Vol. 7 No.2 (2025) Hal. 452-457
HealthCare Nursing Journal
available on : https://journal.umtas.ac.id/index.php/healtcare
e-ISSN : 2655-6812

Research Article

Analysis of Stress Levels in Adolescents at Ciamis Senior High School 2

Idhfi Marpatmawati[1*], Heri Budiawan[2], Wawan Rismawan[1] , Nandita Milda Hidayat[1]
[1] Nursing Department, Faculty of Health,Universitas Bakti Tunas Husada, Indonesia
[2] Nursing Department, Faculty of Health,Universitas Muhammadiyah Tasikmalaya, Indonesia

Article Information

Received: 16 Mei 2025
Revised: 07 Juli 2025
Accepted: 31 Juli 2025
Available online: 31 Juli 2025

Keywords

adolescent stress; mental health; DASS; secondary education; school-based intervention

Correspondence*

Phone: (+62) 82246712011

E-mail: idhfi94@gmail.com

Website
https://journal.umtas.ac.id/index.php/healtcare/index

Doi
https://doi.org/10.35568/healthcare.v7i2.6850

©The Author(s) 2025
This is an Open Access article distributed under the terms of the Creative Commonss Attribution-Non Commercial 4.0 International License

ABSTRACT

Adolescents are an age group particularly vulnerable to stress due to academic, social, and emotional pressures. Unmanaged stress can negatively affect mental health and academic performance. This study aims to analyze stress levels among adolescents at Ciamis Senior High School 2 based on age and gender. A descriptive quantitative approach was used with purposive sampling. The research instrument was the DASS questionnaire, distributed to 861 respondents aged 14–18 years. Data were analyzed using descriptive statistical methods. The majority of respondents experienced moderate (33.57%), severe (22.42%), and extremely severe (16.61%) levels of stress. Adolescents aged 16–17 and females showed higher stress levels than other groups. The findings indicate that mid-adolescents and females are more prone to psychological pressure. This is consistent with Erikson's psychosocial development theory and the transactional stress model by Lazarus & Folkman. Most adolescents experience moderate to extremely severe stress, particularly those aged 16–17 and females. Contextual and gender-sensitive mental health interventions are needed in the school environment.

Keywords:

INTRODUCTION

Stress is an individual's adaptive response to internal or external pressures that are considered to disrupt their psychological balance (American Psychological Association, 2020). Basically, stress can be positive (eustress) or negative (distress), depending on how the individual interprets and deals with it (Sarafino & Smith, 2020). However, in adolescents, especially high school students,

stress tends to have a negative impact because their ability to manage stress in a healthy way is not yet optimal (Santrock, 2019).

High school is a crucial phase of development, marked by intense biological, psychological, and social changes. In the midst of their search for identity, high school students are faced with various academic demands, such as increasing study loads, national exams, and preparation for entering college (Kurniasari et al., 2022). This pressure often causes stress that can have an impact on mental health, concentration in learning, and academic achievement.

According to the results of the 2018 Riskesdas, the prevalence of emotional mental disorders in adolescents aged 15–24 years reached 6.2%, most of which were related to academic pressure and social relationship problems (Ministry of Health of the Republic of Indonesia, 2018). This shows that stress is an important issue that requires serious attention in the educational environment. In addition to academic factors, relationships with peers, family conflicts, and pressure from social media also trigger stress in high school students (Indrawati & Mustikasari, 2020).

The pressure to appear perfect, both in terms of appearance and achievement, often makes adolescents compare themselves negatively, thus exacerbating stress levels (Putri & Fitria, 2021). Previous studies have shown that unmanaged stress can reduce learning motivation, increase the risk of anxiety disorders, and even cause deviant behavior such as skipping school or self-harm (Rachmawati et al., 2021). Therefore, mapping stress levels in high school students is important for early detection of their psychological conditions and as a basis for developing guidance and counseling programs in schools.

Several studies support the importance of studying stress levels in high school adolescents, such as research conducted by Hikmawati and Fitriana (2023) which found that low parental involvement and lack of resilience contributed to high academic stress in students in Bandung. Meanwhile, Amalia (2023) showed that the Independent Learning Curriculum increased stress in high school students in Palembang, with most of them in the moderate stress category. Research by Sulastri and Rahayu (2023) revealed that low student expectations were also related to high academic stress. In the context of distance learning, Utami and Prasetyo (2022) found that technical disruptions and difficulty understanding the material contributed to student stress in Semarang. In addition, Maharani and Wulandari (2022) reported that more than half of students in Jakarta experienced stress, with women being more vulnerable. Although relevant, most of these studies are limited to certain aspects. Therefore, this study offers novelty through a quantitative descriptive approach to describe student stress levels more comprehensively and representatively. The aim of this study was to analyze stress levels in adolescents at Ciamis Senior High School 2

METHOD

This study employed a descriptive quantitative approach, aimed at illustrating the levels of stress experienced by adolescents in secondary schools. This research design was chosen because it is appropriate for mapping psychological phenomena in numerical distribution based on specific demographic characteristics without manipulating the variables. The main focus of this study is to identify the distribution of stress levels among respondents based on age and gender categories.

The population of this study consisted of adolescents aged between 14 and 18 years, with a total of 861 respondents, comprising 296 males and 565 females. The sampling technique used was purposive sampling, considering that this age group is particularly vulnerable to stress due to psychosocial development, academic pressure, and complex social interactions. Participation was

voluntary, and all respondents were informed of the study's purpose and assured of the confidentiality of their personal data prior to completing the questionnaire.

The research instrument used was a structured questionnaire containing statements related to the respondents' psychological conditions, specifically utilizing the Depression Anxiety Stress Scales (DASS). This questionnaire was designed to measure stress levels and classify them into five categories: normal, mild, moderate, severe, and extremely severe. Data collection was conducted through the distribution of the questionnaire, which was completed independently by the respondents offline at school under the supervision of the researcher.

Upon completion of data collection, the researcher reviewed the responses for completeness and proceeded to analyze the data using descriptive statistical techniques. The analysis presented the frequency distribution and percentage of each stress level category. Furthermore, the data were analyzed to observe patterns in stress level distribution based on age and gender variables.

The entire research procedure was carefully designed to enable replication by other researchers in similar populations. The findings of this study are expected to provide essential preliminary information on adolescent stress levels and serve as a basis for mental health interventions or the development of educational policies and psychological support programs within the school environment.

RESULTS

This study analyzes stress levels among 861 adolescent respondents by categorizing them based on stress level, age, and gender. The data is presented in three tables, each illustrating the distribution of stress levels overall, by age, and by gender.

Table 1. Overall Distribution of Respondents' Stress Levels

No	Stress Category	f	(%)
1	Normal	151	17.54
2	Mild	85	9.87
3	Moderate	289	33.57
4	Severe	193	22.42
5	Extremely Severe	143	16.61
	Total	861	100

The majority of respondents fall into the moderate stress category (33.57%), followed by severe and extremely severe categories. Together, these indicate that more than half of the respondents are experiencing significant levels of stress.

Table 2. Distribution of Stress Levels by Age

No	Age	Normal	Mild	Moderate	Severe	Extremely Severe
1	14 years	1	0	0	1	0
2	15 years	5	9	30	23	2
3	16 years	45	20	60	44	30
4	17 years	36	22	62	32	17
5	18 years	16	15	25	20	18
	Total	103	66	177	120	67

Adolescents aged 16 and 17 years show the highest distribution in the moderate to severe stress categories, indicating a greater vulnerability to stress during mid-adolescence.

Table 3. Distribution of Stress Levels by Gender

No	Gender	Normal	Mild	Moderate	Severe	Extremely Severe
1	Male	80	39	100	50	27
2	Female	71	46	185	143	116
	Total	151	85	285	193	143

Female respondents exhibit higher levels of stress than male respondents across all categories, particularly in the moderate to extremely severe levels. This suggests gender-based differences in stress responses.

The key finding of this study is the high proportion of adolescents experiencing moderate to extremely severe stress levels, with a higher prevalence among females and

those aged 16–17. This underscores the importance of mental health interventions targeting this age group and the need for gender-sensitive approaches.

However, this study has limitations that must be considered when interpreting the results. It does not explore in depth the factors contributing to the respondents' stress levels. Important aspects such as family conditions, academic pressure, and social environment influences were not specifically examined, even though these factors may significantly contribute to adolescent stress.

Future research is recommended to delve deeper into aspects not addressed in this study. Subsequent studies should explore specific stress-inducing factors among adolescents, including academic pressure, family conflicts, peer relationships, and social media exposure. A deeper understanding of these stress determinants will provide a stronger foundation for designing targeted interventions. Moreover, it is crucial to develop and assess the effectiveness of stress management interventions tailored to the age and gender characteristics of adolescents. Given the gender differences in stress responses identified in this study, a more personalized and contextual intervention approach is essential.

DISCUSSION

This study found that the majority of adolescent respondents experienced stress within the moderate to extremely severe categories, with the highest proportion observed among those aged 16–17. Furthermore, the prevalence of stress was higher among female adolescents compared to their male counterparts. These findings align with the initial hypothesis that mid-adolescents and females are more vulnerable to psychological stress. The results also correspond with the basic concept in Erikson's psychosocial development theory, which posits that adolescence is characterized by the stage of identity versus role confusion—a period marked by multifaceted pressures including academic, social, and emotional challenges.

Moreover, the *Transactional Model of Stress and Coping* by Lazarus and Folkman is relevant in interpreting these findings. This theory states that stress arises when individuals perceive environmental demands to exceed their capacity to cope with those demands. In this context, adolescents aged 16–17, who are undergoing the transition to early adulthood, are likely to face various stressors such as academic preparation, career decision-making, and uncertainty about the future—all of which are major contributors to stress.

Several studies in the past five years support these findings. Gao et al. (2023) reported that academic stress significantly contributes to emotional burnout among adolescents, and that self-efficacy plays a crucial moderating role in this relationship. Jayanthi et al. (2020) also noted that female adolescents tend to experience higher levels of academic stress and anxiety compared to males. Similarly, Zhao et al. (2021) found that high academic pressure in late secondary school is a major predictor of mental health disorders.

Global data further underscore the importance of addressing this issue. According to a WHO report (2021), one in seven adolescents worldwide experiences a mental health disorder. The CDC (2023) also reported that approximately 20% of adolescents in the United States have unmet mental health needs. These statistics suggest that adolescent stress is not merely a localized concern but a global public health issue.

Another important argument is the need for more contextual and school-based intervention approaches. Recent studies, such as those by Llistosella et al. (2024) and van Loon et al. (2024), highlight the effectiveness of school-based intervention programs in reducing stress levels and enhancing adolescents' emotional resilience. Programs like resilience training, brief psychoeducation, and skills training for

managing test anxiety have been shown to positively impact students' mental health.

From a theoretical perspective, this study reinforces the relevance of psychological models such as Erikson's developmental theory and Lazarus and Folkman's transactional stress model. It also contributes to the literature by emphasizing the importance of age and gender as factors in understanding susceptibility to psychological stress.

From an applied standpoint, the findings affirm the necessity of developing school-based stress management programs, particularly those tailored to adolescents aged 16–17 and designed with gender sensitivity in mind. Interventions such as stress lessons, emotional regulation training, and resilience development should be integrated into the upper secondary education system. Schools represent a strategic setting for implementing such interventions, as they are both a primary source of stress and a potential space for building social support and healthy coping skills.

In conclusion, this study not only provides insight into the stress situation among adolescents but also offers direction for developing relevant interventions aimed at improving the mental health of future generations.

CONCLUSIONS AND RECOMMENDATION

Based on the study, which focused on the distribution of stress levels among adolescents, the conclusion of this research confirms that the largest proportion of the 861 respondents experienced stress in the moderate to extremely severe categories. This was especially evident among respondents aged 16–17 and among females, indicating that these two groups are more vulnerable to psychological pressure. These findings support the initial assumption that age and gender significantly influence adolescents' stress levels. Using a quantitative approach and categorical stress distribution analysis, this study objectively reveals vulnerability patterns that are relevant as a foundation for educational or mental health interventions within school environments.

The scientific contribution of this research to the field of knowledge—particularly developmental psychology and education—lies in its provision of recent empirical data on stress distribution based on demographic variables. The results serve as a critical foundation for designing more targeted and evidence-based school interventions and strengthen scientific understanding of the importance of integrating psychosocial aspects into adolescent education approaches. Therefore, this study not only enriches academic discourse on adolescent stress but also promotes the development of more measurable and applicable intervention strategies in the context of education and adolescent mental health services.

REFERENCES

American Psychological Association. (2020). *Stress: The different kinds of stress*. https://www.apa.org/topics/stress/types

Centers for Disease Control and Prevention. (2023). *Data and statistics on children's mental health*. https://www.cdc.gov/children-mental-health/data.html

Gao, X., Liu, X., Zhang, H., & Li, Q. (2023). Academic stress and burnout in adolescents: Mediated by anxiety and moderated by self-efficacy. *Frontiers in Psychology, 14*, Article 1133706. https://doi.org/10.3389/fpsyg.2023.1133706

Hikmawati, S., & Fitriana, D. (2023). Peran ketahanan psikologis dan keterlibatan orang tua terhadap stres akademik siswa. *Jurnal Psikologi Pendidikan, 12*(2), 112–121.

Indrawati, I., & Mustikasari, M. (2020). Pengaruh media sosial terhadap tingkat stres pada remaja. *Jurnal Kesehatan Mental, 8*(2), 101–109.

Jayanthi, P., Thirunavukarasu, M., & Rajkumar, R. (2020). Academic stress and depression among adolescents: A cross-sectional study. *Indian Journal of Psychiatry, 62*(3), 344–349.

Kementerian Kesehatan Republik Indonesia. (2018). *Laporan nasional Riskesdas 2018*. Badan Penelitian dan Pengembangan Kesehatan.

Kurniasari, D., Lestari, D., & Handayani, R. (2022). Tingkat stres akademik pada siswa SMA berdasarkan tuntutan belajar. *Jurnal Ilmu Pendidikan, 11*(1), 22–29.

Listosella, A., Martí-Vilar, M., & García-Sancho, E. (2024). Effectiveness of a school-based resilience intervention in at-risk adolescents. *Frontiers in Psychology, 15*, Article 1478424. https://doi.org/10.3389/fpsyg.2024.1478424

Maharani, S., & Wulandari, I. (2022). Gender dan tingkat stres pada pelajar SMA di Jakarta. *Jurnal Keperawatan Jiwa, 10*(2), 105–112.

Putri, R. A., & Fitria, R. (2021). Hubungan antara body image dan stres pada remaja putri. *Psikoborneo, 9*(1), 15–23.

Rachmawati, F., Prasetya, R. A., & Susilo, D. (2021). Tingkat stres dan dampaknya terhadap prestasi belajar siswa SMA. *Jurnal Konseling dan Pendidikan, 9*(1), 45–52.

Santrock, J. W. (2019). *Life-span development* (17th ed.). McGraw-Hill Education.

Sarafino, E. P., & Smith, T. W. (2020). *Health psychology: Biopsychosocial interactions* (9th ed.). Wiley.

Sulastri, N., & Rahayu, T. (2023). Ekspektasi akademik dan stres pada siswa SMA. *Jurnal Ilmu Psikologi, 15*(2), 67–74.

Utami, A., & Prasetyo, T. (2022). Stres akademik pada pembelajaran daring siswa SMA selama pandemi. *Jurnal Pendidikan dan Pembelajaran Online, 3*(1), 22–31.

van Loon, A., Olthof, M., & Kuyper, H. (2023). Targeted skills-training programs for performance anxiety and social skills in adolescents. *Child & Youth Care Forum*. https://doi.org/10.1007/s10566-023-09736-x

van Loon, A., Olthof, M., & Kuyper, H. (2024). We need better ways to help students avoid the harms of stress: Meta-analysis of school-based interventions. *ResearchGate*. https://doi.org/10.13140/RG.2.2.13105.63841

World Health Organization. (2021). *Adolescent mental health*. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Zhao, Y., Guo, Y., Xiao, Y., Zhu, R., Sun, W., Huang, W., & Peng, X. (2021). The effects of academic stress on mental health and academic burnout in Chinese adolescents. *Frontiers in Psychology, 12*, Article 679605. https://doi.org/10.3389/fpsyg.2021.679605