Bullying in School-aged Children in Iceland: A Cross-sectional Study

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ABSTRACT

Purpose: We describe the frequency and variations in bullying among a representative national sample of school-age children and examine whether sociodemographic characteristics are associated with bullying.
Design and Methods: This study is based on a cross-sectional school-based survey—the Icelandic contribution to the international research network Health Behaviour in School-aged Children (HBSC). The study population included all students in Iceland in grades 6, 8 and 10 (mean ages: 11, 13 and 15 years, respectively) (participation rate: 84%; n = 11,018). The students completed an anonymous standardized questionnaire administered in the classroom.
Results: The self-reported frequency of being victimized by bullying at least 2–3 times every month was 5.5%. A younger age, speaking a foreign language at home, not living with one's parents, and living in a rural area, were all associated with higher frequencies of being bullied.
Conclusions: Despite efforts to reduce bullying in school, experiences of being victimized through bullying are still too common among Icelandic school-age children. Stakeholders and school health administrators should consider sociodemographic antecedents when planning interventions to reduce bullying at school.

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Introduction

As children enter late childhood and adolescence, peer relationships become increasingly important. Such relationships can have both positive and negative effects. Over the past few decades, bullying among students has emerged as a vitally important concern in schools (Shackleton et al., 2016). Bullying has been identified as a serious peer relationship problem with psychosocial, academic, emotional and mental health implications for both the bullies and their victims (Nansel et al., 2004; Olweus & Limber, 2010; Rettew & Pawlowski, 2016). The social determinants of health are, according to the World Health Organization (WHO, 2012), the conditions in which people are born, grow, live, work and age. Bullying has broad health implications, and it is important to investigate its sociodemographic antecedents in order to prevent risk factors and promote health and well-being in school-age children.

Background

Bullying has been defined as unwanted aggressive behavior that involves a real or perceived power imbalance (Olweus & Limber, 2010). Bullying includes physical, verbal, relational and cyber aggression.

According to the international research network Health Behaviour in School-aged Children (HBSC), 11% of children aged 11–15 have claimed to be bullied at least two or three times per month within the last couple of months (Inchley et al., 2016). However, studies of bullying have also indicated decreasing trends (Chester et al., 2015). A significant proportion of children and adolescents have been victims of cyberbullying. Females and sexual minorities are seemingly at higher risk, and perpetrators are more likely to be male (Aboujaoude, Savage, Starcevic, & Salame, 2015). Given the nature of cyberspace, there seems to be an easier path towards the bully/victim phenomenon (victims who become bullies or vice versa) than in the case of traditional bullying (Aboujaoude et al., 2015).

Sustained bullying often has a persistent adverse impact on children's socioemotional functioning (Bradshaw, 2015). Both physical and cyberbullying are associated with substance use, violent behavior, unsafe sexual behavior and suicidal behavior (Aboujaoude et al., 2015; Litwiller & Brausch, 2013). Bullying is also associated with self-reported catastrophic thoughts and feelings about pain (Sansone, Watts, & Wiederman, 2014), chronic pain (Voerman et al., 2015), migraines and headaches (Due et al., 2005; Gini, Pozzoli, Lenzi, & Vieno, 2014; Waldie et al., 2014) and backache (Politis, Bellou, Belbasis, & Skapinakis, 2014). Both victims and perpetrators have an increased risk of tobacco and illegal drug use and lower job prospects than non-involved individuals—even 12 years after the bullying experience (Sigurdson, Wallander, & Sund, 2014). Some psychosocial, but not

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physical, health symptoms precede bullying (Fekkes, Pijpers, Fredriks, Vogels, & Verloove-Vanhorick, 2006). Children with depressive symptoms and/or anxiety have a significantly higher chance of being victimized. Being overweight has also been shown to be associated with a greater risk of being bullied (Brixval, Rayce, Rasmussen, Holstein, & Due, 2012; Feeg, Candelaria, Krenitsky-Korn, & Vessey, 2014; Fekkes et al., 2006).

Teachers and school health staff can play an important role in preventing and counteracting school bullying. Teacher support and positive classroom climate are inversely correlated with the frequency of bullying (Vervoort, Logan, Goubert, De Clercq, & Hublet, 2014). Furthermore, competent teacher support can serve as a buffer against the harmful effects of bullying, as can interventions involving multiple disciplines (Vreeman & Carroll, 2007). In order for preventive efforts to be effective, it is important to consider the extent and manifestations of bullying as well as its sociodemographic antecedents.

Purpose

The aim of this investigation was to describe the frequency and variations of bullying among a representative national sample of school-age children. A secondary aim was to examine whether sociodemographic characteristics, including age, gender, living in rural versus urban area, ethnicity, family affluence, and household structure, were associated with bullying.

Methods

Study Design and Population

Descriptive and analytic statistics (chi-square and logistic regression analysis) were performed (Norman & Streiner, 2008). This study uses an Icelandic dataset from the WHO international research network HBSC (Currie et al., 2014). The HBSC research network is a large-scale, cross-national study of 11-, 13- and 15-year-olds carried out over four-year intervals in 43 countries in Europe and North America, focusing on health behaviors and their determinants and consequences (Inchley et al., 2016).

The study population included all students in Iceland in grades 6, 8 and 10 attending school on the day of administration of a standardized anonymous questionnaire. A total of 11,018 students from 161 schools participated in the study, yielding an 84% response rate. The mean age in each grade was 11, 13 and 15 years, respectively. Some students (n = 628) chose not to answer the questions on bullying, and therefore the responding sample for this study included 10,390 students. Males constituted 50% of the respondents; 32.1% were 6th graders (11-year-olds), 34.9% were 8th graders (13-year-olds) and 33.0% were 10th graders (15-year-olds). The survey was conducted between November 2013 and January 2014. Teachers distributed the questionnaire, and one school lesson (45 min) was dedicated to completing the survey.

Measures

The HBSC survey consists of one standard mandatory questionnaire. In addition, individual countries can use optional sets of items that examine a topic in more depth (Inchley et al., 2016). Iceland added extra questions regarding bullying in the 2013–2014 survey.

Sociodemographic Variables

The study focused on the following sociodemographic variables: gender (boy/girl), age (birth year and month), family structure (living with both parents, living with parent and step-parent, living with a single parent, or another arrangement), country of birth, and language spoken at home (Currie et al., 2014). Schools in metropolitan areas were coded as "urban," and other schools were coded as "rural." Family socioeconomic status was based on the Family Affluence Scale (FAS)

(Hartley, Leven, & Currie, 2015; Torsheim et al., 2016), a six-item assessment of material assets or activities. The FAS uses the following questions: Does your family own a car, van or truck? Do you have your own bedroom? How many times did you and your family travel abroad for a holiday/vacation last year? How many computers do your family own? Does your family have a dishwasher at home? How many bathrooms (rooms with a bath/shower or both) are in your home? The responses were scored and summed to form a FAS summary score and estimate relative socioeconomic position by comparing an individual's FAS score with all of the other FAS scores in the study. The relative affluence score was then used to identify groups of young people in the lowest 20% (low affluence), middle 60% (medium affluence) and highest 20% (high affluence) groups of affluence (Inchley et al., 2016).

Questions Regarding Bullying

The Icelandic version of the survey included 12 questions regarding bullying (Currie et al., 2014). The students were asked how often they had been bullied at school over the past few months. The question was preceded by the following definition of bullying: "We say a student is being bullied when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. However, it is not bullying when two students of around the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way." The response options ranged from zero to several times a week. The students were furthermore asked how often they had been bullied by someone sending mean instant messages, wall-postings, emails or text messages, or creating a website that made fun of them.

Another question focused on whether someone had taken unflattering or inappropriate pictures of the respondent without his or her permission and posted those pictures online. The respondents were also asked about different examples of bullying, including if they had been lied to, left out, called names, beaten, or bullied because of body growth, foreign nationality, disability or illness, or religion. Response options included "not at all in the past couple of months," "once or twice," "2–3 times during the last month," "about once a week," or "several times a week." The Likert-type scale questions regarding the frequency of bullying were collapsed to a binary variable (0 = not at all in the past couple of months, once or twice, and 1 = 2–3 times during the last month, about once a week, or several times a week).

Statistical Analysis

Descriptive statistics with frequencies, percentages, means and standard deviations were used to describe the various manifestations of bullying. Associations between bullying and sociodemographic variables were analyzed using chi-square and multiple logistic regression (enter) analysis (Norman & Streiner, 2008). The level of significance was set at 5%. Statistical analysis was performed using SPSS version 21 (IBM, Armonk, NY).

Ethics

The survey complied with regulations and requirements concerning human subject research as laid out by the Data Protection Authority in Iceland (Personuvernd, 2013). This study was approved by school authorities and principals at the participating schools. The students were informed that their participation was voluntary. They were also informed that if they agreed to participate, they could skip questions that they did not wish to answer. Parents were informed about the content and purpose of the survey via school management in advance, and parents could withdraw their child from the study if they wished.