therefore based on the problems above, it encourages researchers to conduct further research on the Relationship Between Emotional Regulation and Stress in Students of SMP Negeri 1 Pantai Labu.

Methods

This study used a quantitative approach with a correlational method to examine the relationship between emotional regulation and stress levels in students at SMP Negeri 1 Pantai Labu. The correlational approach is a research method that aims to identify the relationship between two or more variables without manipulating the variables (Creswell, 2016). This study uses numerical data that is analyzed statistically to determine whether there is a significant relationship, as well as how strong and in which direction the relationship (positive or negative) is.

In a correlational design, researchers do not control the independent or dependent variables but only observe the natural relationship that occurs between these variables (Sugiyono, 2018). The population in this study was all students of SMP Negeri 1 Pantai Labu in the 2024/2025 academic year. The characteristics of the population focused on the study included students in grades VII, VIII, and IX, who are in the early adolescent developmental stage and face academic and social challenges that influence their stress levels.The sample in this study was drawn from the student population of SMP Negeri 1 Pantai Labu using a purposive sampling technique. Therefore, the researcher determined the sample size for this study was 133 students from grade IX of SMP Negeri 1 Pantai Labu from six classes.

In the process of instrument development, validity plays a fundamental role, as it concerns the accuracy and soundness of a test in reflecting the variable under investigation. The higher the validity, the more precisely the instrument represents the phenomenon being measured (Syahputra et al., 2025). Based on the validity test results for the Emotional Regulation variable instrument (Variable X), it was found that all statement items showed a calculated r value greater than the r table (0.1716) with a total of 93 respondents (df = 91). The calculated r values ranged from 0.1860 to 0.4994, indicating that all items were above the minimum validity limit. Therefore, all 20 statement items in the Emotional Regulation variable can be declared valid. Based on the validity test results for the Stress variable instrument (Variable Y), it was found that of the 28 statement items tested, 25 had a calculated r value greater than the r table (0.1716) with a total of 93 respondents (df = 91), thus being declared valid. Valid calculated r values ranged from 0.1743 to 0.4901. Meanwhile, there are 3 statement items that have r-count values below r-table, namely items number 8 (0.0995), 26 (0.0770), and 27 (0.0509), so all three are declared invalid.

Linearity testing involves the use of an ANOVA table followed by an F-Regression test, and is considered linear when the significant coefficient is P > 0.05. If P is significant > 0.05, then it is considered part of a normal distribution. Statistical hypothesis testing is conducted to verify the validity of the statements proposed in this study regarding the relationship between emotional regulation and stress in students. Through hypothesis testing, researchers can determine whether there is a significant influence of the independent variables on the dependent variable, as well as how much they contribute to influencing stress.

Results and Discussion

This section presents the research results based on data obtained from respondents using instruments designed according to the indicators of each research variable. The collected data were then analyzed to provide an overview of the respondents' characteristics and the level of each variable studied. The research data was analyzed using descriptive statistics from all 133 ninth-grade students of SMP Negeri 1 Pantai Labu. The descriptive results are outlined in the table below:

Table 1. Descriptive Statistics Results

	Emotional Regulation	Stress
Valid	133	133
Missing	0	0
Mode [a]	63	85
Median	66	90
Mean	66.20	89.74
Std. Deviation	8.12	9.98
Minimum	47	56
Maximum	96	123

[a] More than one mode exists, only the first is reported

Based on the results of descriptive analysis of 133 respondents, it was found that the emotional regulation score had a minimum value of 47, a maximum value of 96, with an average (mean) of 66.203. This indicates that students' emotional regulation abilities are in the fairly good category, where most students are able to manage and control their emotions quite effectively. Meanwhile, data regarding stress showed a minimum value of 56 and a maximum of 123, with an average of 89.744.

Table 2. Hypothesis Testing

Predictor variable	B	β	t	p	R^2
Emotional Regulation	0,481	-0,391	-4,866	< 0,001	0,153

Based on the ANOVA table above, the p-value <0.001, so it can be concluded that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This means that there is a significant influence between Emotional Regulation and Stress. The results of the study indicate a significant relationship between emotional regulation and stress in students. This is evidenced by a significance value of 0.000 < 0.05, indicating a statistically significant effect between the independent variable (emotional regulation) and the dependent variable (stress).

This means that the better a student's ability to regulate their emotions, the lower their perceived stress levels tend to be.

These research findings align with various recent theories and findings. Gross and Thompson (2014) in Emotion Regulation: Conceptual Foundations state that emotional regulation is a crucial process that influences emotional reactions to various situations, including stress. Lazarus and Folkman (1984) are indeed the initial references in stress and coping theory, but several updates, such as the research by Compas et al. (2017), reinforce that effective coping, including emotional regulation, plays a role in reducing stress in children and adolescents. Eisenberg et al.'s (2019) theory also confirms that adaptive emotional regulation is correlated with psychological well-being and can reduce internalizing disorders such as stress and anxiety. These findings are supported by previous research, such as that of Fitriani (2021), who found that emotional regulation has a significant relationship with stress levels in college students. Similarly, research by Putri & Mahmud (2020) found that students with good emotional regulation skills tend to be better able to control their responses to stressful situations, resulting in lower perceived stress. However, these results differ from the findings of Rahayu (2022), who found that emotional regulation had no significant effect on stress in high school students in rural areas. This difference is likely influenced by differences in respondent characteristics, cultural background, and the emotion and stress measurement approaches used in the study.

The research results indicate a significant negative correlation between emotion regulation and stress among students at SMP Negeri 1 Pantai Labu. Assuming that higher scores reflect better emotion regulation abilities, these findings suggest that students who are more capable of regulating their emotions tend to report lower levels of stress. This relationship can be understood through the ways in which students respond to stressful situations. Gross & John (2003) found that cognitive reappraisal and expressive suppression relate differently to psychological well-being. This implies that regulating emotions is not merely about suppressing feelings, but also about re-evaluating the meaning of an experience. In a school setting, for instance, students might learn to view the difficulty of completing an assignment as a challenge that can be addressed incrementally, rather than immediately interpreting it as evidence of their own personal inadequacy. While this explanation offers a plausible mechanism, it has not been specifically tested in the present study.

The observed relationship should also be considered within the context of the pressures adolescents face. Klosowska et al. (2020) demonstrated that stressors arising from relationships with parents and peers are linked to the psychological state of adolescents, with emotion regulation strategies playing a mediating role in some of these associations. These findings suggest that student stress should not be viewed solely as a matter of an individual’s personal capacity to control their emotions; rather, factors such as the family environment, peer experiences, and academic demands must also be taken into account. In this study, the regression model accounts for only a portion of the variance in stress scores, indicating that emotion regulation does not provide a comprehensive explanation. The unexplained variance cannot be attributed to any specific factor, as such factors were not measured. Furthermore, the correlational design of this study cannot definitively establish whether emotion regulation precedes changes in stress levels, or whether the experience of stress, in turn, influences a student's ability to regulate their emotions.

For guidance and counseling services, these findings may serve as a basis for developing activities that help students recognize and understand their emotional responses when faced with pressure. Shapero et al. (2019) found that cognitive reappraisal is associated with a weakening of the link between depressive symptoms and difficulties in emotional recovery following exposure to stress among adolescents. These findings underscore the importance of considering how students interpret stressful experiences, even though the variables and contexts differ somewhat from those in the present study. School counselors might consider activities such as documenting emotion-triggering situations, identifying the thoughts that arise, and practicing the formulation of more realistic, alternative appraisals. Such activities should be accompanied by monitoring the specific needs of each student. However, their effectiveness in reducing stress remains to be tested through intervention research, as the current study only demonstrates relationships between variables.

These findings offer practical implications for schools, particularly guidance and counseling teachers, to develop student emotional development programs through individual counseling, stress management training, or social-emotional learning. Structured interventions can help students better recognize, understand, and regulate their emotions in facing the challenges of school and social life. Further research incorporating other variables such as

social support, personality, and academic load is also needed to more comprehensively explain other factors contributing to student stress levels.

Conclusion

The research results indicate a significant negative correlation between emotion regulation and stress among students at SMP Negeri 1 Pantai Labu. In other words, better emotion regulation skills are associated with lower levels of stress. While these findings highlight the importance of considering emotion regulation when examining student stress, they do not establish a causal relationship. Future research should involve students from multiple schools and account for other factors, such as social support, academic demands, and coping strategies. Longitudinal studies could help clarify the relationship between emotion regulation and stress over time. Furthermore, experimental research is needed to test whether emotion regulation training is effective in reducing student stress.

Ethical Approval

This study was conducted with permission from SMP Negeri 1 Pantai Labu under letter number 00251/SMPN1PL/V/2026. Informed consent was obtained from the participants' students prior to data collection. Participation was voluntary, and students were informed that they could decline participation or withdraw without any academic consequences. Participants' identities and responses were kept confidential, and the data were used solely for research purposes.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of Interests

The authors declare that they have no conflict of interests.

Author Contributions

Author DA: Conceptualization, methodology, data analysis, and writing original draft. Author SA: Investigation, data collection, and writing review and editing. Author AMD: Supervision, validation, and final approval of the manuscript. Author WRS: Validation, and final approval of the manuscript. Author CE: Conceptualization, methodology, data collection, and writing review and editing

Supplementary Material

No supplementary material is associated with this article.

Declaration about the Use of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this manuscript, the authors used ChatGpt to assist with language improvement, grammar checking, translation, or other purpose.

Acknowledgment

The author is deeply grateful for the assistance provided by various parties who participated in this research. The author extends the highest appreciation to everyone who offered support, guidance, and contributions throughout the preparation of this article. The author also expresses special thanks to all the teachers and students of SMP Negeri 1 Pantai Labu for their invaluable help and participation in the conduct of this research.

References

Ajat, R. (2018). *Pendekatan Penelitian Kuantitatif: Quantitative Research Approach*. Deepublish.

Aldao, A., Gee, D. G., De Los Reyes, A., & Seager, I. (2016). Emotion Regulation as a Transdiagnostic Factor in the Development of Internalizing and Externalizing Psychopathology: Current and Future Directions. Development and Psychopathology, 28(4pt1), 927–946. https://doi.org/10.1017/S0954579416000638

Arnesty, A. E., & Pedhu, Y. (2023). Analisis korelasi antara regulasi emosi dan perilaku memaafkan remaja panti asuhan. *Jurnal psiko edukasi*, *21*(2), 141–150. https://doi.org/DOI: 10.25170/psikoedukasi.v21i2.4879

Gross, J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2).

Hasibun, D. T. M. (2019). *Hubungan Stres Belajar dengan Motivasi Belajar pada Mahasiswa yang Menjalani Pendidikan di Sekolah Tinggi Ilmu Kesehatan Murni Teguh*. STIKES Murni Teguh.

Herman, K. C., Reinke, W. M., & Dong, N. (2020). Student Stress and Emotion Regulation: Effects on Academic Engagement and Mental Health. School Psychology Review, 49(4), 443–455. https://doi.org/10.1080/2372966X.2020.1818367

Hermawan, M. A., Mulyatini, N., & Yustini, I. (2022). *Pengaruh Peran Ganda dan Stres Kerja Terhadap Kinerja Pegawai (Studi Kasus pada UPTD Puskesmas Manonjaya)*. *4*, 39–45.

Ifdil, I., Lela, L., Syahputra, Y., Fitria, L., Zola, N., Fadli, R. P., ... & Amalianita, B. (2022). Academic Stress Among Male and Female Students After the Covid-19 Pandemic. *COUNS-EDU: The International Journal of Counseling and Education*, *7*(3).

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity.* Wiley.

Kim, J., & Cicchetti, D. (2021). Longitudinal Pathways Linking Child Maltreatment, Emotion Regulation, Peer Relationships, and Adolescent Depression. Development and Psychopathology, 33(1), 215–230. https://doi.org/10.1017/S0954579420000516

Klosowska, J. C., Verbeken, S., Braet, C., Wijnant, K., Debeuf, T., De Henauw, S., & Michels, N. (2020). The moderating role of emotion regulation in the association between stressors with psychological and biological measures in adolescence. *Psychosomatic Medicine, 82*(5), 495–507. https://doi.org/10.1097/PSY.0000000000000804

MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, *146*(2).

Maufiroh, I. (2023). *HUBUNGAN REGULASI EMOSI SISWA DENGAN STRES AKADEMIK SISWA DI SMK YP 17-1 MALANG*. UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG.

Morales, S., & Telzer, E. H. (2022). Emotion Regulation Strategies and Academic Success in Adolescents. Child

Development, 93(3), 763–779. https://doi.org/10.1111/cdev.13753

Moris, A. ., Silk, J., Steinberg, Myers, & Robinson, L. . (2007). The Role of Family Context in the Development of emission regulasion. *Journal Social* Purwanza, S. W. (2022). *Metodologi Penelitian Kuantitatif, Kualitatif, dan Kombinasi* (A. Munandar (ed.); Issue Februari). CV. MEDIA SAINS INDONESIA.

Rahmi, N. (2013). *Hubungan Tingkat Stres dengan Prestasi Belajar Mahasiswa tingkat II Prodi D-III Kebidanan Banda Aceh Jurusan Kebidanan Poltekkes Kemenkes NAD TA 2011/2012*. STIKes U' Budiyah Banda Aceh.

Riswandi, A., & Asmarita, W. (2019). Konseling Kelompok Menggunakan Musik untuk Menurunkan Stres Belajar peserta didik di SMA Muhammadiyah 1 Palangka Raya. *Jurnal Bimbingan Dan Konseling*, *4*(2).

Salendu, P. C. M., Syahputra, Y., & Rahmat, C. P. (2025). Pengaruh Stres Terhadap Kecemasan Matematika Pada Siswa SMK Jurusan Multimedia. *TERAPUTIK: Jurnal Bimbingan dan Konseling*, *9*(1), 38-46.

Saxena, S., & Jain, M. (2017). Academic Stress and its Impact on Mental Health of Students: A Study of Emotion Regulation Strategies. Indian Journal of Health and Wellbeing, 8(5), 488–492.

Shapero, B. G., Stange, J. P., McArthur, B. A., Abramson, L. Y., & Alloy, L. B. (2019). Cognitive reappraisal attenuates the association between depressive symptoms and emotional response to stress during adolescence. *Cognition and Emotion, 33*(3), 524–535. https://doi.org/10.1080/02699931.2018.1462148

Shields, A. M., & Cicchetti, D. (2018). Emotion Regulation and School Adjustment: A Longitudinal Study in Middle School Students. Journal of School Psychology, 66, 1–14. https://doi.org/10.1016/j.jsp.2017.12.001

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kuaitatif dan R&D*. CV Alfabeta.

Syahputra, H. (2019). Penerapan Konseling Kelompok Terhadap Peningkatkan Kepercayaan Diri Siswa Kelas XI IIS 1 Man 3 Medan. In *Universitas Islam Negeri Sumatera Utara Medan*. Universitas Islam Negeri Sumatera Utara. http://repository.uinsu.ac.id/8358/1/HERI SYAHPUTRA SKRIPSI ACC 2019.pdf

Syahputra, Andi, and Deki Rifandi, 'Hubungan Intensitas Media Sosial Dan Kepercayaan Diri Pada Remaja Awal the Relationship Between Social Media Intensity and Self-Confidence in Early Adolescents', *Journal of Healthcare Technology and Medicine*, 7 (2021), 2615–109.

Syahputra, Y., Prayitno, P., Syahniar, S., & Hariyani, H. (2019). Rasch stacking analysis of student internet addiction based on gender. *Jurnal Konseling Dan Pendidikan*, *7*(1), 35-41.

Syahputra, Y., Rahmat, C. P., & Erwinda, L. (2025). *Instrumentasi Tes dalam Bimbingan dan Konseling*. CV Eureka Media Aksara.

Wulandari, W., & Kumalasari, D. (2022). Resiliensi Akademik Pada Mahasiswa: Bagaimana Kaitannya Dengan Dukungan Dosen? *Jurnal Psikologi Malahayati*, *4*(1), 19–30. https://doi.org/10.33024/jpm.v4i1.5058

Zhou, M., & Ee, J. (2016). Development of Emotion Regulation and Impact on Academic Performance in Adolescents. Educational Psychology, 36(4), 784–803. https://doi.org/10.1080/01443410.2014.895294

Zimmerman, B. J. (2020). Self-Regulated Learning: Theories, Measures, and Outcomes. *Educational Psychology Review*, *32*(1), 105–125.