

4-30-2021

A Cross-Sectional Study on Bullying and Psychological Disturbances among Malaysian School Children

Muhammad Lokman Md Isa

Kulliyah of Nursing, International Islamic University Malaysia, Kuantan 25200, Malaysia,
lokman@iium.edu.my

Nurfatin Aina Mocktar

National Heart Institute, Kuala Lumpur 50400, Malaysia, ainafatin177@gmail.com

Wisam Nabeel Ibrahim

Department of Biomedical Science, College of Health Sciences, Qatar University, Doha 2713, Qatar,
w.ibrahim@qu.edu.qa

Mohd Said Nurumal

Kulliyah of Nursing, International Islamic University Malaysia, Kuantan 25200, Malaysia,
mohdsaid@iium.edu.my

Muhammad Kamil Che Hasan

Kulliyah of Nursing, International Islamic University Malaysia, Kuantan 25200, Malaysia,
mkamil@iium.edu.my

Follow this and additional works at: <https://scholarhub.ui.ac.id/mjhr>



Part of the [Epidemiology Commons](#), [Psychiatric and Mental Health Nursing Commons](#), [Psychiatry Commons](#), [Public Health and Community Nursing Commons](#), and the [Public Health Education and Promotion Commons](#)

Recommended Citation

Md Isa ML, Mocktar NA, Ibrahim WN, Nurumal MS, Che Hasan MK. A cross-sectional study on bullying and psychological disturbances among Malaysian school children. Makara J Health Res. 2021;25.

A Cross-Sectional Study on Bullying and Psychological Disturbances among Malaysian School Children

Muhammad Lokman Md Isa¹, Nurfatina Aina Mocktar², Wisam Nabeel Ibrahim^{3,4}, Mohd Said Nurumal¹, Muhammad Kamil Che Hasan^{1*}

¹Kulliyah of Nursing, International Islamic University Malaysia, Kuantan 25200, Malaysia

²National Heart Institute, Kuala Lumpur 50400, Malaysia

³Department of Biomedical Science, College of Health Sciences, Qatar University, Doha 2713, Qatar

⁴Biomedical and Pharmaceutical Research Unit, Qatar University Health, Qatar University, Doha 2713, Qatar

Abstract

Background: Bullying is a common violence in school and has become a major public health and global concern. Bullying influences mental health and is identified as a leading factor of depression. Therefore, this study aimed to identify bullying prevalence and its association toward psychological disturbances (stress, anxiety, and depression).

Methods: This cross-sectional study was conducted in three secondary schools in Kuantan. After obtaining consent from parents/guardians, participants were asked to answer a self-administered questionnaire, including School Climate Bullying Survey, Depression Anxiety Stress Questionnaire-21, Patient Depression Questionnaire, and Generalized Anxiety Disorder. Demographic data were self-reported. Data were analyzed using SPSS version 20.0, and chi-square and correlation tests were conducted for variables.

Results: A total of 207 students were included in this study. Of respondents, 50.7% were boys and 49.3% girls, and the majority (92.8%) were Malays. Of students, 63.2% were involved in bullying problems through the school years, with verbal bullying as the highest (55.1%). Bullying is significantly associated with stress ($p = 0.045$), anxiety ($p = 0.018$), and depression ($p = 0.012$).

Conclusions: School children in Kuantan continue to be involved in bullying. The current study supported that involvement with any bullying activity was associated with psychological disturbances including anxiety, stress, and depression.

Keywords: bullying, child, cross-sectional study, Malaysia, psychology

INTRODUCTION

Bullying can be defined as when a person uses his or her strength or power to harm or torture another person repeatedly. Bullying can take many forms including physical, verbal, social, and cyber.¹ Bullying can happen anywhere but is commonly reported in the school setting, and the most common types are verbal and physical.² Verbal bullying occurs when bullies repeatedly tease, put down, or insult someone purposely, whereas physical bullying involves repeatedly hitting, kicking, or shoving someone weaker on purpose.³ It became a serious problem among school-age children as they result in negative impacts on students' academic performance, psychological well-being, social adjustment, and physical wellness.⁴

Students who are bullied or victimized are more likely to develop anxiety, panic disorder, and sociality compared with bully-victims and perpetrators.^{5,6} These conditions

will trigger the students' psychological health status that causes stress, anxiety, and depression. The Ministry of Education Malaysia in 2016 reported that the prevalence of bullying was more than 14,000 cases between 2012 and 2015.⁷

Many studies on bullying and health established the links between low self-esteem, anxiety, depression, and adjustment problems among bullied victims.^{8,9} Students who are bullied had a higher prevalence of suicidal ideation than those who were not bullied. The predictors of suicidal ideation among the students were depression, anxiety, stress, bullying, and low-esteem.¹⁰ Although the prevalence of bullying has been reported previously, the number in suburban areas is scarce. The impact on school children in one of the east-coast city of Peninsular Malaysia is also unknown. Therefore, this study aimed to identify the bullying prevalence and its association toward psychological disturbances (stress, anxiety, and depression).

METHODS

This cross-sectional study was conducted from March to April 2019 with approval from the Kulliyah of Nursing Postgraduate Research Committee (IIUM/313/C/20/4/10), IIUM Research Ethics Committee (IREC 2019-035), and

*Corresponding author:

Muhammad Kamil Che Hasan
Kulliyah of Nursing, International Islamic University Malaysia,
Kuantan, Malaysia
E-mail: mkamil@iiu.edu.my

Ministry of Education (KPM.600-3/2/3-eras(3386)). The parent/legal guardians were asked for the assent/consent for the participation of the selected children, whom their identity and participation would not be revealed to anyone. All information was kept confidential, and results from the collected data were reported anonymously, with no references to specific individuals.

We applied a simple random sampling method to select the schools in Kuantan, Pahang, and convenience sampling method for eligible participants. School children were included if they were Malaysians, aged 13–17 years, and physically and mentally intact. Those who were not willing to participate were excluded.

The sample size was calculated using the online sample size calculator Raosoft® (Raosoft Inc., USA).¹¹ The minimum effective sample for this study was $n = 207$, with a confidence level of 95%, a response distribution of 50%, and total estimated schoolchildren of 1300. We managed to secure 207 participants from three schools whose parents/guardian assented/consented to participate in this study, completed the questionnaire, and considered them for analysis. During the data collection, all the respondents were gathered at the school's hall, and a hard copy of the questionnaire was distributed after the researcher explained the study. Respondents were given about 30 min to answer all questionnaires.

Participants who assented/consented to participate in the study were asked to complete a set of self-administered questionnaires written bilingually. It consists of five parts, namely, sociodemographics data, School Climate Bullying Survey,¹² Depression Stress Anxiety Scale (DASS-21),¹³ Generalized Anxiety Disorder Scale (GAD-7),¹⁴ and Patient Depression Questionnaire-9 (PHQ-9).¹⁵ For the DASS-21, only the stress scale part was used in this study because GAD-7 and PHQ-9 have more excellent validity.¹⁶ The sociodemographic data consist of four questions, including age, gender, ethnicity, and family income. The School Climate Bullying Survey consists of ten questions with four options to classify the prevalence of bullying based on the four types of bullying. The stress scales of DASS-21 and GAD-7 consist of seven questions with four options to measure the stress and anxiety levels of the students. The last part was the PHQ-9 that consists of nine questions related to depression. The scores of all three parts of the psychological disturbance questionnaires were added to classify the level of the respondents.

Data were analyzed and transformed using IBM SPSS version 20. Data were descriptively analyzed, whereas associations between bullying and psychological disturbances were determined using the chi-square test. A p of 0.05 or less indicates statistical significance.

RESULTS

A total of 207 secondary school students with mean age of 14.5 ± 1.2 from three schools in Kuantan, Pahang, participated in this study. Table 1 shows the sociodemographic factors of the respondents. Based on the survey, there were 105 (50.7%) boys and 102 (49.3%) girls, and the mean age was 14.49 years. Besides, most students in this study were Malays 192 (92.8%), followed by Indians 9 (4.3%) and Chinese 6 (2.9%). Meanwhile, 105 (50.7%) students have a family income between Ringgit Malaysia (RM) 1000 and RM 3000 per month.

TABLE 1. Distribution of sociodemographic factors, prevalence and types of bullying, and prevalence of stress, anxiety, and depression

| Variables | Frequency (N) | Percentage (%) |
|---|---------------|----------------|
| Age (Years old) | | |
| 13 | 50 | 24.2 |
| 14 | 81 | 39.1 |
| 16 | 76 | 36.7 |
| Gender | | |
| Male | 105 | 50.7 |
| Female | 102 | 49.3 |
| Ethnicity | | |
| Malay | 192 | 92.8 |
| Indian | 9 | 4.3 |
| Chinese | 6 | 2.9 |
| Family Income | | |
| <RM 1000 | 15 | 7.2 |
| RM 1000 – RM 3000 | 105 | 50.7 |
| RM 3001 – RM 4999 | 38 | 18.4 |
| ≥RM 5000 | 49 | 23.7 |
| Bullying School Climate Survey | 132 | 63.2 |
| Types of bullying | | |
| Physical | 44 | 21.2 |
| Verbal | 114 | 55.1 |
| Social | 64 | 30.8 |
| Cyber | 23 | 11.1 |
| Depression Anxiety Stress scale (DASS) | | |
| Normal stress | 143 | 69.1 |
| Mild stress | 31 | 15.0 |
| Moderate stress | 19 | 9.2 |
| Severe stress | 11 | 5.3 |
| Extremely stress | 3 | 1.4 |
| Generalized Anxiety Disorder 7 (GAD-7) scale | | |
| None-minimal anxiety | 122 | 58.9 |
| Mild anxiety | 58 | 28.0 |
| Moderate anxiety | 20 | 9.7 |
| Severe anxiety | 7 | 3.4 |
| Patient Health Question 9 (PHQ-9) scale | | |
| Minimal depression | 87 | 42.0 |
| Mild depression | 69 | 33.3 |
| Moderate depression | 37 | 17.9 |
| Moderately severe depression | 11 | 5.3 |
| Severe depression | 3 | 1.4 |

Table 1 also shows the Bullying School Climate Survey, which indicated that 132 (63.2%) students were involved in bullying problems through the school years, whereas 75 (36.2%) were never involved. Verbal bullying has the highest reported incidence among the school children (n = 114, 55.1%), followed by social (n = 64, 30.8%), physical (n = 44, 21.2%), and cyber (n = 23, 11.1%).

The psychological disturbances measured based on stress, anxiety, and depression can be seen in Table 1. School children reported that they were having a combination of mild, moderate, or severe stress (n = 64, 30.9%), anxiety (n = 85, 41.1%), and depression (n = 120, 58%). Most of the students reported a normal stress level 143 (69.1%), followed by mild stress 31 (15.0%); only 3 (1.4%) students reported having an extreme stress level. Meanwhile, most of the students reported having none-minimal anxiety (n = 122, 58.9%), followed by mild (n = 58, 28.0%), moderate (n = 20, 9.7%), and severe (n = 7, 3.4%) anxiety. For depression, only 87 students (42.0%) reported having a normal or minimal depression level, whereas 120 (58.0%) experienced depression regardless of severity level.

Table 2 shows that bullying is significantly associated with stress ($p = 0.045$), anxiety ($p = 0.018$), and depression ($p = 0.012$).

DISCUSSION

Findings from this study indicated that most respondents were involved in bullying throughout school years as consistently reported by the Ministry of Education Malaysia.⁷ Another review reported that bullying peaks

among 12–15 years old and continues to decline by the end of high school.² Another study estimated that approximately 20–25% of young people were specifically involved in bullying as victims, perpetrators, or both.⁶ Bullying not only negatively affects the health of both bullies and victims but also harms the audience.¹⁷

The most common type of bullying was verbal, followed by social. This result was supported by a study among universities in Virginia, where the verbal form of bullying was the most common occurrence among students followed by the social form.¹² The impact of verbal and social forms has greater and long term damage to victims in terms of psychological status. In this study, cyberbullying has been shown as the least common among the respondents, although the statistics have increased globally.¹⁸ This could be due to the number of school children having lesser technology update than adults within the population of study context.

Bullying is also associated with psychological disturbances among school children. It has the risk of poor sleep quality,¹⁹ stress, anxiety, and depression.²⁰ This finding is also supported by other studies that indicated that bullying is associated with academic performance and mental health status.^{7,21} Thus, bullying is added to the list influencing mental well-being among school children despite obesity, which was reported earlier.^{22,23} Moreover, students who have disabilities, are suffering from obesity, or belong to ethnic or sexual minorities are at greater risk of being victimized than their peers.⁹

TABLE 2. The association of bullying and psychological disturbances

| Variables | N | Bullying activities (N = 207) | | p^a |
|-------------------|-----|---|--|--------|
| | | Have been involved with bullying N (%) | Never been involved with bullying N (%) | |
| Stress | | | | |
| Normal | 143 | 84 (58.7) | 59 (41.3) | 0.045* |
| Mild | 31 | 26 (83.9) | 5 (16.1) | |
| Moderate | 19 | 12 (63.2) | 7 (36.8) | |
| Severe | 11 | 9 (81.8) | 2 (18.2) | |
| Extremely | 3 | 1 (33.3) | 2 (66.7) | |
| Anxiety | | | | |
| None-minimal | 122 | 69 (56.6) | 53 (43.4) | 0.018* |
| Mild | 58 | 44 (75.9) | 14 (24.1) | |
| Moderate | 20 | 16 (80.0) | 4 (20.0) | |
| Severe | 7 | 3 (42.9) | 4 (57.1) | |
| Depression | | | | |
| Minimal | 87 | 50 (57.5) | 37 (42.5) | 0.012* |
| Mild | 69 | 48 (69.6) | 21 (30.4) | |
| Moderate | 37 | 28 (75.7) | 9 (24.3) | |
| Moderately severe | 11 | 3 (27.3) | 8 (72.7) | |
| Severe | 3 | 3 (100) | 0 (0.0) | |

*Significant at $p < 0.05$; ^aChi-square test.

Studies that also addressed the issues of causality found that bullying problems most likely lead to anxiety, depression, social withdrawal, delinquent behavior, and poor academic performance.^{24,25} At first, they might experience stress and anxiety, but in the long term, this condition might lead to depression as stress and anxiety have been identified as predisposing factors of depression.¹⁰ The victims of bullying frequently experience anxiety, low self-esteem, vulnerability, depression, introversion, oversensitivity, and withdrawal from social activities; thus, higher levels of physical fitness can favor higher well-being in children and adolescents.²⁶ In particular, the risk factors reported at the adolescent stage for the development of violent behavior toward peers are as follows: low life satisfaction, high psychological distress, lack of empathic capacity, a propensity to depressive symptomatology, and low self-esteem.²⁰

Another study also indicated that psychological distress completely mediated the relationship between school bullying victimization and breakfast skipping in girls, whereas that relationship was only partially mediated between boys.²⁷

The previous study discussed that the academic outcomes of bullied students were below the normative expectation as most of them earned a lower grade in achievement tests and were poorly engaged with the teacher for academic purposes.^{28,29} These students also have difficulties making friends, have a poor relationship with classmate, and experience loneliness.

Similar to other studies, this study has a range of strengths and limitations. One strong point is the sample size of school children in the east-coast region of Peninsular Malaysia for whom data on bullying and psychological are not available. However, the limitation of the study is that other variables, such as academic performance and social status, may be considered important factors affecting depressive symptoms among school children. Socioeconomic factors have been stated to be linked to bullying prevalence as it has been proposed that adolescents of lower social groups are more vulnerable to victimization than adolescents from high socioeconomic status.³⁰ Further research strategies in bullying are suggested to enhance the understanding of bullying among school children.³¹

CONCLUSIONS

This study shows that bullying continues to be frequently experienced by school children. The current study supported that involvement with any bullying activity was associated with psychological disturbances including anxiety, stress, and depression. Current evidence may be used to inform governmental or nongovernmental

organizations to pay attention to this behavior among school children. Further strategies could be implemented before the number of mental health illness increases among our future generations.

ACKNOWLEDGEMENTS

The authors would also like to thank all the participants that participated in this study.

CONFLICT OF INTEREST

The authors declare conflict of interests.

FUNDING

There is no funding received.

Received: September 19, 2020 | Accepted: January 19, 2021

REFERENCES

1. Antiri KO. Types of bullying in the senior high schools in Ghana. *J Educ Pract.* 2016;7:131–8.
2. Hymel S, Swearer SM. Four decades of research on school bullying: An Introduction. *Am Psychol.* 2015;70:293–9.
3. Cornell DG, Huang FL, Konold TR, Shukla K, Malone M, Datta P, et al. *Development of a standard model for school climate and safety assessment: Final report.* Charlottesville, VA: Curry School of Education, University of Virginia; 2016
4. David-Ferdon C, Vivolo-Kantor AM, Dahlberg LL, Marshall KJ, Rainford N, Hall JE. *A comprehensive technical package for the prevention of youth violence and associated risk behaviors.* Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2016.
5. Copeland WE, Wolke D, Angold A, Costello EJ. Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry.* 2013;70:419–26.
6. Juvonen J, Graham S. Bullying in schools: The power of bullies and the plight of victims. *Annu Rev Psychol.* 2014;65:159–85.
7. Abdalqader MA, Ariffin IA, Ghazi HF, Baobaid MF, Fadzil MA. The prevalence of bullying and its associated factors among one of high school students in Selangor, Malaysia. *Malaysian J Public Heal Med.* 2018;18:52–6.
8. Nasheeda A, Hassan NC, Hassan A. Relationships between bullies, victims and mental health issues among adolescents. *Maldives Natl J Res.* 2017;5:23–44.
9. Menesini E, Salmivalli C. Bullying in schools: The state of knowledge and effective interventions. *Psychol Heal Med.* 2017;22:240–53.
10. Ibrahim N, Mohd Sidik S, Cheng Kar P, Mukhtar F, Awang H, Jin Kiat A, et al. Prevalence and predictors of depression and suicidal ideation among adolescents attending government secondary schools in Malaysia. *Med J Malaysia.* 2017;72:221–7.

11. Raosoft.com. *Sample size calculator by Raosoft, Inc.* Seattle, WA: Raosoft, Inc.; 2004.
12. Klein J, Cornell D, Konold T. Relationships between bullying, school climate, and student risk behaviors. *Sch Psychol Q.* 2012;27:154–69.
13. Nordin R, Kaur A, Soni T, Kean Por L, Miranda S. Construct validity and internal consistency reliability of the Malay version of the 21-item depression anxiety stress scale (Malay-DASS-21) among male outpatient clinic attendees in Johor. *Med J Malaysia.* 2017;72:264–70.
14. Jordan P, Shedden-Mora MC, Löwe B. Psychometric analysis of the Generalized Anxiety Disorder scale (GAD-7) in primary care using modern item response theory. *PLoS One.* 2017;12:e0182162.
15. Sherina MS, Arroll B, Goodyear-Smith F. Criterion validity of the PHQ-9 (Malay Version) in a primary care clinic in Malaysia. *Med J Malaysia.* 2012;67:309–15.
16. Ang JK, Phang CK, Mukhtar F, Osman ZJ, Awang H, Sidik SM, et al. Association between perceived parental style and depressive symptoms among adolescents in Hulu Langat District, Malaysia. *Int J Adolesc Med Health.* 2018;30:20160130.
17. Wolke D, Lereya ST. Long-term effects of bullying. *Arch Dis Child.* 2015;100:879–85.
18. Chen L, Ho SS, Lwin MO. A meta-analysis of factors predicting cyberbullying perpetration and victimization: From the social cognitive and media effects approach. *New Media Soc.* 2017;19:1194–213.
19. Zhou Y, Guo L, Lu CY, Deng JX, He Y, Huang JH, et al. Bullying as a risk for poor sleep quality among high school students in China. *PLoS One.* 2015;10:121602.
20. Estévez E, Estévez JF, Segura L, Suárez C. The influence of bullying and cyberbullying in the psychological adjustment of victims and aggressors in adolescence. *Int J Environ Res Public Health.* 2019;16:2080.
21. Thomas HJ, Connor JP, Lawrence DM, Hafekost JM, Zubrick SR, Scott JG. Prevalence and correlates of bullying victimisation and perpetration in a nationally representative sample of Australian youth. *Aust N Z J Psychiatry.* 2017;51:909–20.
22. Nurumal MS, Zainal Abidin R, Ibrahim WN, Md Isa ML, Che Hasan MK. Obesity is associated with depression in Malaysian schoolchildren: A cross-sectional study. *Makara J Health Res.* 2020;24:8–12.
23. Rankin J, Matthews L, Cobley S, Han A, Sanders R, Wiltshire HD, et al. Psychological consequences of childhood obesity: Psychiatric comorbidity and prevention. *Adolesc Health Med Ther.* 2016;7:125–46.
24. Shetgiri R. Bullying and victimization among children. *Adv Pediatr.* 2013;60:33–51.
25. Lutrick K, Clark R, Nuño VL, Bauman S, Carvajal S. Latinx bullying and depression in children and youth: A systematic review. *Syst Rev.* 2020;9:126.
26. Garcia-Hermoso A, Oriol-Granado X, Correa-Bautista JE, Ramírez-Vélez R. Association between bullying victimization and physical fitness among children and adolescents. *Int J Clin Heal Psychol.* 2019;19:134–40.
27. Sampasa-Kanyinga H, Willmore J. Relationships between bullying victimization psychological distress and breakfast skipping among boys and girls. *Appetite.* 2015;89:41–6.
28. AlBuhairan F, Abou Abbas O, El Sayed D, Badri M, Alshahri S, de Vries N. The relationship of bullying and physical violence to mental health and academic performance: A cross-sectional study among adolescents in Kingdom of Saudi Arabia. *Int J Pediatr Adolesc Med.* 2017;4:61–5.
29. Goldweber A, Waasdorp TE, Bradshaw CP. Examining the link between forms of bullying behaviors and perceptions of safety and belonging among secondary school students. *J Sch Psychol.* 2013;51:469–85.
30. García-Hermoso A, Hormazabal-Aguayo I, Oriol-Granado X, Fernández-Vergara O, del Pozo Cruz B. Bullying victimization, physical inactivity and sedentary behavior among children and adolescents: A meta-analysis. *Int J Behav Nutr Phys Act.* 2020;17:114.
31. Patton DU, Hong JS, Patel S, Kral MJ. A Systematic review of research strategies used in qualitative studies on school bullying and victimization. *Trauma Violence Abuse.* 2017;18:3–16.