Bullying experience of pupils in Nigerian primary schools

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Abstract

Childhood bullying leads to life-long scars and hinders adult development. Schoolchildren involved in bullying are at risk of developing behavioural difficulties, physical health problems and suicidal ideation. This research aimed to evaluate the bullying experience of pupils in Nigerian primary schools.

The study is a cross-sectional analytic survey conducted from June to November 2019. A total of 1080 pupils in participated in the study. A self-report questionnaire containing 3 questions was used for collecting data. Analysis of the collected data was done using percentage and Chi-Squared at 0.05 probability level.

Results indicate that 51.4% of the male pupils and 50.8% of females reported being victims of bullying. 51.8% of the males and 49.5% of females were found to be perpetrators of bullying. 39.6% of the males and 42.9% of the females were bystanders of bullying. 35.1% of the males and 34.1% of females have experienced any 2 of the categories while 11.2% of the males and 12.4% of the females have experienced all the categories of bullying. Results show a non-significant difference between male and female pupils on bullying victimization ($\chi^2 = .036$, P = .849), bullying perpetration ($\chi^2 = .589$, P = .443), and bullying bystander problem ($\chi^2 = 1.194$, P = .275).

In conclusion, school bullying is an increasing problem among Nigerian schoolchildren. Initiatives must, therefore, be taken by the Nigerian government to further prevent and counter bullying problem in Nigerian primary schools. Interventions aimed at helping schools to develop effective policies to reduce bullying behaviour among pupils should be initiated.

Abbreviations: χ^2 = Chi-Squared, BEQ = bullying experience questionnaire.

Keywords: bullying, bystander, perpetrator, primary schools, pupils, victim

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The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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1. Introduction

Childhood bullying leads to life-long scars and hinders adult development. Children involved in bullying are at risk of developing behavioural difficulties, physical health problems and suicidal ideation.^[1-4] Bullying problem affects up to half of children and adolescents worldwide.^[5] Bullying is usually defined as a form of aggression in which 1 or more children known as the perpetrator (s) intend to harm or disturb another child known as the victim who is perceived as being unable to defend himself or herself.^[6] Typically, a power imbalance exists between the perpetrator and the victim, with the perpetrator being either physically or psychologically more powerful.^[7] Often, the perpetrator uses bullying as a means to establish dominance or maintain status.^[8,9] In addition, bullying behaviors tend to occur repeatedly.^[10,11] Such behaviors include name-calling, physically assaulting, threatening, stealing, vandalizing, slandering, excluding, and taunting.^[12] Regardless of which behavior is chosen, bullying is marked by intense intimidation that creates a pattern of humiliation, abuse, and fear for the victim.^[8]

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Bullying can be considered the most prevalent form of youth violence and may escalate into extremely serious forms of antisocial behaviors.^[13] Even if the majority of children in a class do not participate in active bullying behavior, they may behave in ways which make the beginning and continuation of the bullying process possible. This matters more than their real attitude to

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bullying. Even the ignoring of what is going on between the bully and his/her victim may be interpreted by the bully as approval of his/her behavior. Not only do the roles of the bullies and the victims constitute an important element in the bullying process, but so, too, do the roles of "the others." We refer to these roles as bystander roles.

Research^[14] showed that among elementary students, peers were present in 85% of bullying incidents, thus, majority of students report that they witnessed school bullying. It has been reported that regardless of the form of criminal offending, somehow it appears to be derived from an early-onset trajectory of aggressive behavior in childhood.^[15] Bullying peers can clearly be considered as 1 component of this early-onset trajectory. Psychological and other aspects of environmental-based factors have been considered in relation to bullying tendencies in schoolchildren by scholars.^[1-4] Studies investigating more proximal factors such as family context have shown associations between maltreatment,^[16] parental conflicts,^[17,18] parental depression,^[19] low socioeconomic status,^[20] and low cognitive stimulation^[21] in children being involved in bullying. Identification of early factors that may increase young childrens risk of being involved in bullying may guide prevention strategies for reducing bullying behaviors and has the potential to change the trajectory of children at risk for becoming involved in persistent bullying.^[22]

Studies indicate varying frequencies of bullying incidents in children both in Nigeria and elsewhere. For instance, a crosssectional study of 1192 Nigerian middle school students regarding the prevalence and correlates of bullying found 59.9% bullying prevalence rate, with male students being more likely to bully compared to female students.^[23] A survey conducted in Romania using 264 students in grades 5 to 8 who were between the ages of 10 and 14 years old found that 3.8% of the students were bullies, while 40.5% were regularly bullied by fellow students.^[24] A 2019 survey report showed that 12.2% of 5th to 10th graders and those in upper secondary schools in Norway indicated being rarely bullied, 1.4% reported being bullied severally in a week.^[25] Another report showed that in 2019/2020 academic year in Norwegian schools, 59.6% of the pupils said they were bullied by 1 or several pupils in their class.^[26] A study which compared bullying and victimization incidents among boys and girls in 40 countries found that bullying incidents differed across countries, with prevalence rates of 8.6% to 45.2% for boys, and 4.8% to 35.8% for girls.^[27] However, there is a dearth of empirical data regarding bullying among primary school pupils in Nigeria. The present study aimed to investigate the bullying experience in a representative sample of primary school children in Nigeria.

2. Method

2.1. Research design, setting and participants

This study is a cross-sectional analytic survey conducted in rural, public primary schools in Nigeria from June to November 2019. Nigeria has a federal system of government with 36 states and the Federal Capital Territory of Abuja including 744 local governments in total. It is a multi-ethnic society with an education system encompasses 3 different sectors: basic education (9 years), post-basic/senior secondary education (3 years), and tertiary education (4 to 6 years, depending on the program of study). The approval for conducting the study was obtained by the authors

from the Faculty of Education Research Ethics Committee at the University of Nigeria Nsukka. Parents of the participants gave written informed consent. The researchers also complied with the ethical requirements for conducting research with human participants as stated in the World Medical Association's Declaration of Helsinki. The researchers maintained confidentiality through the avoidance of specific personal identifiers in the research instrument.

A total number of 1080 pupils (490 males, 45.4%; and 590 females, 54.6%) randomly selected from 72 rural, public primary schools, 2 schools from each States across Nigeria participated in the study, with each school contributing 15 pupils. The inclusion criteria included approval by the school to allow the researchers to collect the needed data, participants parents informed consent and being a public primary school pupil in class 5. The sample size was calculated in view of an a priori power of 95% at a significant level of 0.05 for Chi-Squared goodness-of-fit analysis as determined using G*Power 3.1.9.4 software.^[28,29] A minimum sample size of 220 was suggested by the power estimation.

3. Outcome measure

Bullying experience questionnaire (BEQ): The bullying experience questionnaire which was developed by the researchers contains 3 questions which describe the pupils experience as a perpetrator, victim or bystander during the current academic session. Pupils answered by circling Yes or No. In the BEQ, the pupils were asked the following questions:

- Have you been bullied (hit, kicked, threatened, locked inside a classroom, sent nasty notes, said nasty, and unpleasant things to) this academic session?
- 2. Have you bullied someone this academic session?
- 3. Have you witnessed someone being bullied this academic session?

The reliability coefficient for the BEQ is 0.83 using K-R 21 formula.

4. Data collection and analysis procedure

The questionnaires were administered to pupils by teachers who were not the pupils usual teachers. Standardized instructions were available. Teachers were asked to explain to the pupils that the questionnaires were about how much bullying takes place in school; that it was important to answer the questions truthfully; and to stress to the pupils that they did not have to put their names on the questionnaires and that no 1 would know that it was them who had filled it in. The pupils sat separately without talking to or copying each other. If there were any pupil (s) who had difficulties in filling in the questionnaire, teachers were advised to put them separately in small groups and have someone else go through it with them. Pupils were asked to fill in the date, school and class and to give their answers to the questions by circling the letter next to their response choice. Examples of how to do this were given and read out to the pupils to ensure that they understood. It was then left to the teachers discretion as to whether or not they read out each individual question or let the pupils continue at their own pace. Before the questions, the definition of bullying was read out and explained. After completion, with no time-limit imposed, the questionnaires were placed in an envelope and sealed. Percentage and Chi-Squared were used to analyze data from this study. We also screened for

Bullying experience of pupils according to gender in Nigerian primary schools.

		Male N (%)	Female N (%)	χ^2	Р	Phi
Victim of bullying	No	238 (48.6)	290 (49.2)	.036	.849	006
	Yes	252 (51.4)	300 (50.8)			
Perpetrator of bullying	No	236 (48.2)	298 (50.5)	.589	.443	023
	Yes	254 (51.8)	292 (49.5)			
Bullying bystander	No	296 (60.4)	337 (57.1)	1.194	.275	.033
	Yes	194 (39.6)	253 (42.9)			
Either 2 or more bullying experience	No	263 (53.7)	316 (53.6)	.381	.826	.019
	Yes to 2	172 (35.1)	201 (34.1)			
	Yes to all	55 (11.2)	73 (12.4)			

missing data and there was no missing data. Statistical analyses were all carried out using IBM SPSS, version 22. Results were deemed significant at $P \le .05$.

5. Result

Table 1 which shows the results of the Chi-Squared test for independence (with Yates Continuity Correction) indicated that 51.4% of the male pupil and 50.8% of females reported being victims of bullying. No significant difference was found between male and female pupils on bullying victimization (that is, being bullied), χ^2 (1, n=1080) =.036, P=.849, phi=-.006.

Regarding bullying perpetration, 51.8% of the males and 49.5% of females were found to be perpetrators of bullying. No significant difference was found between male and female pupils on bullying perpetration, χ^2 (1, n=1080) =.589, P=.443, phi=-.023.

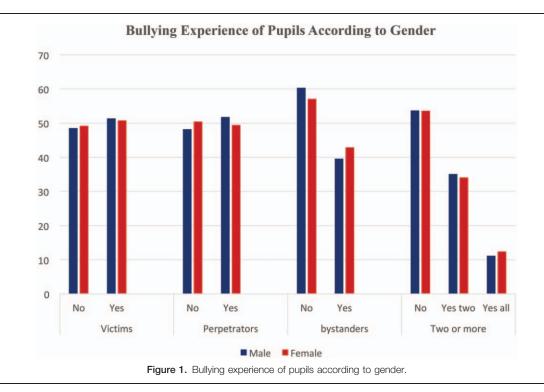
Further, the proportion of male pupils who are bystanders against the proportion of females was analyzed. The result shows that 39.6% of the males and 42.9% of the females were bystanders of bullying. No significant difference was found

between male and female on bystander problem, χ^2 (1, *n*=1080) = 1.194, *P*=.275, *phi*=.033.

An analysis was done to ascertain the proportion of male and female pupils who have experienced any 2 or all of the categories (being a victim, perpetrator and bystander). The result shows that 35.1% of the males and 34.1% of females have experienced any 2 of the categories while 11.2% of the males and 12.4% of the females have experienced all the categories of bullying (see Fig. 1 for clarity).

6. Discussion

This study aimed to evaluate the bullying experience of pupils in Nigerian primary schools within a cross-sectional design based on the use of a self-report questionnaire for data collection. The current study revealed a high degree of bullying victimization, bullying perpetration and bullying bystander problems among the pupils. No significant difference exists between male and female pupils in their experience of bullying. Findings from past studies^[20,30] showed that girls were highly non-involved in bullying, victimization and bystander problems than boys.



Although the frequency of being bullied may decrease with age, the frequency of bullying others does not.^[31] Trends have shown that most bullying occurs in the playground or the classroom and calling children nasty names and beating other children are popular forms of bullying which have been reported consistently by studies.^[6,12,13] Using a randomized cluster sampling, a crosssectional investigation of 723 Norwegian adolescent-students between 12 to 18 years old revealed that 13% of the students were being bullied with no gender differences whereas, in terms of bullying others, more males than female students were involved in this.^[32] In Kuwaiti high schools, a study showed that bullying incidents among 9th and 10th graders range between 41.6% and 71.1% among males and between 10 and 81.4% among females, however, victimization ranges between 46.2% and 87.9% among males and between 42.7% and 80.8% among females.^[33] In Sweden, school bullying prevalence is shown to be 6.3% among females, whereas 41.4% was found among males in Lithuania.^[34] A meta-analytic study using 80 research articles with a total sample of 335,500 respondents reported mean prevalence rates of 35% for traditional bullying incidents.^[35] Study shows that among middle-school students, 20% bullying incident was reported in the United Arab Emirates while 39% bullying incident was reported in Oman.^[36] Among United States youths, study reports an estimate of 13.0% bullies, 10.6% victims, and 6.3% bully victims.^[7]

In a study conducted in Nigerian schools by Egbochuku^[37] it was reported that almost 4 in every 5 participants (78%) reported being bullied and 85% of the children admitted to bullying others at least once. The study further indicated that more than half of the students (62%) were bullied and 30% bullied others. Similarly, another Nigerian study by Aluede and Fajoju revealed that majority of the respondents (62.4%) have been victims of bullying, while 29.6% of the respondents indicated that they have bullied others within the academic session.^[38] A situational analysis survey of school violence in Nigeria according to Federal Ministry of Education^[39] revealed that physical violence and psychological violence accounted for 85% and 50% respectively of the bulk of violence against children in schools. Across school location, physical violence was more prevalent in rural (90%) than in the urban areas (80%). Across region, physical violence in schools is higher in Southern Nigeria (90%) than in the Northern region (79%); in the case of psychological violence, 61% in Southern Nigeria and 38.7% in Northern Nigeria. Thus, the incidence of bullying problem is high in Nigerian schools. Our research confirms this report showing that school bullying is a significant problem in Nigeria. Previous studies indicate that if school bullying is not tackled, its consequences could be devastating to both the bullies and victims.^[10,40-42] Given that the success of interventions which aimed to reduce bullying has been demonstrated elsewhere,^[43] it is likely that similar programs in Nigeria would have a positive impact. Thus, intervention efforts to prevent bullying in schools by the government should be intensified. Also, psychosocial interventions aimed at helping schools to develop effective policies to reduce bullying behavior among pupils should be initiated. An anti-bullying policy with clear guidelines on actions to be taken to combat bullying in the schools should be developed.

Some studies have suggested male gender as a risk factor for bullying and perpetration^[44,45] but this difference was not seen in our current study. A plausible explanation for this disparity could be due to the fact that our study was conducted specifically among pupils in rural primary schools and it was the pupils who responded to the questionnaires. More so, while some studies demonstrated that boys are more often the victims when various forms of bullying are considered, [45,46] other studies reported that frequently, girls indirectly indulge in bullying.^[47,48] A Romanian survey reported that girls displayed bullying behavior more often than boys.^[24] As such reports in respect to gender as a risk factor for bullying could be described as mixed. Another plausible explanation for the disparity in research findings could be due to the size of the sample, nature of questions posed, number of questions, and type of outcome measure used to evaluate bullying problems in children. In addition, in some previous studies, teachers,^[49,50] peer nominations,^[51,52] and parents^[53,54] were used to provide data regarding bullying experiences of schoolchildren. These approaches could have also introduced some level of response bias, thus, 1 cannot rule out the possibility of differences in findings across studies. Besides, our results suggest that bullying is a significant problem among male and female pupils in rural primary schools in Nigeria. Therefore, schooldriven, evidence-based bullying prevention interventions and anti-bullying curriculum should not only focus on males; female pupils in the rural schools should also be targeted in any effort directed at reducing school bullying and its adverse effects.

Additionally, the prevalence of bullying in some studies^[53] was found to be lower than ours. One thing that must be borne in mind is that our study did not consider cyberbullying like most previous studies. Moreover, there are chances that results might differ across studies if pupils school location (i.e., rural/urban) was not considered as a possible confounding factor. In a previous nationallyrepresentative survey of 13,710 children in 6th to 10th grades in the United States, the prevalence of all forms of bullying among students was found to be 37.3%; in terms of the degree of the bullying problem, moderate bullying was found to be 12.6%, while frequent bullying was found to be 6.6%.[44] The method of measurement and estimation of bullying behavior might also influence study results.^[55] A study which investigated bullying reports of 5th graders and their parents from an urban, ethnically diverse school district showed that students reports of their rates of bullying perpetration and victimization were greater than those reported by their parents who were having no knowledge regarding whether their children bullied others or not.^[56] In a previous study by Elgar et al., the incidence of school-bullying was also noted to vary in respect to rates of income inequality across thirty seven countries.^[57] UNESCO report showed that bullying victimization in Europe, for instance, is reported among 1 in 4 schoolchildren to closely 1 in 2 schoolchildren in sub-Saharan Africa.^[58]

The limitations of the present study cannot be ignored. Pupils age was not considered as an essential confounding factor, whereas it is possible that pupils do have different bullying experiences when compared to matured students. Also, pupils report of bullying experience was essentially based on self-report measure, as a result, we cannot rule out self-reporting bias. Also, respondents were attending rural, public primary schools; differences in bullying experience could be found if pupils in urban, public primary schools or private primary schools are evaluated. Further prospective studies are required in this respect that could use interviews, parent-rated and/or teacher-rated to report pupils bullying experience.

7. Conclusion

In conclusion, our study demonstrated that no significant difference exists between the male and female pupils on bullying victimization, bullying perpetration, and bystander problem. Although we did not find any significant difference between male and female pupils in the 3 bullying experiences analyzed, the study promotes the development of effective policies to reduce bullying behavior among pupils. Interventions aimed at assisting schools to develop effective policies and gender-inclusive interventions to reduce bullying behavior among pupils should be supported.

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References

- Arseneault L, Walsh E, Trzesniewski K, et al. Bullying victimization uniquely contributes to adjustment problems in young children: a nationally representative cohort study. Pediatrics 2006; 118:130–8.
- [2] Kim YS, Koh Y-J, Leventhal B. School bullying and suicidal risk in Korean middle school students. Pediatrics 2005;115:357–63.
- [3] Kim YS, Leventhal BL, Koh Y-J, et al. School bullying and youth violence: causes or consequences of psychopathologic behavior? Arch Gen Psychiatry 2006;63:1035–41.
- [4] Williams K, Chambers M, Logan S, et al. Association of common health symptoms with bullying in primary school children. BMJ 1996;313: 17–9.
- [5] Nansel TR, Craig W, Overpeck MD, et al. Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. Arch Pediatr Adolesc Med 2004;158:730–6.
- [6] Glew G, Rivara F, Feudtner C. Bullying: children hurting children. Pediatr Rev 2000;21:183–90.
- [7] Nansel TR, Overpeck M, Pilla RS, et al. Bullying behaviors among US youth: prevalence and association with psychosocial adjustment. JAMA 2001;285:2094–100.
- [8] Roberts WBJr, Morotti AA. The bully as victim: understanding bully behaviors to increase the effectiveness of interventions in the bully-victim dyad. Prof Sch Couns 2000;4:148–56.
- [9] Pellegrini AD, Bartini M, Brooks F. School bullies, victims, and aggressive victims: factors relating to group affiliation and victimization in early adolescence. J Educ Psychol 1999;91:216.
- [10] Olweus D. Bully/victim problems among schoolchildren: basic facts and effects of a school based intervention program. Dev Treat Child Aggress 1991;17:411–48.
- [11] Sharp S, Smith PK. Bullying in UK schools: the DES Sheffield bullying project. Early Child Dev Care 1991;77:47–55.
- [12] Beale AV. Bullybusters": using drama to empower students to take a stand against bullying behavior. Prof Sch Couns 2001;4:300.
- [13] Smokowski PR, Kopasz KH. Bullying in School: an overview of types, effects, family characteristics, and intervention strategies. Child Sch 2005;27:101–10.
- [14] Craig WM, Pepler DJ. Observations of bullying and victimization in the school yard. Can J Sch Psychol 1998;13:41–59.
- [15] General USYouth violence: a report of the surgeon general. Wash DC US Dep Health Hum Serv 2001.
- [16] Shields A, Cicchetti D. Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. J Clin Child Psychol 2001;30:349–63.
- [17] Baldry AC. Bullying in schools and exposure to domestic violence. Child Abuse Negl 2003;27:713–32.
- [18] Baldry AC, Farrington DP. Protective factors as moderators of risk factors in adolescence bullying. Soc Psychol Educ 2005;8:263–84.
- [19] Beran TN, Violato C. A model of childhood perceived peer harassment: analyses of the Canadian national longitudinal survey of children and youth data. J Psychol 2004;138:129–48.
- [20] Wolke D, Woods S, Stanford K, et al. Bullying and victimization of primary school children in England and Germany: prevalence and school factors. Br J Psychol 2001;92:673–96.
- [21] Zimmerman FJ, Glew GM, Christakis DA, et al. Early cognitive stimulation, emotional support, and television watching as predictors of subsequent bullying among grade-school children. Arch Pediatr Adolesc Med 2005;159:384–8.

- [22] Barker ED, Boivin M, Brendgen M, et al. Predictive validity and early predictors of peer-victimization trajectories in preschool. Arch Gen Psychiatry 2008;65:1185–92.
- [23] Fenny O, Falola MI. Prevalence and correlates of bullying behavior among Nigerian middle school students. Int J Offender Ther Comp Criminol 2020;64:564–85.
- [24] Beldean-Galea IE, Jurcău N, Tigan ŞI. Frequency of bullying behaviours in secondary schools in Cluj-Napoca. Appl Med Inform 2010;27:62–6.
- [25] Statista Research Department. Survey on pupils bullied in Norway 2009-2019 by frequency. Published online March 30, 2020. Accessed August 8, 2020. https://www.statista.com/statistics/824328/survey-on-pupilsbullied-in-norway/.
- [26] Statista Research Department. Survey on persons who bullied pupils at school in Norway 2019. Published online March 30, 2020. Accessed August 8, 2020. https://www.statista.com/statistics/824389/survey-onpersons-who-bullied-pupils-at-school-in-norway/.
- [27] Craig W, Harel-Fisch Y, Fogel-Grinvald H, et al. A cross-national profile of bullying and victimization among adolescents in 40 countries. Int J Public Health 2009;54:216–24.
- [28] Faul F, Erdfelder E, Buchner A, et al. Statistical power analyses using G* Power 3.1: tests for correlation and regression analyses. Behav Res Methods 2009;41:1149–60.
- [29] Faul F, Erdfelder E, Lang A-G, et al. G^{*} Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods 2007;39:175–91.
- [30] Perren S, Alsaker FD. Social behavior and peer relationships of victims, bully-victims, and bullies in kindergarten. J Child Psychol Psychiatry 2006;47:45–57.
- [31] Whitney I, Smith PK. A survey of the nature and extent of bullying in junior/middle and secondary schools. Educ Res 1993;35:3–25.
- [32] Haraldstad K, Kvarme LG, Christophersen K-A, et al. Associations between self-efficacy, bullying and health-related quality of life in a school sample of adolescents: a cross-sectional study. BMC Public Health 2019;19:757.
- [33] Alsaleh A. Peer bullying and victimization among high school students in Kuwait. Sociol Focus 2014;47:84–100.
- [34] Due P, Holstein BE, Lynch J, et al. Bullying and symptoms among schoolaged children: international comparative cross sectional study in 28 countries. Eur J Public Health 2005;15:128–32.
- [35] Modecki KL, Minchin J, Harbaugh AG, et al. Bullying prevalence across contexts: a meta-analysis measuring cyber and traditional bullying. J Adolesc Health 2014;55:602–11.
- [36] Fleming LC, Jacobsen KH. Bullying among middle-school students in low and middle income countries. Health Promot Int 2010;25:73–84.
- [37] Egbochuku EO. Bullying in Nigerian schools: prevalence study and implications for counselling. J Soc Sci 2007;14:65–71.
- [38] Aluede O, Fajoju SA. Bullying behaviour among secondary school students in the Benin Metropolis of Nigeria. Zimb J Educ Res 2011;23:102–19.
- [39] Federal Ministry of EducationThe National Strategic Framwork for Violence Free Basic Educationin Nigeria. 2007;Federal Ministry of Education,

- [40] Lane D. Violent histories: Bullying and criminality. Bullying Sch 1989;94–104.
- [41] Parker JG, Asher SR. Peer relations and later personal adjustment: are low-accepted children at risk? Psychol Bull 1987;102:357.
- [42] Rutter M. Pathways from childhood to adult life. J Child Psychol Psychiatry 1989;30:23–51.
- [43] Wang J, Iannotti RJ, Nansel TR. School bullying among adolescents in the United States: physical, verbal, relational, and cyber. J Adolesc Health 2009;45:368–75.
- [44] Shetgiri R, Lin H, Flores G. Identifying children at risk for being bullies in the United States. Acad Pediatr 2012;12:509–22.
- [45] Iossi Silva MA, Pereira B, Mendonça D, et al. The involvement of girls and boys with bullying: an analysis of gender differences. Int J Environ Res Public Health 2013;10:6820–31.
- [46] Glew GM, Fan M-Y, Katon W, et al. Bullying, psychosocial adjustment, and academic performance in elementary school. Arch Pediatr Adolesc Med 2005;159:1026–31.
- [47] Carbone-Lopez K, Esbensen F-A, Brick BT. Correlates and consequences of peer victimization: gender differences in direct and indirect forms of bullying. Youth Violence Juv Justice 2010;8:332–50.
- [48] Romera Félix EM, Rey Alamillo R del, Ortega Ruiz R. Prevalencia y aspectos diferenciales relativos al género del fenómeno bullying en países pobres. Psicothema 2011;23:624–9.
- [49] Jansen PW, Verlinden M, Dommisse-van Berkel A, et al. Prevalence of bullying and victimization among children in early elementary school: do family and school neighbourhood socioeconomic status matter? BMC Public Health 2012;12:494.
- [50] Jansen PW, Verlinden M, Dommisse-van Berkel A, et al. Teacher and peer reports of overweight and bullying among young primary school children. Pediatrics 2014;134:473–80.
- [51] Perren S, Stadelmann S, Bürgin D, et al. Associations between behavioral/ emotional difficulties in kindergarten children and the quality of their peer relationships. J Am Acad Child Adolesc Psychiatry 2006;45:867–76.
- [52] Simone P, Smith PK, Blumberg HH. Surveying bullying using peer nomination methods. Paediatr Today 2013;9:102–11.
- [53] Nordhagen R, Nielsen A, Stigum H, et al. Parental reported bullying among nordic children: a population-based study. Child Care Health Dev 2005;31:693–701.
- [54] Shemesh E, Annunziato RA, Ambrose MA, et al. Child and parental reports of bullying in a consecutive sample of children with food allergy. Pediatrics 2013;131:e10–7.
- [55] Nielsen MB, Skogstad A, Matthiesen SB, et al. Prevalence of workplace bullying in Norway: comparisons across time and estimation methods. Eur J Work Organ Psychol 2009;18:81–101.
- [56] Holt MK, Kaufman Kantor G, Finkelhor D. Parent/child concordance about bullying involvement and family characteristics related to bullying and peer victimization. J Sch Violence 2008;8:42–63.
- [57] Elgar FJ, Craig W, Boyce W, et al. Income inequality and school bullying: multilevel study of adolescents in 37 countries. J Adolesc Health 2009;45:351–9.
- [58] UNESCOSchool violence and bullying: Global status report. Paris: UNESCO; 2017.