

Research Article

EXAMINING MENTAL HEALTH RISKS IN SECONDARY STUDENTS: A STUDY UTILIZING THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE

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Abstract

Adolescent mental health is a topic of increasing concern, as this developmental period is marked by significant changes and heightened vulnerability to mental health challenges. This study delves into the mental health status of 6th and 7th-grade students in two secondary schools in Lien Chieu district, Danang City, Vietnam, with a focus on risk factors for mental disorders and specific sub-domains of mental health manifestations. The research employs the Strengths and Difficulties Questionnaire (SDQ) to assess the mental well-being of these students comprehensively. The SDQ, a validated tool for evaluating adolescents' strengths and weaknesses, encompasses five scales: Emotional problems, conduct problems, hyperactivity, peer problems, and pro-social behavior. The study of 6th and 7th-grade students in Lien Chieu district revealed a predominantly stable mental health status among a substantial portion of the student population, with 70.67% categorized as having "No risk" factors for mental disorders. However, a significant proportion exhibited varying levels of risk factors, highlighting the need for tailored interventions and mental health awareness programs within educational settings to support students with diverse mental health needs. Targeted support services are essential for students at different risk levels and across various dimensions of mental health. This study sheds light on the intricate web of adolescent mental health, emphasizing the importance of a holistic approach to supporting their well-being. By recognizing and addressing varying risk profiles and mental health challenges among students, educational institutions can contribute to creating a nurturing environment that fosters positive mental health outcomes for all adolescents. *ASEAN Journal of Psychiatry, Vol. 25 (5) May, 2024; 1-12.*

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Introduction

Adolescence is a critical developmental period marked by significant physical, emotional, and social changes [1-3]. During these formative years, adolescents navigate various challenges and experiences that can profoundly impact their mental well-being [4,5]. Understanding the factors influencing adolescent mental health including anxiety, academic stress or self-concealment psychological help seeking is of paramount importance, as it lays the foundation

for interventions and support systems that promote positive mental health outcomes [6-8]. Adolescent mental health is a topic of growing concern due to its profound implications for well-being across the lifespan. Research has consistently shown that adolescence is a critical developmental period marked by significant changes in brain structure and function, making it a period of heightened vulnerability to mental health challenges [9,10]. This vulnerability is exacerbated by the various psychosocial stressors and transitions that adolescents navigate, including

academic pressures, peer relationships, identity formation, and family dynamics [5,11]. This study aims to delve into the mental health status of 6th and 7th-grade students in two secondary schools in Lien Chieu district, shedding light on risk factors for mental disorders and specific sub-domains of mental health manifestations. By examining these factors, we can gain insights into the diverse landscape of adolescent mental health and inform strategies for fostering well-being within educational settings. Adolescence is a time of heightened vulnerability to mental health challenges [9,12]. Academic stress, peer relationships, self-identity development, and family dynamics all contribute to the complex tapestry of adolescent mental health [11,13-16]. Recognizing the multifaceted nature of this issue, researchers have employed various assessment tools and approaches to gain a comprehensive understanding of adolescent mental well-being [17]. One such tool is the Strengths and Difficulties Questionnaire (SDQ), a widely used instrument for assessing the strengths and weaknesses of adolescents, providing valuable insights into their mental health status [18,19]. Understanding the factors that influence adolescent mental health is essential for effective intervention and support. One prominent tool used in the assessment of adolescent mental health is the Strengths and Difficulties Questionnaire (SDQ). Its versatility, with versions for child self-report, parent report, and teacher report, makes it a valuable tool for capturing diverse perspectives on adolescent mental well-being [19]. The SDQ, available in child self-report, parent report, and teacher report versions, captures the intricacies of adolescent mental health through five scales: Emotional problems, conduct problems, hyperactivity, peer problems, and pro-social problems [19]. Utilizing the SDQ allows for a nuanced examination of specific dimensions of mental health, shedding light on areas of strength and areas of concern among adolescents.

In recent years, increasing attention has been given to the mental health of adolescents within

educational settings [20-22]. Schools play a pivotal role in shaping the social and emotional development of students [23,24]. Recognizing this, educational institutions have started to implement mental health support systems and awareness programs to foster a positive and supportive environment [25,26]. However, the effectiveness of these initiatives relies on a thorough understanding of the mental health landscape within schools [27,28]. Studies have shown that risk factors for mental health disorders among adolescents can vary widely. Factors such as gender, socioeconomic status, family dynamics, and exposure to adverse childhood experiences can significantly influence mental health outcomes [29-31]. Additionally, specific domains of mental health, including emotional well-being, behavioral adjustment, and social relationships, can each present unique challenge for adolescents [5,32]. Understanding the complex interplay between risk factors and sub-domains of mental health is crucial for designing effective interventions and support systems within educational contexts. Tailored approaches that address the specific needs of adolescents at different risk levels and across various dimensions of mental health are essential for promoting well-being and resilience among students [33,34]. This study contributes to this understanding by examining risk factors for mental disorders and specific sub-domains of mental health manifestations among middle school students, providing crucial insights for educators, mental health professionals, and policymakers involved in promoting adolescent well-being within educational settings.

Materials and Methods

Participants

The research participants for this study comprised a total of 167 6th and 7th-grade students from two secondary schools located in Lien Chieu district. The study aimed to investigate various aspects of these students' characteristics, and the data is summarized in Table 1.

Table 1. Characteristics of respondents.

School	Grade 6			Grade 7			Total
	Boy	Girl	Total	Boy	Girl	Total	
Dam Quang Trung School	19	18	37	22	17	39	76
Nguyen Luong Bang School	17	23	40	19	30	49	91
Total	167						

The participants were divided into two distinct schools: Dam Quang Trung School and Nguyen Luong Bang School. At Dam Quang Trung School, there were a combined total of 76 students, with 37 in the 6th grade and 39 in the 7th grade. This group was further categorized based on gender, with 19 boys and 18 girls in the 6th grade, and 22 boys and 17 girls in the 7th grade.

At Nguyen Luong Bang School, a larger cohort of students was involved, totaling 91 participants. In this school, 40 students were in the 6th grade, and 49 were in the 7th grade. Similar to the other school, these students were also categorized by gender, revealing 17 boys and 23 girls in the 6th grade, and 19 boys and 30 girls in the 7th grade.

The research study included 167 students, spanning both 6th and 7th grades, from two secondary schools in Lien Chieu district. The data was further divided by school and grade level, as well as by gender, providing a comprehensive overview of the characteristics of the study participants. This information serves as a valuable foundation for understanding the demographics of the sample and conducting further analysis within the study's context.

Measurement

The study utilized the SDQ25 questionnaire, based on the Strengths and Difficulties Questionnaire (SDQ), to assess various psychological characteristics of 6th and 7th-grade students. The SDQ25 questionnaire is a well-established tool for evaluating the strengths and weaknesses of adolescents, specifically designed as a screening assessment for common mental illnesses in children and adolescents aged 4 to 17 [18,19]. This tool has been adapted for the Vietnamese context and was previously employed by Bahr Weiss and colleagues in studies involving Vietnamese children. The SDQ25 is recognized as a reliable and valid assessment tool, built on empirical evidence, and is widely used for gathering information from various sources, including children, parents, and teachers.

The SDQ25 comprises 25 questions, each requiring responses on a three-point scale: 0 for "Not true", 1 for "Somewhat true", and 2 for "Absolutely correct". These questions are categorized into five scales, each focused on a specific aspect of the participants' mental well-being:

Emotional problems: This scale consisted of 5

questions, and the total score could range from 0 to 10. Higher scores within this scale indicated a greater presence of emotional difficulties or challenges. To interpret the results, participants scoring within 0-5 were categorized as "Normal", while those with scores of 6-10 were considered at varying degrees of "Low risk" or "High risk".

Conduct problems: Similarly, the Conduct Problems scale comprised 5 questions with scores ranging from 0 to 10. Higher scores here pointed to an increased likelihood of behavioral problems. Categories for interpretation included "Normal" for scores between 0-3, "Low risk" for scores of 4, and "High risk" for scores between 5 to 10.

Hyperactivity: The Hyperactivity scale, with 5 questions, assessed levels of hyperactivity. Scores on this scale varied between 0 and 10. As with the other scales, "Normal" was designated for scores of 0 to 5, "Low risk" for 6, and "High risk" for scores of 7 to 10.

Peer problems: On the Peer Problems scale, which also included 5 questions, participants could score between 0 and 10. This scale assessed difficulties in peer relationships. "Normal" was attributed to scores ranging from 0 to 3, "Low risk" to a score of 4, and "High risk" for scores of 5 to 10.

Pro-social problems: The pro-social problems scale was unique in that it was calculated in a positive direction, with scores ranging from 0 to 10. Higher scores on this scale indicated a higher level of pro-social behavior. Participants scoring between 6 and 10 were considered within the "Normal" range, while scores between 0 and 4 were deemed "Low risk" (Table 2).

Table 2. Score level of the scale.

Total	Normal	Low risk	High risk
	0-15	16-19	20-40
Emotional problems	0-5	6	7-10
Conduct problems	0-3	4	5-10
Hyperactivity	0-5	6	7-10
Peer problems	0-3	04-May	6-10
Prosocial problems	6-10	5	0-4

Procedures

The implementation of the research project spanned from October 2018 to February 2020, with a specific focus on data collection during the sampling period from February 2019 to May 2019. The research project commenced with its conceptualization and planning phases. This phase involved defining the project's objectives, scope, and methodology. The ethical principles adhered to criteria set forth by reputable organizations, including the World Medical Association (2013) and the American Psychological Association (2017).

Before the sampling period, which took place from February 2019 to May 2019, researchers undertook the crucial task of selecting and recruiting participants. This phase involved identifying the target population: 6th and 7th-grade students from two secondary schools in Lien Chieu district. Contact and collaboration were established with school authorities to secure their consent and cooperation for the research. Researchers focused on adapting the chosen assessment tool, the Strengths and Difficulties Questionnaire (SDQ), to the local context. This process included translating the questionnaire and culturally validating it to ensure its appropriateness for the Vietnamese context. To ensure the consistency and reliability of data collection procedures, research staff underwent comprehensive training. Training encompassed various aspects, including the administration of the adapted SDQ25 questionnaire, adherence to standardized protocols, and the handling of ethical considerations, such as obtaining informed consent from participants and their guardians.

The sampling phase occurred within the specified timeframe. During this period, researchers administered the SDQ25 questionnaire to the selected 6th and 7th-grade students in the two secondary schools. This process was conducted following the established research plan and ethical guidelines. After concluding the data collection phase, researchers moved on to the analysis of the gathered information. This encompassed scoring and interpreting the responses from the SDQ25 questionnaire, as well as organizing and compiling the data for further statistical analysis. The research team employed statistical techniques and software to comprehensively analyze the collected data. They scrutinized the responses to the SDQ25 questionnaire to identify patterns, correlations, and risk factors among the participating students.

The findings were meticulously interpreted to draw meaningful conclusions regarding the psychological characteristics of the students.

The final phase of the project, in February 2020, involved the synthesis of research results into a comprehensive report. This report summarized the research procedures, findings, and conclusions. It was then disseminated to relevant stakeholders, including the participating schools, to contribute to the body of knowledge on mental health among adolescents and inform potential interventions.

Throughout these systematic procedures, the research project ensured ethical compliance, cultural adaptation of tools, and a thorough data collection and analysis process, all while adhering to the specific timeframes outlined for the project's implementation and data sampling.

Data analysis

Data analysis is a crucial step in the research process that involves examining and interpreting the collected data to derive meaningful insights and draw conclusions. In the context of your research project, which focuses on the psychological characteristics of 6th and 7th-grade students using the SDQ25 questionnaire? Before diving into the analysis, it's essential to ensure that the collected data is well-organized and ready for examination. This includes cleaning the data, checking for missing values, and verifying data accuracy. To provide an initial overview of the data, you can calculate descriptive statistics for each scale and overall scores. This may include measures such as means, medians, standard deviations, and frequency distributions. Descriptive statistics help summarize the central tendencies and distributions of the responses. Calculate the scores for each of the five scales: Emotional problems, conduct problems, hyperactivity, peer problems, and pro-social problems, based on the responses to the corresponding items in the SDQ25 questionnaire. Ensure that the scoring aligns with the established criteria (e.g., 0-10 scale) for each scale. Calculate the Total SDQ Score by summing the scores from the Emotional Problems, Conduct Problems, Hyperactivity, and Peer Problems scales. This provides an overall measure of the students' mental health difficulties, with higher scores indicating greater challenges in these areas. Analyze the scores obtained in each scale and the Total SDQ Score. Compare the scores against established cutoff points or thresholds to categorize students into different risk groups, such as "Normal", "Low

risk”, or “High risk” as defined in your research plan.

Results

Risk factors for mental disorders among students participating in the study

In Table 3, we examine the prevalence of risk factors for mental disorders among the students who participated in the study. The data is categorized into three levels: “No risk”, “Low risk”, and “High risk”, providing valuable insights into the mental health status of the student population before the experiment.

Table 3. Risk factors for mental disorders among students participating in the study.

	Level	N	Percentage (%)
Mental disorders at the time before the experiment	No risk	118	70.67
	Low risk	31	18.56
	High risk	18	10.76
	Total risk	49	29.32

The largest segment of the student participants, accounting for 70.67% of the total (N=118), was categorized as having “No risk” factors for mental disorders. This indicates that a substantial majority of the students entered the study with what appeared to be a stable mental health status. It is encouraging to observe that most students in the sample did not exhibit any obvious risk factors for mental health issues at the outset. On the other hand, 18.56% of the students (N=31) were classified as “Low risk”. This group likely had some identifiable risk factors for mental disorders, albeit at a lower level than the “High risk” category. It is essential to recognize this category, as it may represent students who could benefit from targeted mental health support or intervention. The smallest portion of the student population, comprising 10.76% (N=18), fell into the “High risk” category. These students were facing a higher level of risk factors for mental disorders, suggesting that they may be particularly vulnerable to mental health challenges. Identifying and providing appropriate resources and assistance for this group is crucial for their well-being. When considering the overall distribution of risk, it’s notable that 29.32% of the

total student sample (N=49) was classified as being at some level of risk (combining both “Low risk” and “High risk” categories). This underscores the importance of addressing mental health concerns among students and implementing preventive measures and support services. Table 3 offers a comprehensive overview of the risk factors for mental disorders among the student participants in the study. The majority of students were in the “No risk” category, but a significant proportion exhibited some level of risk. These findings underscore the importance of mental health awareness and interventions on college campuses to ensure the well-being of students with varying levels of risk.

Risk factors of the SDQ25 sub-domains of students participating in the study

Table 4 provides valuable insights into the risk factors associated with various sub-domains of mental health manifestations, as measured by the SDQ25, among students who participated in the study. This breakdown offers a detailed understanding of how different aspects of mental health were influenced by risk factors.

Table 4. Risk factors for mental health manifestations according to SDQ25.

	Normal	Low risk	High risk
Emotional problems	73.30%	15.00%	10.80%
Conduct problems	77.80%	13.80%	8.40%
Hyperactivity	88.00%	6.00%	6.00%
Peer problems	60.50%	33.50%	6.00%
Prosocial problems	86.90%	9.70%	3.40%

In the sub-domain of “Emotional problems”, it is observed that the majority of students, accounting for 73.3%, fell within the “Normal” range, indicating that they had relatively few emotional symptoms. However, 15.0% were categorized as “Low risk”, suggesting a moderate level of emotional symptom risk, while 10.8% were classified as “High risk”, indicating a heightened vulnerability to emotional difficulties. For

“Conduct problems”, a similar pattern emerged, with 77.8% of students categorized as “Normal”, reflecting a generally well-adjusted behavior. Meanwhile, 13.8% were at “Low risk” for behavioral problems, and 8.4% were classified as “High risk,” indicating a higher likelihood of facing behavioral challenges. In the “Hyperactivity” sub-domain, a significant proportion of students, 88.0%, were within the “Normal” range, suggesting that most had appropriate levels of hyperactivity. A smaller percentage, 6.0%, was categorized as “Low risk”, and another 6.0% were deemed “High risk” for hyperactivity. The “Peer problems” sub-domain revealed a different distribution, with 60.5% of students categorized as “Normal” in their friendship-related behaviors. However, a substantial 33.5% were classified as “Low risk”, indicating some issues in this area, while 6.0% were considered “High risk”, highlighting potential challenges in forming and maintaining friendships. Lastly, in the sub-domain of “Pro-social problems”, the majority of students, 86.9%, were categorized as “Normal”, demonstrating healthy public relationship skills. A smaller percentage, 9.7%, were at “Low risk”, and 3.4% were classified as “High risk” in this area, indicating varying levels of risk associated with public relationship difficulties.

Table 4 reveals a nuanced picture of risk factors within different sub-domains of mental health manifestations among the student participants. While the majority fell within the “Normal” range for most sub-domains, there were notable variations in risk levels across these categories, highlighting the need for tailored interventions and support to address specific aspects of students’ mental well-being. This data provides essential guidance for developing strategies to promote positive mental health among students with varying risk profiles.

Discussion

The results presented shed light on the prevalence of risk factors for mental disorders and the specific sub-domains of mental health manifestations among the students participating in this study. These findings offer valuable insights into the mental health status of the student population and provide a foundation for discussing the implications for mental health interventions and support services on college campuses.

The results provide significant insights into the

prevalence of risk factors for mental disorders among the student participants in the study. Notably, a substantial majority of students were categorized as having “No risk” factors for mental disorders. This is an encouraging observation and suggests that a significant portion of the student population appeared to have a stable mental health status at the outset of the study [35]. These findings highlight the importance of promoting and maintaining mental well-being among students [36]. However, it is crucial to continue monitoring their mental health status over time to identify any potential changes or emerging risk factors that may require intervention or support. These results align with the notion that adolescent students often represent a diverse group in terms of mental health, with a significant proportion demonstrating resilience and psychological well-being [9,10,37]. However, it is crucial to recognize the percentage of students classified as “Low risk” and “High risk” category. This indicates that a noteworthy portion of the student body exhibits varying levels of risk factors for mental disorders, warranting attention and intervention strategies [38]. Understanding the specific risk factors that contribute to mental health issues among adolescent students is essential for developing effective intervention strategies [39]. By identifying these factors, schools can provide targeted support and resources to help students navigate their mental health challenges and promote overall well-being [25,40]. Additionally, recognizing the diversity within the student population ensures that interventions are tailored to meet the unique needs of each individual, fostering a more inclusive and supportive campus environment [37]. The cumulative percentage of students at some level of risk emphasizes the importance of addressing mental health concerns among students comprehensively. These findings underscore the necessity of implementing preventive measures, mental health awareness programs, and support services to ensure the well-being of students with varying risk profiles [21,41]. By providing preventive measures, mental health awareness programs, and support services, schools can create a supportive environment that promotes the overall well-being of students. This comprehensive approach can help identify and address mental health concerns early on, ultimately improving the academic success and retention rates of students.

This finding provides an in-depth examination of risk factors within various sub-domains

of mental health manifestations among the student participants, as measured by the SDQ25 questionnaire. The results present a nuanced picture of the students' mental well-being across different dimensions [19]. In the "Emotional problems" sub-domain, it is encouraging to observe that the majority of students fell within the "Normal" range, indicating relatively few emotional symptoms. However, classification as "Low risk" and "High risk" suggests that a substantial proportion of students experience varying levels of emotional difficulties. This finding underscores the need for interventions targeting emotional well-being, such as counseling services and stress management programs, to support students in managing emotional challenges effectively [8,42,43]. By providing these resources, educational institutions can help students develop healthy coping mechanisms and improve their overall mental health. Additionally, implementing preventive measures like promoting a positive school environment and teaching emotional intelligence can contribute to reducing emotional difficulties among students [37,44]. A similar pattern is observed in the "Conduct problems" sub-domain categorized as "Normal". However, "Low risk" and "High risk" levels suggest that behavioral challenges exist among some students. This underscores the importance of promoting positive behavior and providing resources for students facing behavioral issues [45]. By addressing behavioral challenges and providing necessary resources, schools can create a supportive environment that helps students overcome their difficulties and succeed academically. Additionally, implementing proactive strategies such as social-emotional learning programs can further contribute to promoting positive behavior and reducing the occurrence of conduct problems among students [46]. In the "Peer Problems" sub-domain, a substantial percentage of students were categorized as "Low risk", indicating potential difficulties in forming and maintaining friendships. This finding emphasizes the significance of fostering a supportive and inclusive social environment within the educational community [47]. Additionally, the presence of students in the "High risk" category highlights the need for targeted interventions to address peer relationship challenges [48]. These interventions could include social skills training programs or peer mentoring initiatives to help students develop and improve their interpersonal skills [49]. It is crucial for schools to prioritize the creation of a positive and inclusive campus culture that promotes healthy

relationships and provides resources for students struggling with peer problems [7,15,50]. In the "Pro-social problems" sub-domain, the majority of students were categorized as "Normal", demonstrating healthy public relationship skills. However, a small percentage of students were identified as having "At risk" or "Clinical" levels of pro-social problems, indicating potential difficulties in establishing and maintaining positive relationships with others [51]. It is important to provide support and intervention for these students to help them develop the necessary skills for healthy social interactions [52]. This data underscores the importance of addressing social and relational aspects of students' mental well-being. The findings emphasize the complexity of mental health among adolescent students, with varying risk profiles observed across different sub-domains of mental health manifestations [53]. These results underscore the importance of a comprehensive and tailored approach to mental health support in school, including interventions and awareness programs that address specific facets of students' mental well-being [33]. By recognizing and addressing these nuances, schools can better promote the positive mental health of their students and create a more supportive and inclusive learning environment [54,55].

The findings of this study carry significant implications for various stakeholders involved in the well-being of adolescents in educational settings. These implications span the domains of mental health support, awareness, policy, and research. The identification of students with varying levels of risk factors for mental disorders, underscores the importance of tailored interventions. Educational institutions should develop and implement support services that cater to the specific needs of students. This proactive approach can help prevent the escalation of mental health challenges and promote early intervention [56]. Then, the prevalence of risk factors within specific sub-domains, suggests the need for comprehensive mental health awareness programs within schools. These programs should focus on emotional well-being, positive behavior, and healthy social relationships. By reducing stigma, encouraging help-seeking behaviors, and equipping students with coping skills, schools can create a more mentally supportive environment [8]. Moreover, educational institutions should consider integrating mental health services seamlessly into their existing student support systems [27]. This integration involves ensuring

that school counselors, psychologists, and other mental health professionals are readily available and accessible to students. Creating an environment where seeking help for mental health concerns is normalized and convenient is crucial. In addition, it is essential to provide training for teachers and school staff to recognize signs of mental distress and offer initial support. Teachers often play a pivotal role in identifying students who may be struggling emotionally or behaviorally [57]. Equipping them with the skills to provide immediate assistance and connect students with appropriate resources can make a significant difference. Parents and guardians should also be actively involved in supporting their children's mental health. Schools can facilitate workshops and information sessions to enhance parental understanding of adolescent mental health. Engaging parents in recognizing warning signs and collaborating with the school in addressing their child's needs is invaluable [58]. Policymakers should consider utilizing research findings, such as those presented in this study, to inform and shape policies related to mental health support in educational settings. Adequate funding, resources, and guidelines should be established to ensure that schools can effectively address the mental health needs of their students [59]. Furthermore, future research in this area could benefit from conducting longitudinal studies to track changes in risk factors and mental health status over time. This approach would provide deeper insights into the effectiveness of interventions and support services in maintaining and improving student mental well-being. Last but not least, cultural sensitivity is paramount. Recognizing that cultural factors significantly influence mental health perceptions and experiences, schools should adopt culturally sensitive approaches to mental health support. This includes acknowledging the diverse cultural backgrounds and beliefs held by students and tailoring support accordingly.

While this study provides valuable insights into the mental health status of 6th and 7th-grade students in two secondary schools, it is essential to acknowledge certain limitations that may impact the interpretation and generalizability of the findings. Firstly, the study's cross-sectional design restricts our ability to establish causal relationships. The data collected at a single point in time allows us to identify associations and correlations but does not permit us to infer causation. Longitudinal research would be required to examine changes in risk factors and mental health over time and better

understand the dynamic nature of these factors. Secondly, the study's sample was drawn from two secondary schools in a specific district, which may limit the generalizability of the findings to a broader population. The unique characteristics and demographics of the sampled schools may not be representative of all secondary schools or students, both within the district and in other regions. Replication of the study across diverse settings would enhance the generalizability of the results. Additionally, self-report questionnaires, such as the SDQ25 used in this study, are subject to response bias. Students may underreport or overreport their mental health symptoms and risk factors due to social desirability bias or a lack of self-awareness. Combining self-report data with other sources of information, such as parent or teacher reports, could provide a more comprehensive picture of students' mental health. Furthermore, the study's focus on 6th and 7th-grade students may not capture the full spectrum of mental health challenges faced by adolescents. Mental health experiences and risk factors can vary significantly across different age groups, and it would be beneficial to extend this research to encompass a wider age range of students to gain a more comprehensive understanding. The reliance on a single assessment tool, the SDQ25 questionnaire, while validated and widely used, may not capture all dimensions of mental health. Other assessment methods or diagnostic interviews conducted by mental health professionals could provide a more comprehensive evaluation of students' mental well-being. Lastly, cultural factors and regional context were not extensively explored in this study. Cultural nuances and regional variations can significantly influence mental health perceptions and experiences. Future research should consider these factors to provide a more culturally sensitive perspective on adolescent mental health.

Conclusion

This study offers significant insights into the mental well-being of 6th and 7th-grade pupils in two secondary schools. Although most students had a consistent mental health state, a significant fraction experienced different degrees of risk factors for mental diseases. These findings emphasize the significance of customized interventions and mental health awareness initiatives in school environments. It is imperative to include mental health services into schools, provide training for educators, and involve parents in order to effectively promote children's well-

being. Policymakers ought to use study findings in order to develop effective mental health policy, while future research should investigate cultural and regional subtleties. Understanding these intricacies is crucial for establishing a nurturing atmosphere that promotes favorable mental health results for every kid.

References

1. Hickie IB, Scott EM, Cross SP, Iorfino F, Davenport TA, et al. Right care, first time: A highly personalised and measurement-based care model to manage youth mental health. *Med J Aust.* 2019;211:S3-S46.
2. Le DT, Huynh SV, Vu TV, Dang-Thi NT, Nguyen-Duong BT, et al. Personality traits and aggressive behavior in Vietnamese adolescents. *Psychol Res Behav Manag.* 2023;16:1987-2003.
3. Steinberg LD. Age of opportunity: Lessons from the new science of adolescence. Houghton Mifflin Harcourt. 2014.
4. Nguyen-Thi DM, Huynh VS, Tran-Chi VL. Loneliness, stress, self-esteem, and deception among adolescents. *J Hum Ecol.* 2020;70(1-3):118-123.
5. Sawyer SM, Azzopardi PS, Wickremarathne D, Patton GC. The age of adolescence. *The lancet child & adolescent health.* 2018;2(3):223-228.
6. Luu-Thi HT, Ngo-Thi TT, Nguyen-Thi MT, Thao-Ly T, Nguyen-Duong BT, et al. An investigation of mathematics anxiety and academic coping strategies among high school students in Vietnam: A cross-sectional study. *Front Educ.* 2021;6:742130.
7. Moldes VM, Biton CL, Gonzaga DJ, Moneva JC. Students, peer pressure and their academic performance in school. *Int J Sci Res Publ.* 2019;9(1):300-312.
8. Tran-Chi VL, Ly TT, Luu-Thi HT, Huynh VS, Nguyen-Thi MT. The influence of COVID-19 stress and self-concealment on professional help-seeking attitudes: A cross-sectional study of university students. *Psychol Res Behav Manag.* 2021:2081-2091.
9. Paus T, Keshavan M, Giedd JN. Why do many psychiatric disorders emerge during adolescence? *Nat Rev Neurosci.* 2008;9(12):947-957.
10. Sisk LM, Gee DG. Stress and adolescence: Vulnerability and opportunity during a sensitive window of development. *Curr Opin Psychol.* 2022;44:286-292.
11. Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, et al. Our future: A Lancet commission on adolescent health and wellbeing. *Lancet.* 2016;387(10036):2423-2478.
12. Blakemore SJ. Adolescence and mental health. *Lancet.* 2019;393(10185):2030-2031.
13. Ho TT, Nguyen BT, Nguyen NP. Academic stress and depression among vietnamese adolescents: a moderated mediation model of life satisfaction and resilience. *Current Psychology.* 2023 Nov;42(31):27217-27.
14. Smetana JG, Rote WM. Adolescent-parent relationships: Progress, processes, and prospects. *Annu Rev Psychol.* 2019;1:41-68.
15. Tang HK, Nguyen NM, Dibley MJ, Nguyen TH, Alam A. Improving the lifestyle of adolescents through peer education and support in vietnam: Protocol for a pilot cluster randomized controlled trial. *JMIR Res Protoc.* 2020;9(6):e15930.
16. Verhoeven M, Poorthuis AM, Volman M. The role of school in adolescents' identity development. A literature review. *Educ Psychol Rev.* 2019;31:35-63.
17. Goodman R, Ford T, Richards H, Gatward R, Meltzer H. The development and well-being assessment: Description and initial validation of an integrated assessment of child and adolescent psychopathology. *J Child Psychol Psychiatry.* 2000;41(5):645-655.
18. Dang HM, Nguyen H, Weiss B. Incremental validity of the Child Behavior Check List (CBCL) and the Strengths and Difficulties Questionnaire (SDQ) in Vietnam. *Asian J Psychiatr.* 2017;29:96-100.
19. Goodman R, Ford T, Simmons H, Gatward R, Meltzer H. Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *Int Rev Psychiatry.* 2000;17(6):534-539.
20. Ali MM, West K, Teich JL, Lynch S, Mutter R, et al. Utilization of mental health services in educational setting by adolescents in the United States. *J Sch Health.* 2019;89(5):393-401.

21. Hunt J, Eisenberg D. Mental health problems and help-seeking behavior among college students. *J Adolesc Health.* 2010;46(1):3-10.
22. Lehtimäki S, Martic J, Wahl B, Foster KT, Schwalbe N. Evidence on digital mental health interventions for adolescents and young people: Systematic overview. *JMIR Ment Health.* 2021;8(4):e25847.
23. Robina-Ramírez R, Merodio JA, McCallum S. What role do emotions play in transforming students' environmental behaviour at school? *J Clean Prod.* 2020;258:120638.
24. Walker G, Venker Weidenbenner J. Social and Emotional Learning in the age of virtual play: Technology, empathy, and learning. *Journal of Research in Innovative Teaching & Learning.* 2019;12(2):116-132.
25. García-Carrión R, Villarejo-Carballido B, Villardón-Gallego L. Children and adolescents mental health: A systematic review of interaction-based interventions in schools and communities. *Front Psychol.* 2019;10:918.
26. Weist MD, Rubin M, Moore E, Adelsheim S, Wrobel G. Mental health screening in schools. *J Sch Health.* 2007;77(2):53-58.
27. Hoover S, Bostic J. Schools as a vital component of the child and adolescent mental health system. *Psychiatr Serv.* 2021;72(1):37-48.
28. Huang FL, Moon TR. Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educational Assessment, Evaluation and Accountability.* 2009;21:209-234.
29. Barnhart S, Garcia AR, Karcher NR. Adolescent mental health and family economic hardships: The roles of adverse childhood experiences and family conflict. *J Youth Adolesc.* 2022;51(12):2294-2311.
30. McLaughlin KA, Green JG, Gruber MJ, Sampson NA, Zaslavsky AM, et al. Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents. *Arch Gen Psychiatry.* 2012;69(11):1151-1160.
31. Wang D, Jiang Q, Yang Z, Choi JK. The longitudinal influences of adverse childhood experiences and positive childhood experiences at family, school, and neighborhood on adolescent depression and anxiety. *J Affect Disord.* 2021;292:542-551.
32. Arslan G. Psychological well-being and mental health in youth: Technical adequacy of the comprehensive inventory of thriving. *Children.* 2023;10(7):1269.
33. Goodwin J, Behan L, O'Brien N. Teachers' views and experiences of student mental health and well-being programmes: A systematic review. *J Child Adolesc Ment Health.* 2021;33(1-3):55-74.
34. Manrique-Millones D, Wiium N, Pineda-Marín C, Fernández-Arata M, Alfonso-Murcia D, et al. Association between substance use behaviors, developmental assets and mental health: A glance at Latin American young college students. *Front Psychol.* 2021;12:639578.
35. Weavers B, Heron J, Thapar AK, Stephens A, Lennon J, et al. The antecedents and outcomes of persistent and remitting adolescent depressive symptom trajectories: A longitudinal, population-based English study. *Lancet Psychiatry.* 2021;8(12):1053-1061.
36. Cilar L, Štiglic G, Kmetec S, Barr O, Pajnikihar M. Effectiveness of school-based mental well-being interventions among adolescents: A systematic review. *J Adv Nurs.* 2020;76(8):2023-2045.
37. Hawkins GT, Chung CS, Hertz MF, Antolin N. The school environment and physical and social-emotional well-being: Implications for students and school employees. *J Sch Health.* 2023;93(9):799-812.
38. Wang Z, Wang X, Lu K, He J, Zheng J, et al. Profiles, transitions, and resilience factors of suicide risk in early Chinese adolescents. *J Youth Adolesc.* 2023;52(11):2300-2313.
39. Arslan G. School belongingness, well-being, and mental health among adolescents: Exploring the role of loneliness. *Aust J Psychol.* 2021;73(1):70-80.
40. Odgers CL, Jensen MR. Annual research review: Adolescent mental health in the digital age: Facts, fears, and future directions. *J Child Psychol Psychiatry.* 2020;61(3):336-348.

41. Fusar-Poli P, Correll CU, Arango C, Berk M, Patel V, et al. Preventive psychiatry: A blueprint for improving the mental health of young people. *World Psychiatry*. 2021;20(2):200-221.
42. Knight L, Samuel V. Acceptance and commitment therapy interventions in secondary schools and their impact on students' mental health and well-being: A systematic review. *J Context Behav Sci*. 2022;25:90-105.
43. Šouláková B, Kasal A, Butzer B, Winkler P. Meta-review on the effectiveness of classroom-based psychological interventions aimed at improving student mental health and well-being, and preventing mental illness. *J Prim Prev*. 2019;40:255-278.
44. Méndez I, Jorquera AB, Ruiz-Esteban C, Martínez-Ramón JP, Fernández-Sogorb A. Emotional intelligence, bullying, and cyberbullying in adolescents. *Int J Environ Res Public Health*. 2019;16(23):4837.
45. Salas-Pilco SZ, Yang Y, Zhang Z. Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review. *Br J Educ Technol*. 2022;53(3):593-619.
46. Daunic AP, Aydin B, Corbett NL, Smith SW, Boss D, et al. Social-emotional learning intervention for K-1 students at risk for emotional and behavioral disorders: Mediation effects of social-emotional on School adjustment. *Behav Disord*. 2023;49(1):17-30.
47. Hymel S, Katz J. Designing classrooms for diversity: Fostering social inclusion. *Educ Psychol*. 2019;54(4):331-339.
48. Kelly EV, Newton NC, Stapinski LA, Conrod PJ, Barrett EL, et al. A novel approach to tackling bullying in schools: Personality-targeted intervention for adolescent victims and bullies in Australia. *J Am Acad Child Adolesc Psychiatry*. 2020;59(4):508-518.
49. Ammentorp J, Bigi S, Silverman J, Sator M, Gillen P, et al. Upscaling communication skills training-lessons learned from international initiatives. *Patient Educ Couns*. 2021;104(2):352-359.
50. Jessiman P, Kidger J, Spencer L, Geijer-Simpson E, Kaluzeviciute G, et al. School culture and student mental health: A qualitative study in UK secondary schools. *BMC Public Health*. 2022;22(1):619.
51. Waters L, Algoe SB, Dutton J, Emmons R, Fredrickson BL, et al. Positive psychology in a pandemic: Buffering, bolstering, and building mental health. *J Posit Psychol*. 2022;17(3):303-323.
52. Shah K, Mann S, Singh R, Bangar R, Kulkarni R. Impact of COVID-19 on the mental health of children and adolescents. *Cureus*. 2020;12(8):e10051.
53. Murray AL, Ushakova A, Speyer L, Brown R, Auyeung B, et al. Sex/gender differences in individual and joint trajectories of common mental health symptoms in early to middle adolescence. *JCPP Adv*. 2022;2(1):e12057.
54. Colvin S, Egan JE, Coulter RW. School climate & sexual and gender minority adolescent mental health. *J Youth Adolesc*. 2019;48(10):1938-1951.
55. Ferreira M, Martinsone B, Talić S. Promoting sustainable social emotional learning at school through relationship-centered learning environment, teaching methods and formative assessment. *Journal of Teacher Education for Sustainability*. 2020;22(1):21-36.
56. Wakschlag LS, Roberts MY, Flynn RM, Smith JD, Krogh-Jespersen S, et al. Future directions for early childhood prevention of mental disorders: A road map to mental health, earlier. *J Clin Child Adolesc Psychol*. 2019;48(3):539-554.
57. Keels M, Tackie H, Wilkins N. Educators need more than a strong belief in the importance of student relationships. *School Mental Health*. 2022;14(2):225-237.
58. Toros K, Tart K, Falch-Eriksen A. Collaboration of child protective services and early childhood educators: Enhancing the well-being of children in need. *Early Child Educ J*. 2021;49(5):995-1006.
59. Hoffman JA, Miller EA. Addressing the consequences of school closure due to COVID-19 on children's physical and mental well-being. *World Med Health Policy*. 2020;12(3):300-310.

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