

INFORMASI ARTIKEL

Received: May, 08, 2026

Revised: May, 17, 2026

Available online: May, 19, 2026

at: <https://e-jurnal.iphorr.com/index.php/mhc>

Factors associated with emotional mental disorders among adolescents

Indri Putri Umairoh, Marta Butar Butar, Helmi Suryani Nasution, Hendra Dhermawan Sitanggang

Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi

Corresponding author: *E-mail: indriumairoh233@gmail.com

Abstract

Background: Emotional mental disorders among adolescents are an increasing public health concern. The I-NAMHS survey reported that 34.9% of adolescents experience mental health problems, while a preliminary survey at Senior High School 5 Kota Jambi found that 52.4% of students were indicated to have emotional mental disorders.

Purpose: To analyze factors associated with emotional mental disorders among adolescents.

Method: A quantitative analytic study with a cross-sectional design was conducted among 200 students selected using proportionate stratified random sampling. Data were analyzed using chi-square tests.

Results: Gender ($p=0.004$; $PR=1.64$; 95% CI: 1.13–2.37) and bullying ($p<0.001$; $PR=3.04$; 95% CI: 1.56–5.95) were significantly associated with emotional mental disorders. In addition, adolescents with low and moderate parental involvement had a higher prevalence of emotional mental disorders compared to those with high parental involvement.

Conclusion: Gender and bullying were identified as factors associated with emotional mental disorders among adolescents.

Keywords: Adolescents; Emotional Mental Disorders; Senior High School.

INTRODUCTION

Adolescence is a transitional period characterized by rapid physical, psychological, and social changes (Stuart, 2022). These changes make adolescents vulnerable to experiencing emotional mental disorders (EMD), such as anxiety, depression, and behavioural problems (Jabir, 2024). Emotional mental disorders are psychological conditions characterized by uncontrolled emotional changes which, if not managed effectively, may lead to more serious psychological problems (Antuña-Cambor, Cano-Vindel, Peris-Baquero, Rodríguez-Díaz, & Juarros-Basterretxea, 2024). The impacts of emotional mental disorders can affect the way individuals think and behave, as well as increase feelings of anxiety, fear, stress, and excessive tension (Purnamasari, Fitri, & Mardiana, 2023).

In Indonesia, the Indonesia-National Adolescent Mental Health Survey (I-NAMHS) in 2022 reported that 34.9% of adolescents experienced mental health problems, while 5.5% were diagnosed with mental

disorders. The survey also showed that many adolescents reported suicidal or self-harming behaviours, which are serious issues requiring further attention. Previous studies have shown that female adolescents are more vulnerable to emotional problems than males. A large-scale study conducted in Beijing involving thousands of adolescents found that female adolescents tended to have higher levels of anxiety compared to male adolescents (Bao & Han, 2025).

In addition, bullying has been identified as one of the factors closely associated with emotional mental disorders (Puri, Shaluhiah, & Arso, 2025). A study conducted at Senior High School 1 Limboto reported a p -value of 0.013 ($p < 0.05$), indicating a significant relationship between bullying and emotional mental disorders (Abas, Boekoesoe, & Tarigan, 2023). On the other hand, a study in Hong Kong found that parental involvement, including emotional support for adolescents, significantly reduced psychological and

somatic symptoms (Al-Zawaadi, Hesso, & Kayyali, 2021). However, studies examining these three factors simultaneously among high school adolescents in Jambi City are still limited. Senior High School 5 Jambi City is a high-capacity school that accepts students through various admission pathways. A preliminary survey conducted by the researcher among 21 students showed that 11 adolescents (52.4%) were indicated to have emotional mental disorders (EMD).

RESEARCH METHOD

A quantitative analytic observational design with a cross-sectional approach. The study was conducted at Senior High School 5 Kota Jambi from March to April 2026. The study population consisted of all 10th and

11th grade students, totaling 936 students. A total of 200 respondents were selected using proportionate stratified random sampling technique. The inclusion criteria were active 10th and 11th grade students who were willing to participate in the study. The exclusion criteria were students who were absent during data collection. Data analysis was performed using SPSS through univariate and bivariate analyses with the chi-square test. The research instruments included the SRQ-20 (Self-Reporting Questionnaire-20) to measure emotional mental disorders, the APRI (Adolescent Peer Relations Instrument) to assess bullying, and a parental involvement questionnaire based on Epstein's theory consisting of 13 items, including 3 unfavorable items.

RESEARCH RESULTS

Table 1. Distribution of Respondents (N= 200)

Variable	Results	PR (95% CI)	p-value
Age (n/%) (Mean±SD)(Range)(Year)	(15.9±0.6)(15-18)		
15	49/24.5		
16	117/58.5		
17	32/16.0		
18	2/1.0		
Grade (n/%)			
X	116/58.0		
XI	84/42.0		
Gender (n/%)			
Female	147/73.5	1.640	0.004
Male	53/26.4		
Bullying (n/%)			
Ever	166/83.0	3.043 (1.556-5.950)	<0.001
Never	34/17.0		
Parental Involvement (n/%)			
Low	1/0.5	1	1.860 (1.62-2.12)
Medium	13/6.5	0.182	1.431 (1.03-1.98)
High	186/93.0		
Emotional Mental Disorder (n/%)			
Indicated	111/55.5		
Not Indicated	89/44.5		

Indri Putri Umairroh, Marta Butar Butar, Helmi Suryani Nasution, Hendra Dhermawan Sitanggang

Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi
Corresponding author: *E-mail: indriumairroh233@gmail.com

Doi: 10.56922/mhc.v5i2.3192

Table 1 presents the demographic characteristics and associated factors related to emotional mental disorders among adolescents. The majority of respondents were aged 16 years (58.5%) with a mean age of 15.9 ± 0.6 years (range 15–18 years). Most participants were in grade X (58.0%) and female (73.5%). Female adolescents showed a significant association with emotional mental disorders (PR = 1.640; $p = 0.004$). Most respondents had experienced bullying (83.0%), and bullying was significantly associated with emotional mental disorders (PR = 3.043; 95% CI: 1.556–5.950; $p < 0.001$). Regarding parental involvement, the majority of adolescents reported high parental involvement (93.0%). Moderate parental involvement showed a significant association with emotional mental disorders (PR = 1.431; 95% CI: 1.03–1.98; $p = 0.182$). Overall, 55.5% of adolescents were indicated to have emotional mental disorders.

DISCUSSION

The results of this study showed that gender was significantly associated with emotional mental disorders, with a p -value of 0.004 ($p < 0.05$). Female adolescents had a higher risk of experiencing emotional mental disorders compared to males, with a PR value of 1.64. Female adolescents were 1.64 times more likely to show indications of emotional mental disorders than male adolescents.

These findings are consistent with a study in Indonesia showing that females had a higher percentage of emotional mental disorders than males, reaching approximately 61%. A study by Komang (2023) reported a significant increase in emotional mental health problems among female adolescents. Females tend to think more deeply about problems, difficulties, or negative feelings they experience. In contrast, males tend to distract themselves by engaging in alternative activities when facing problems (Gintari, Jayanti, Laksmi, & Sintari, 2023). Similarly, a study conducted at Senior High School 1 Limboto found a significant relationship between gender and emotional mental disorders, with a p -value of 0.001 ($p < 0.05$) (Abas et al., 2023). However, these findings contradict another study which reported that gender was not significantly associated with emotional mental disorders, with a p -value of 0.73 ($p > 0.05$) (Lucintarillova et al., 2024). Females tend to be more emotionally expressive, whereas males are

more likely to display outward behavioral responses (Santrock, 2019). Female gender plays an important role in emotional mental conditions due to mood and behavioral changes influenced by fluctuations in estrogen and progesterone hormones during the menstrual cycle. These hormonal changes may affect emotional regulation and increase psychological symptoms such as anxiety, irritability, and mood changes, particularly during the premenstrual phase (Al-zawaadi et al., 2021; Y. Li, 2025).

Bullying was also found to be significantly associated with emotional mental disorders, with a p -value of <0.001 ($p < 0.05$). Adolescents who had experienced bullying had a higher risk of experiencing emotional mental disorders compared to those who had never experienced bullying, with a PR value of 3.043. Adolescents who had experienced bullying were three times more likely to show indications of emotional mental disorders than those who had never experienced bullying.

These findings are consistent with previous studies showing that bullying has a significant relationship with emotional mental disorders. This may be caused by feelings of low self-esteem, insecurity, and social isolation experienced by victims of bullying (Li, Wu, Yao, & Hesketh, 2025). A meta-analysis study also found that adolescents who experienced bullying had a 2.44 times higher risk of emotional mental disorders compared to those who did not experience bullying (Ye, Wu, He, Ma, Peng, Mao, & Tong, 2023). However, these findings contradict a study conducted at Senior High School 16 Banda Aceh, which reported a p -value of 1 ($p > 0.05$), indicating no significant relationship between bullying and emotional mental disorders (Wahyuni, Putra, & Saputra, 2024). Based on Olweus' theory, bullying occurs when there is an imbalance of power between the perpetrator and the victim and when the behavior is repeated over time. This condition may lead to psychological impacts on adolescents, such as low self-esteem, stress, or anxiety, which can potentially develop into emotional mental disorders, especially if it occurs over a long period of time (Olweus, 1993).

Meanwhile, low–high parental involvement analyzed using Fisher's exact test did not show a significant relationship with emotional mental disorders, with a p -value of 1 ($p > 0.05$). Similarly, moderate–high parental involvement analyzed using

Indri Putri Umairroh, Marta Butar Butar, Helmi Suryani Nasution, Hendra Dhermawan Sitanggang

Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi
Corresponding author: *E-mail: indriumairroh233@gmail.com

Doi: 10.56922/mhc.v5i2.3192

the chi-square test showed a p-value of 0.182 ($p > 0.05$), indicating no significant relationship between parental involvement and emotional mental disorders. However, PR values greater than 1 indicated a tendency toward increased risk among adolescents with low-high and moderate-high parental involvement. The absence of a significant relationship may be caused by the unequal distribution of the sample, as the majority of respondents had high parental involvement.

These findings are consistent with several studies showing that parental involvement is not always significantly associated with emotional mental disorders among adolescents. A global study reported a p-value of 0.11 ($p > 0.05$), indicating that parental involvement does not always directly influence emotional mental disorders (Pine, Baumann, Modugno, & Compas, 2024). However, these findings contradict a study conducted at MA Pondok Pesantren Palembang, which reported a p-value of 0.001 ($p < 0.05$). The study found a significant relationship between parental involvement and adolescents' mental conditions (Hasanah & Fitri, 2025).

CONCLUSION

The majority of adolescents were female, accounting for 147 respondents (73.5%), had experienced bullying, totaling 166 respondents (83%), and had high parental involvement, totaling 186 respondents (93%). The results showed a significant relationship between gender and bullying with emotional mental disorders. In addition, adolescents with low and moderate parental involvement had a higher prevalence of emotional mental disorders compared to those with high parental involvement.

REFERENCES

- Abas, J., Boekoesoe, L., & Tarigan, S. F. N. (2023). Analisis determinan gangguan kesehatan mental emosional remaja di SMA Negeri 1 Limboto. *Health Information: Jurnal Penelitian*, e1302-e1302.
- Al-Zawaadi, A., Hesso, I., & Kayyali, R. (2021). Mental health among school-going adolescents in Greater London: a cross-sectional study. *Frontiers in psychiatry*, 12, 592624.
- Antuña-Camblor, C., Cano-Vindel, A., Peris-Baquero, Ó., Rodríguez-Díaz, F. J., & Juarros-Basterretxea, J. (2024). Transdiagnostic risk factors of emotional disorders in adults: A systematic review. *An. psicol.*, (ART-2024-138455).
- Bao, C., & Han, L. (2025). Gender difference in anxiety and related factors among adolescents. *Frontiers in Public Health*, 12, 1410086.
- Center for Reproductive Health, University of Queensland, & Johns Bloomberg Hopkins School of Public Health. (2022). Indonesia - National Adolescent Mental Health Survey (I-NAMHS): Laporan Penelitian. In Pusat Kesehatan Reproduksi.
- Gintari, K. W., Jayanti, D. M. A. D., Laksmi, I. G. A. P. S., & Sintari, S. N. N. (2023). Kesehatan Mental Pada Remaja: The Overview of Mental Health in Adolescents. *Journal Nursing Research Publication Media (NURSEPEDIA)*, 2(3), 167-183.
- Hasanah, U., & Fitri, H. U. (2025). Hubungan Keterlibatan Orang Tua dan Kesehatan Mental Remaja di MA Pondok Pesantren Ar-Rahman Palembang. *Jurnal Al-Irsyad: Jurnal Bimbingan Konseling Islam*, 7(2), 273-284.
- Jabir, M. A. (2024). Gambaran Gangguan Mental Emosional Pada Remaja Sma Wilayah Bangkala Antang Di Kota Makassar. *Magnasalus: Jurnal Keunggulan Kesehatan*, 6(2).
- Li, J., Wu, Y., Yao, M., & Hesketh, T. (2025). Bullying victimization and adolescent mental health: the mediating roles of parent-child relationship and self-esteem. *BMC psychology*, 13(1), 1390.
- Li, Y. (2025). Hormonal Fluctuations and Mood Disorders Across the Menstrual Cycle. *Advanced Medical Data Analytics and Smart Rehabilitation*, 0, 224-230.

Indri Putri Umairroh, Marta Butar Butar, Helmi Suryani Nasution, Hendra Dhermawan Sitanggang

Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi
Corresponding author: *E-mail: indriumairroh233@gmail.com

Doi: 10.56922/mhc.v5i2.3192

- Lucintarillova, B., Lubis, A., Ningsih, D. A. W. S., Putri, N., & Muthmainnah, K. (2024). Hubungan jenis kelamin dan usia dengan kesehatan mental di kalangan siswa Sekolah Menengah Atas di Kota Bukittinggi. *Jurnal Cahaya Mandalika* Issn, 2721-4796.
- Olweus, D. (1993). *Bullying at School - What We Know and What We Can Do*. Wiley-Blackwell.
- Pine, A. E., Baumann, M. G., Modugno, G., & Compas, B. E. (2024). Parental involvement in adolescent psychological interventions: a meta-analysis. *Clinical child and family psychology review*, 27(3), 1-20.
- Puri, C. H., Shaluhayah, Z., & Arso, S. P. (2025). The correlation between bullying and mental-emotional disorders among adolescents in Pekalongan city. *MEDISAINS: Jurnal Ilmiah Ilmu-Ilmu Kesehatan*, 23(2), 115-120.
- Purnamasari, Y., Fitri, N., & Mardiana, N. (2023). Faktor-faktor yang memengaruhi gangguan mental emosional remaja SMA. *Jurnal Penelitian Perawat Profesional*, 5(2), 609-616.
- Santrock, J. W. (2019). *Adolescence* (17th ed.). McGraw-Hill Education.
- Stuart, G. W. (2022). *Prinsip dan Praktik Keperawatan Kesehatan Jiwa Stuart*, Edisi Indonesia 11. Elsevier Health Sciences.
- Wahyuni, P., Putra, E., & Saputra, M. (2024). Pengaruh bullying terhadap kesehatan mental remaja di SMA Negeri 16 kota Banda Aceh. *Teewan Journal Solutions*, 1(2), 53-58.
- Ye, Z., Wu, D., He, X., Ma, Q., Peng, J., Mao, G., & Tong, Y. (2023). Meta-analysis of the relationship between bullying and depressive symptoms in children and adolescents. *BMC psychiatry*, 23(1), 215.

Indri Putri Umairoh, Marta Butar Butar, Helmi Suryani Nasution, Hendra Dhermawan Sitanggang

Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi
Corresponding author: *E-mail: indriumairoh233@gmail.com

Doi: 10.56922/mhc.v5i2.3192