

Prevalence of Mental Health Issues Among Secondary School Students in Surabaya, Indonesia, Using the Strengths and Difficulties Questionnaire

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ABSTRACT: Adolescent mental health is a growing concern worldwide, yet evidence from Indonesia remains limited. This study examined the prevalence of mental health issues among secondary school students in Surabaya using the Strengths and Difficulties Questionnaire (SDQ). A cross-sectional survey was conducted across four schools, involving 167 junior and senior high school students. Participants self-reported emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship difficulties, and prosocial behavior. Data were analyzed using descriptive statistics and non-parametric tests to explore differences across gender, age, school type, and school level. Findings revealed that 24.6% of students were at substantial risk of mental health difficulties. In contrast, 70.7% of students were unlikely to experience clinically significant problems, and only 1.8% were at risk of low prosocial behavior. Female students reported higher total difficulty scores but also demonstrated greater prosocial behavior compared to males. Additionally, students in public schools showed higher levels of prosocial behavior than those in private schools.

KEYWORDS: Mental health; SDQ; difficulties; prosocial.

1. Introduction

Mental health has become a growing concern among students worldwide, with the World Health Organization (WHO) reporting that one in seven children and adolescents aged 10 to 19 suffered from a mental health condition [1]. This highlighted the urgent need to prioritize awareness and interventions for mental health in educational settings. Students affected by mental health challenges often experienced significant disruptions in their daily lives, including sleep disturbances, changes in eating habits, trauma, and the development of harmful addictions [2]. According to WHO (2019), mental health conditions could adversely impact various aspects of life, including relationships with family, peers, and the broader community [3].

Data from jedfoundation.org highlighted common mental health challenges faced by students, including anxiety (36% of males, 52% of females), stress related to college admissions (36% of males, 52% of females), difficulty managing emotions (31% of males, 41% of females), and depression (29% of males, 38% of females) [4]. Additional issues included social isolation (22% of males, 29% of females), suicidal thoughts (18% of males,

24% of females), and self-harm (17% of males, 23% of females). These figures emphasized the diverse and significant nature of mental health challenges in educational environments [4].

Globally, adolescent suicidal behavior has been a significant issue in the WHO Asia Region. As indicated by GSHS data, the prevalence of suicidal ideation among 13–17-year-olds ranged from 5% in Bangladesh, 12% in Bhutan, 5% in Indonesia, 13% in Maldives, 9% in Myanmar, 14% in Nepal, 9% in Sri Lanka, 13% in Thailand, and 9% in Timor Leste. Female students generally reported higher rates of mental illnesses, although significant gender differences were observed in only a few countries [5]. In Europe, nearly one-third of students reported mental health issues, most commonly depression and anxiety disorders [6]. Similarly, in the United States, 39.7% of high school students reported persistent feelings of sadness and hopelessness, 28.5% experienced poor mental health, 20.4% seriously considered suicide, and 9.5% attempted suicide [7].

Academically, students struggling with mental health issues often faced difficulties in focusing and applying themselves, leading to temporary challenges in learning efficiency [8]. Athletically, they were at an increased risk of injuries during physical activities [9]. Early identification of mental health conditions has been shown to yield positive outcomes [10]. A study by Lee, Goh, & Yeo highlighted how awareness of symptoms and causes empowered students to seek professional support, fostering a proactive approach to mental health [11]. Furthermore, research by Kalita emphasized that good mental health enabled individuals to realize their potential, lead fulfilling lives, and contribute meaningfully to society [12].

In Indonesia, the Indonesia National Adolescent Mental Health Survey revealed that one in three adolescents aged 10–17 experienced mental health issues [13]. A 2023 report by the Indonesian Ministry of Health (Kementrian Kesehatan) further indicated that 1.4% of the population suffered from mental health problems, with the highest prevalence found among individuals aged 15–24 [14].

Despite these statistics, no studies had specifically examined students' mental health in Surabaya, highlighting a critical research gap. Questionnaires such as the Strengths and Difficulties Questionnaire (SDQ) were crucial for accurately detecting at-risk students, assessing the type and severity of problems, and evaluating the impact of interventions [15]. While the use of Goodman's SDQ could result in occasional false outcomes, it remained a practical tool in the Indonesian context, where access to mental health professionals and funding was limited [16]. As a low-cost and easy-to-administer screening tool [17], the SDQ facilitated early psychological involvement and detection of mental health difficulties in this vulnerable age group [18]. The SDQ's flexibility and reliability made it suitable for assessing behavioral and emotional problems in children and adolescents. Therefore, this study examined the prevalence of mental health issues among secondary school students in Surabaya using the SDQ, providing valuable insights and filling a critical gap in local literature.

2. Materials and Methods

This study employed a cross-sectional survey design to investigate the prevalence of mental health difficulties and prosocial behaviors among junior and senior high school students in Surabaya. Data were collected using the Student Self-Report Version of the SDQ, a validated behavioral screening tool widely used with children and adolescents aged 11–17 [19]. The SDQ consisted of 25 items divided into five subscales: (1) Emotional Symptoms, (2) Conduct Problems, (3) Hyperactivity/Inattention, (4) Peer Relationship Problems, and (5) Prosocial

Behavior. The difficulty score was calculated by combining the Emotional Symptoms, Conduct Problems, Hyperactivity/Inattention, and Peer Relationship Problems subscales. Subscale scores were derived by summing the relevant items. Higher scores indicated greater difficulties, except for the Prosocial Behavior subscale, where higher scores reflected more positive social behaviors. Standard SDQ cut-off scores were used to classify participants into normal, borderline, and high-risk categories. The score ranges for difficulty were defined as follows: 0–15 = normal (unlikely to have clinically significant problems), 16–19 = borderline, and 20–40 = high (likely to have clinically significant problems). Meanwhile, for the Prosocial Behavior Score, ranges were: 6–10 = normal, 5 = borderline (adequate prosocial behavior), and 0–4 = low (indicating limited prosocial behavior and potential clinical concern) [20]. The questionnaire had two parts. Part I collected demographic information, including age, gender, type of school (public/private), and school level (junior/senior high). Part II consisted of 25 SDQ items rated on a 3-point Likert scale (0 = Not True, 1 = Somewhat True, 2 = Certainly True). Reverse scoring was applied for items 7, 11, 14, 21, and 25.

2.1. Data collection and analysis.

A cross-sectional survey was conducted to collect data from junior and senior high school students in Surabaya. Seven schools were initially contacted, but only four agreed to participate. The schools were selected through stratified random samples to ensure representation across school types, with two public/government schools and two private schools included. Two versions of the online questionnaire were developed: one in English for international curriculum classes and one in Indonesian for national curriculum classes. The questionnaire was distributed online using Google Forms from April 1 to April 30, 2025. Coordination with schoolteachers ensured standardized administration procedures. The questionnaires were completed by students in the classroom under direct teacher supervision, resulting in a total of 167 completed responses. Total Difficulties and Prosocial Behavior scores for each participant were calculated using Microsoft Excel. Demographic data were coded and transferred to SPSS for further analysis. Descriptive statistics summarized participants' characteristics. Crosstabulation analyses examined the distribution of Total Difficulties and Prosocial Behavior scores across student characteristics, including gender, type of school, and school level. The Kruskal-Wallis H test was applied to identify statistically significant differences between groups, as the outcome variables were ordinal.

2.2. Validity.

The Content validity was evaluated by an expert in leadership education, who reviewed the relevance, clarity, and appropriateness of the items. Minor revisions were made based on feedback to enhance clarity and alignment with the study's objectives. Construct validity was assessed using exploratory factor analysis (EFA). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.778, indicating acceptable adequacy [22]. Bartlett's Test of Sphericity was statistically significant (Approx. Chi-Square = 1103.633, $df = 300$, $p < 0.001$), supporting the factorability of the correlation matrix. The EFA results confirmed a clear factor structure, aligning with the theoretical framework.

Table 1. KMO and Bartlett's test.

Measure	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.778
Bartlett's Test of Sphericity Approx. Chi-Square	1103.633
df	300
Sig.	<0.001

2.3. Reliability.

Cronbach's Alpha assessed the internal consistency of the SDQ. The overall Cronbach's Alpha was 0.758, indicating acceptable reliability. Although removing certain items (Q4, Q6, Q9, Q14, Q17, Q20, Q23, and Q25) slightly increased internal consistency, these items were retained for their theoretical relevance. The corrected item-total correlations were modest but acceptable.

Table 2. Reliability statistics.

Cronbach's Alpha	N of Items
0.758	25

3. Results Discussion

The results are presented in five parts: (1) the characteristics of the participants, (2) the total difficulties scores across participants, including analysis of differences by age, school type, and school level, (3) the total prosocial behavior scores across participants, including analysis of differences by age and school type, (4) the comparison of difficulty and prosocial scores between female and male students, and (5) the comparison of prosocial scores between students in public and private schools.

3.1. Participant characteristics.

A total of 167 junior and senior high school students participated in this study, including 64 male students (38.3%) and 103 female students (61.7%). Participants' ages ranged from 11 to 17 years, with the majority aged 15–16 years (37.1%) and 17 years (47.9%). The sample comprised students from both public/government schools ($n = 132$, 79.0%) and private schools ($n = 35$, 21.0%). Regarding school level, 143 students (85.6%) were from senior high schools, while 24 students (14.4%) were from junior high schools.

3.2. Distribution of total difficulty scores.

This section presents the findings on participants' overall difficulties scores derived from the SDQ. The composite score was calculated from four domains: emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems.

3.2.1. Distribution of students' total difficulty scores.

Analysis of the total difficulty scores revealed that out of 167 respondents, the majority (70.7%) fell within the normal range, indicating no significant mental health difficulties. A smaller proportion (4.8%) were categorized as having borderline difficulties, while 24.6% were identified as having high difficulty scores, suggesting a higher risk of mental health problems.

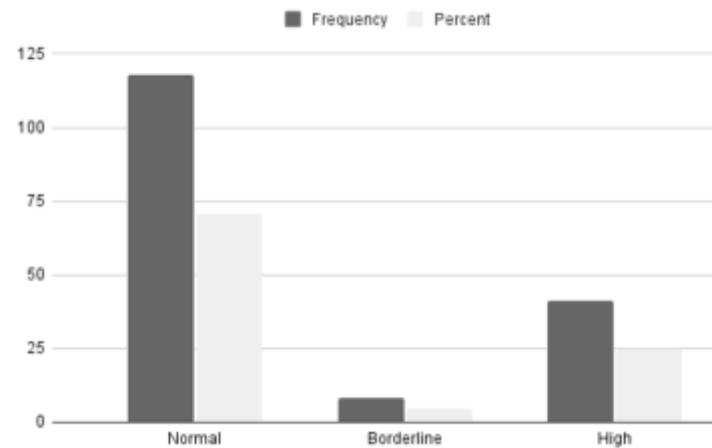


Figure 1. Bar chart, distribution of students' total difficulty scores.

Table 3. Statistical analysis: distribution of students' total difficulty scores.

Category	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Normal	118	70.7	70.7	70.7
Borderline	8	4.8	4.8	75.4
High	41	24.6	24.6	100.0
Total	167	100.0	100.0	—

3.2.2. Distribution of students' difficulty scores by type of school.

The distribution of SDQ difficulty scores differed between students from public/government schools and those from private schools. Among public/government school students ($n = 132$), the majority were classified as normal (75.0%), while 5.3% fell into the borderline category and 19.7% were in the high range. In contrast, private school students ($n = 35$) showed a lower proportion in the normal range (54.3%), with only 2.9% categorized as borderline, but a notably higher proportion (42.9%) classified in the high range. The Kruskal-Wallis H test revealed no statistically significant difference in total difficulty scores between public and private school students ($H = 1.548$, $df = 1$, $p = 0.213$). Although private school students had a higher mean rank ($M = 93.03$) compared to public school students ($M = 81.61$), indicating greater levels of emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship difficulties, this difference was not statistically significant.

Table 4. Crosstabulation analysis: distribution of difficulty scores by type of school.

Difficulty Level	Public/Government School	% of Public Participants	Private School	% of Private Participants
Normal	99	75.00	19	54.29
Borderline	7	5.30	1	2.86
High	26	19.70	15	42.86
Total	132	100.00	35	100.00

3.2.3. Distribution of Students' difficulty scores by school level.

The distribution of difficulty scores also differed between junior high and senior high students. Among junior high students ($n = 24$), just over half were classified as normal (54.2%), while

none were in the borderline category. However, a relatively large proportion (45.8%) were classified in the high range, indicating elevated psychological difficulties. In contrast, among senior high students ($n = 143$), nearly three-quarters were in the normal range (73.4%), 5.6% were categorized as borderline, and 21.0% were in the high range. The Kruskal-Wallis H test revealed no statistically significant difference in total difficulty scores between junior high and senior high students ($H = 0.761$, $df = 1$, $p = 0.383$). Although junior high students had a higher mean rank ($M = 91.96$) compared to senior high students ($M = 82.66$), indicating greater levels of emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship difficulties, this difference was not statistically significant.

Table 5. Cross-based analysis: distribution of difficulty scores by school level.

Difficulty Level	Junior High (Lower Secondary)	% of Junior High Participants	Senior High (Upper Secondary)	% of Senior High Participants
Normal	13	54.17	105	73.43
Borderline	0	0.00	8	5.59
High	11	45.83	30	20.98
Total	24	100.00	143	100.00

3.3. Variation in prosocial scores.

The following section presents the findings on the overall prosocial score derived from the SDQ. Prosocial behavior denotes positive, helpful, and beneficial actions toward others [23].

3.3.1. Distribution of Students' prosocial scores in Surabaya.

The analysis of prosocial scores among 167 students showed that the majority (89.2%) were within the normal range. A smaller proportion (9.0%) fell into the borderline category, while only 3 students (1.8%) were classified in the low range, suggesting limited prosocial behavior.

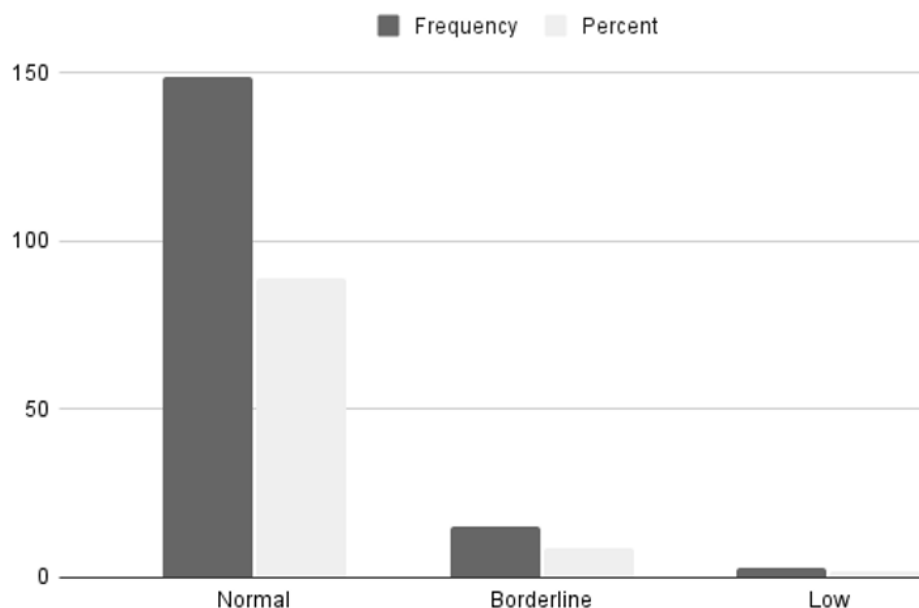


Figure 2. Bar Chart, Distribution of students' prosocial scores in Surabaya.

Table 6. Descriptive analysis: distribution of students' prosocial scores in Surabaya.

Prosocial Score	Frequency	Percent	Valid Percent	Cumulative Percent
Normal	149	89.2	89.2	89.2
Borderline	15	9.0	9.0	98.8
Low	3	1.8	1.8	100.0
Total	167	100.0	100.0	

3.3.2. *Distribution of Students' prosocial scores by school level.*

The distribution of prosocial scores by school level is summarized in Table 7. Among junior high students, 75.00% were classified in the normal range, while 20.83% fell into the borderline category and 4.17% into the low category. In contrast, the majority of senior high students (91.61%) were in the normal range, with smaller proportions identified as borderline (6.99%) and low (1.40%). The Kruskal-Wallis H test revealed no statistically significant difference in prosocial scores between junior high and senior high students ($H = 3.037$, $df = 1$, $p = 0.081$). Although senior high students had a higher mean rank ($M = 86.63$) compared to junior high students ($M = 68.35$), indicating stronger prosocial behaviors, this difference was not statistically significant. This aligns with the categorical distribution, where 91.61% of senior high students were classified as normal compared to 75.00% of junior high students.

Table 7. Crosstabulation analysis: distribution of prosocial scores by school level.

Prosocial Score	Lower Secondary	Percent of Junior High	Upper Secondary	Percent of Senior High
Normal	18	75.00%	131	91.61%
Borderline	5	20.83%	10	6.99%
Low	1	4.17%	2	1.40%
Total	24	100%	143	100%

3.4. *Female students exhibit higher difficulty and prosocial scores than male students.*

An examination of gender differences revealed an interesting pattern. Female students reported higher levels of both total difficulties and prosocial behavior compared to their male counterparts.

3.4.1. *Distribution of students' difficulty scores by gender.*

Among 167 students, a larger proportion of female students (29.13%) fell within the high-difficulty range compared to male students (17.19%). Conversely, a greater proportion of males (79.69%) were classified as normal compared to females (65.05%). Descriptive statistics showed that female students had a significantly higher mean rank ($M = 94.99$) than male students ($M = 66.32$), indicating greater levels of emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship difficulties. The Kruskal-Wallis H test confirmed a statistically significant difference between genders ($H = 13.911$, $df = 1$, $p < 0.001$).

Table 8. Crosstabulation analysis: distribution of SDQ total difficulty scores by gender.

Difficulty Category	Male	Percent of Males	Female	Percent of Females
Normal	51	79.69%	67	65.05%
Borderline	2	3.13%	6	5.83%
High	11	17.19%	30	29.13%
Total	64	100%	103	100%

3.4.2. Distribution of students' prosocial scores by gender.

Prosocial scores were also compared between male and female students. Most students in both groups were classified as normal: 87.5% of males and 90.29% of females. Smaller proportions were classified as borderline (10.9% of males and 7.77% of females), while very few students fell into the low category (1.6% of males and 1.94% of females). The Kruskal-Wallis H test indicated a statistically significant difference in prosocial scores between genders ($H = 9.275$, $df = 1$, $p = 0.002$). Female students had a significantly higher mean rank ($M = 92.83$) compared to male students ($M = 69.79$), indicating stronger prosocial behaviors. This aligns with the categorical distribution, where 90.29% of females were classified as normal compared to 87.5% of males.

Table 9. Crosstabulation analysis: distribution of SDQ total prosocial scores by gender.

Prosocial Category	Male	Percent of Males	Female	Percent of Females
Normal	56	87.5%	93	90.29%
Borderline	7	10.9%	8	7.77%
Low	1	1.6%	2	1.94%
Total	64	100%	103	100%

3.5 Students in public schools exhibit higher prosocial scores than those in private schools.

The distribution of prosocial scores across school types is presented in Table 10. Among public school students, the majority were classified as normal (93.18%), with smaller proportions classified as borderline (6.82%) and none in the low category. In contrast, private school students showed lower proportions in the normal range (74.29%), with higher representation in the borderline (17.14%) and low (8.57%) categories. The Kruskal-Wallis H test revealed a statistically significant difference in prosocial scores between public and private school students ($H = 6.635$, $df = 1$, $p = 0.010$). Public school students had a higher mean rank ($M = 88.88$) compared to private school students ($M = 65.60$), indicating stronger prosocial behaviors such as helpfulness, kindness, and cooperation. This aligns with the categorical distribution, where 93.18% of public-school students were classified as normal compared to 74.29% of private school students.

Table 10. Crosstabulation analysis: distribution of SDQ total prosocial scores by school type.

Prosocial Category	Public / Government	Percent of Public	Private	Percent of Private
Normal	123	93.18%	26	74.29%
Borderline	9	6.82%	6	17.14%
Low	0	0.00%	3	8.57%
Total	132	100%	35	100%

4. Discussion

The results indicate that approximately one-fourth of secondary school students in Surabaya were at high risk of experiencing difficulties related to emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship challenges. This finding aligns closely with UNICEF's *State of the World's Children Report*, which reported that 29% of Indonesian adolescents are vulnerable to mental health issues. The 24.6% prevalence rate found in this

study reflects a comparable level of concern, suggesting that mental health challenges among adolescents in Surabaya mirror broader national trends.

Internationally, higher prevalence rates have been observed in South Asia. Mudunna (2025) reported that anxiety disorders were most prevalent in India (81.6%) and Pakistan (68%), while depression was notably high in Sri Lanka (57.7%). In contrast, lower prevalence rates have been reported across Southeast Asia, where approximately 10% of adolescents experienced loneliness, 5% reported anxiety, and 8% indicated that they had no close friends. These findings underscore the global nature of adolescent mental health challenges, although severity and distribution vary across regional and socio-cultural contexts.

These difficulties may arise from a range of factors, including limited economic resources, restricted access to professional support, and persistent mental health stigma. On a positive note, 70.7% of students in this study were unlikely to experience clinically significant problems, with only a small proportion falling within the borderline range. This suggests that while a considerable number of adolescents face challenges, the majority demonstrate adequate psychological resilience and adjustment.

Regarding prosocial behavior, only 1.8% of students were identified as having low prosocial scores. Although this proportion is small, low prosocial scores have been linked with callous-unemotional traits, which are associated with greater self-reported mental health difficulties later in development. This finding highlights the importance of early identification and preventive interventions to strengthen students' social and emotional development.

Gender differences emerged as a key finding. Female students reported significantly higher total difficulties compared to their male peers. This differs from earlier studies in South Norway, which found higher difficulty scores among boys in younger age groups. In Indonesia, factors such as gender stereotyping, economic constraints, and high rates of child marriage, which disproportionately affect female students, may contribute to this pattern. Additionally, female students tend to be highly motivated learners and often outperform male peers when given equal opportunities, though the proportion of girls with no access to education remains higher than that of boys.

Interestingly, despite higher difficulty scores, female students in Surabaya also demonstrated stronger prosocial behavior. This aligns with prior research showing that females are generally more empathetic, socially sensitive, and prosocially oriented. Empirical studies have linked higher empathy in females to greater prosocial actions, including charitable behavior. These results suggest that although female students face greater emotional challenges, they often exhibit higher levels of empathy and social engagement.

Differences between school types were also evident. Students in public schools reported higher prosocial scores compared to those in private schools, consistent with prior research suggesting that adolescents in public schools display stronger prosocial tendencies. Public school students are often exposed to greater socioeconomic and cultural diversity, fostering more flexible social identities and peer solidarity compared to students in religious private schools. Differences in teacher backgrounds, professional development, and school resources may also contribute to this pattern.

Despite these insights, the study has limitations. First, the sample included only four schools, which may not represent all secondary schools in Surabaya, limiting generalizability. Second, reliance on self-reported SDQ measures may introduce response bias, as students

could underreport or overreport difficulties due to social desirability, misinterpretation, or subjective perceptions.

4. Conclusions

This study highlights the prevalence of mental health issues among secondary school students in Surabaya, with approximately one-fourth of students identified as being at substantial high risk for emotional, behavioral, hyperactivity, and peer-related difficulties. While most students reported no clinically significant problems, the presence of this vulnerable minority underscores the urgent need for early detection and intervention. Encouragingly, the majority of students demonstrated positive levels of prosocial behavior, particularly among females and those in public schools, suggesting that social connectedness may act as a protective factor against psychological challenges. Future research should expand the sample size, incorporate longitudinal data, and integrate perspectives from teachers and parents to achieve a more comprehensive understanding of adolescent mental health in Indonesia. In schools, collaboration among teachers, school counselors, and parents is essential to ensure that students with elevated difficulty scores or low prosocial scores receive appropriate guidance and intervention. Schools are encouraged to establish regular communication channels that enable teachers to share observations and Strengths and Difficulties Questionnaire (SDQ) insights with counseling staff for follow-up action. Likewise, parents of children exhibiting high difficulty scores and low prosocial behavior are advised to seek guidance or intervention from qualified mental health professionals.

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Author Contribution

Nafisah: Conceptualization, Methodology, Data Collection, Data Analysis, Writing, and Supervision. Balamurugan: Conceptualization, Introduction, Questionnaire Design, Writing, Grammar Review.

Competing Interest

No competing interest has been identified.

Data Availability

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

References

- [1] United Nations. 1 in 7 children and teens impacted by mental health conditions. (accessed on 09 September 2025) Available online: <https://www.un.org/sustainabledevelopment/blog/2024/10/1-in-7-children-and-teens-impacted-by-mental-health-conditions/#:~:text=Around%20one%20in%20seven%20children,Fund%20report%20released%20on%20Wednesday.>
- [2] Limone, P.; Toto, G.A. (2022). Factors That Predispose Undergraduates to Mental Issues: A Cumulative Literature Review for Future Research Perspectives. *Frontiers in Public Health*, 10, 1–12. <https://doi.org/10.3389/fpubh.2022.831349>.
- [3] Metal Health. (accessed on 10 September 2025) Available online: https://www.who.int/health-topics/mental-health#tab=tab_2.
- [4] Understanding and Addressing the Mental Health of High School Students. New York City: JED, 2020.
- [5] India: World Health Organization, 2017. (accessed on 10 September 2025) Available online: <https://iris.who.int/server/api/core/bitstreams/c4d82f7a-1f68-417a-9b22-1dfd4f230805/content>.
- [6] Cuppen, J.; Muja, A.; Geurts, R. (2017). Well-being and mental health among students in European higher education. *eurostudent.eu*, 1–22.
- [7] Verlenden, J.V.; Fodeman, A.; Wilkins, N.; Jones, S.E.; Moore, S.; Cornett, K.; Sims, V.; Saelee, R.; Brener, N.D. (2024). Mental Health and Suicide Risk Among High School Students and Protective Factors — Youth Risk Behavior Survey, United States, 2023. *Supplement*, 73(4), 79–86. <https://doi.org/10.15585/mmwr.su7304a9>.
- [8] Zhang, J.; Peng, C.; Chen, C. (2024). Mental health and academic performance of college students: Knowledge in the field of mental health, self-control, and learning in college. *Acta Psychologica*, 248, 2–10. <https://doi.org/10.1016/j.actpsy.2024.104351>.
- [9] Tanaka, M.J.; Cosgarea, A.J.; Ginsburg, R.D.; Dreher, G.M. (2023). How mental health affects injury risk and outcomes in athletes. *Sports Health: A Multidisciplinary Approach*, 16, 222–229. <https://doi.org/10.1177/19417381231179678>.
- [10] Stubbing, J. (2023). Understanding mental health and wellbeing in upper secondary school students. *The Education Hub*. (accessed on 05 May 2025) Available online: <https://theeducationhub.org.nz/understanding-mental-health-and-wellbeing-in-upper-secondary-school-students/>.
- [11] Lee, J.E.; Goh, M.L.; Yeo, S.F. (2023). Mental health awareness of secondary schools students: Mediating roles of knowledge on mental health, knowledge on professional help, and attitude towards mental health. *Heliyon*, 9, 2–17. <https://doi.org/10.1016/j.heliyon.2023.e14512>.
- [12] Kalita, P. (2023). The Importance of Mental Health of Student in the Present Modern Context. *International Journal for Multidisciplinary Research*, 5, 1–9. <https://doi.org/10.36948/ijfmr.2023.v05i02.1892>.
- [13] Gloriabarus. (accessed on 10 May 2025) Available online: <https://ugm.ac.id/id/berita/23086-hasil-survei-i-namhs-satu-dari-tiga-remaja-indonesia-memiliki-masalah-kesehatan-mental/>.
- [14] Depresi pada Anak Muda di Indonesia. (accessed on 10 September 2025) Available online: https://repository.badankebijakan.kemkes.go.id/id/eprint/5532/1/03%20factsheet%20Keswa_bahasa.pdf.
- [15] Cipta, D.A.; Saputra, A. (2022). Changing Landscape of Mental Health from Early Career Psychiatrists' Perspective in Indonesia. *Journal of Global Health Neurology and Psychiatry*, 5, 2–7. <https://doi.org/10.52872/001c.37413>.
- [16] Mullick, M.S.; Goodman, R. (2001). Questionnaire screening for mental health problems in Bangladeshi children: a preliminary study. *Social Psychiatry and Psychiatric Epidemiology*, 36, 1–?. <https://doi.org/10.1007/s001270050295>.

- [17] Goodman, R.; F, T.; S, H.; G, R.; Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *British Journal of Psychiatry*, 177, 534–539. <https://doi.org/10.1192/bjp.177.6.534>.
- [18] Jong, T.J.d.; Schroef, M.P.v.d.; Achterkamp, M.D.; Vroegop, J.L. (2023). First results of the Strengths and Difficulties Questionnaire, applied as a screening tool for psychosocial difficulties in pediatric audiology. *European Archives of Otorhinolaryngology*, 280(10), 4467–4476. <https://doi.org/10.1007/s00405-023-07979-x>.
- [19] Goodman, R. (2002). Mental Health National Outcomes and Casemix Collection: Overview of Clinician-Rated and Consumer Self-Report Measures. *Mental Health & Suicide Prevention Branch*, VI(50).
- [20] Department of Health and Ageing. "Mental Health and Suicide Prevention Branch." (accessed on 06 July 2025) Available online: https://depts.washington.edu/dbpeds/Screening%20Tools/Strengths_and_Difficulties_Questionnaire.pdf.
- [21] TechTarget. (accessed on 09 October 2025) Available online: <https://www.techtarget.com/whatis/definition/SPSS-Statistical-Package-for-the-Social-Sciences>.
- [22] Exploratory Factor Analysis in R. (accessed on 30 June 2025) Available online: https://bookdown.org/luguben/EFA_in_R/.
- [23] Crone, E.A.; Achterberg, M. (2022). Prosocial development in adolescence. *Current Opinion in Psychology*, 44, 220–225. <https://doi.org/10.1016/j.copsyc.2021.09.020>.
- [24] United Nation Department of Economic and Social Affairs Sustainable Development. (accessed on 01 June 2025) Available online: <https://sdgs.un.org/partnerships/sehat-jiwa-school>.
- [25] Mudunna, C.; Weerasinghe, M.; Tran, T.; Antoniades, J.; Romero, L.; Chandradasa, M.; Fisher, J. (2025). Nature, prevalence and determinants of mental health problems experienced by adolescents in south Asia: a systematic review. *The Lancet Regional Health - Southeast Asia*, 33, 1–13. <https://doi.org/10.1016/j.lansea.2025>.
- [26] Desy, Y.I.; Chua, J.Y.X.; Wong, J.C.M.; Minna, P.; Goh, Y.S.S.; Shorey, S. (2025). Perceptions of Mental Health Challenges and Needs of Indonesian Adolescents: A Descriptive Qualitative Study. *International Journal of Mental Health Nursing*, 34(1). <https://doi.org/10.1111/inm.13505>.
- [27] Reig-Aleixandre, N.; Esparza-Reig, J.; Martí-Vilar, M.; Merino-Soto, C.; Livia, J. (2023). Measurement of Prosocial Tendencies: Meta-Analysis of the Generalization of the Reliability of the Instrument. *Healthcare*, 11, 1–23. <https://doi.org/10.3390/healthcare11040560>.
- [28] Mølland, E.; Haraldstad, K.; Abildsnes, E.; Håland, Å.T.; Köpp, U.M.S.; Fegran, L.; Westergren, T. (2023). Use of the Strengths and Difficulties Questionnaire in child and school health services among children aged 4 and 6 years in Southern Norway: clinical considerations. *BMC Pediatrics*, 23(30), 2–11. <https://doi.org/10.1186/s12887-023-03837-1>.
- [29] Mieloo, C.; Raat, H.; Oort, F.v.; Bevaart, F.; Vogel, I.; Donker, M. (2012). Validity and Reliability of the Strengths and Difficulties Questionnaire in 5–6 Year Olds: Differences by Gender or by Parental Education? *PLoS ONE*, 7(5), 1–8. <https://doi.org/10.1371/journal.pone.0036805>.
- [30] Girls Do Better Than Boys At School in Indonesia If They Get Thehance (accessed on 12 October 2025) Available online: <https://indonesiaatmelbourne.unimelb.edu.au/girls-do-better-than-boys-at-school-in-indonesia-if-they-get-the-chance/>.
- [31] Fachrunnisa, R. (2020). Education of Indonesian Girls: The Outlook of Discrimination, Rights, and the Impact on Society. *World Conference on Gender Studies, KnE Social Sciences*. <https://doi.org/10.18502/kss.v4i10.7422>.
- [32] Thuy, T.N. (2024). Emotional-Behavioral Difficulties and Prosocial Behaviour among Vietnamese Adolescents: the Role of Social Support. *Health Psychology Research*, 12. <https://doi.org/10.52965/001c.116967>.

- [33] Linda, K.; Anne, P. (2021). Empathy, gender, and prosocial behavior. *Journal of Behavioral and Experimental Economics*, 92, 2214–8043. <https://doi.org/10.46843/jiecr.v3i3.121>.
- [34] AR, M.M.; Hardiansyah, F. (2022). Prosocial Behavior of Elementary School Students Based on Gender Differences in Society 5.0. *Journal of Innovation in Educational and Cultural Research*, 3(3), 390–396. <https://doi.org/10.46843/jiecr.v3i3.121>.
- [35] OECD. (accessed on 12 October 2025) Available online: <https://gpseducation.oecd.org/CountryProfile?primaryCountry=IDN&treshold=10&topic=PI>.
- [36] Azzahra, F.A.; Ampuni, S. (2021). Prosocial intentions towards religious ingroup and outgroup members among adolescents from public and religious schools. *Indigenous: Jurnal Ilmiah Psikologi*, 6(3), 73–91. <https://doi.org/10.23917/indigenous.v6i3.15401>.
- [37] OECD. Education in Indonesia: Rising to the Challenge, OECD Publishing. Paris, 2021.
- [38] Hendajany, N. (2016). The Effectiveness of Public vs Private Schools in Indonesia. *Journal of Indonesian Applied Economics*, 6(1), 66–89. <https://doi.org/10.21776/ub.jiae.2016.006.01.4>.
- [39] P.v.P.S.i. Indonesia. io Indonesia Overview. (accessed on 12 October 2025) Available online: <https://www.indonesiaoverview.com/private-vs-public-schools-in-indonesia/>.



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