



PREVENTION OF BULLYING IN SCHOOLS: AN ECOLOGICAL MODEL

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ABSTRACT

The main goal is to understand the different processes, characteristics, settings and timing of bullying behaviour according to ecological system theory.

The data is based on the Health Behaviour in School-aged Children surveys conducted in 1997/1998 and 2001/2002 in which students with average ages of 11.5, 13.5 and 15.5 years participated. The data were analysed using descriptive statistics, logistic regression, and structural equation modelling and multiple regression.

Victims are usually highly associated with internalizing behaviours, bullies frequently indicate a high association with externalizing behaviours, and bully/victims often have strong associations with excessive and extreme behaviours of both an internalizing and an externalizing type. For each country, within the school, victims and bully/victims reported lower levels of support from classmates, and bullies and bully/victims received similar support from teachers. Outside school, victims reported lower levels of support from friends. Across nations, bullying attained its highest prevalence, for both victims and bullies, in the lower and higher GDP countries (U-shaped curve).

These findings support the assumption that involvement in bullying will damage the healthy development of young people and turn the world into malfunctioning societies. It is important for society to develop strategies that might prevent bullying, and school is considered to be a particularly important setting for implementing systematic approaches towards preventing bullying behaviour. Furthermore, school is in a position to initiate collaboration with both parents and local community which is important for wide reaching impact of the prevention strategies.

Keywords: bullying behaviour, school context, social support, GDP, prevention

INTRODUCTION

Adverse short- and long-term consequences of involvement in bullying behaviour are associated with mental and physical health problems because experiencing fear as the victim or experiencing power as the bully will probably interfere with normal children's development. Because bullying involves



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intentionality, repetition over time and abuse of power (Olweus, 1993), the victims live with fear and are frightened by the perpetrators, which frequently causes physical and psychological symptoms. Also, bullies constantly strive to dominate their victims in what is often a quest to use violence. As stated, bullying can have significant negative effects on the health and corresponding behaviours of children, and it may therefore represent a serious risk to healthy youth development (Nansel et al., 2001). Further, these problems may affect social relations and become a social and economic concern. Social problems, arising probably within the family (e.g., communication difficulties), peer group (e.g., friendships), schools (e.g., school climate) and communities (e.g., neighbourhood safety), will almost certainly affect the interpersonal relationships of those who are directly or indirectly involved. Economic problems can occur because it will cost money to deal with the health consequences of young people's involvement in bullying (e.g., medical care and psychological counselling), and everyone directly or indirectly involved will be less productive (e.g., children and teachers at school, parents at work). Bullying is therefore a serious problem not only for bullies and their victims, but also for the total community because of its impact on the ecology of human development. It is thus important to promote good relationships within and between families, peers, schools and communities, for extended periods of time.

A study based on a representative sample of the national Portuguese school population found that 57% of adolescents between 11 and 16 years of age reported their involvement in bullying behaviour at least once during the last school term. Of these, 10% were bullies, 21% were victims and 26% were bully/victims (Carvalhosa, Lima & Matos, 2001). Since prevention of bullying is a major challenge in Portugal, it is crucial to identify the extent of the problem and factors that might prevent it. The main goal of this work is to understand the different processes, characteristics, settings and timing of bullying behaviour according to ecological system theory (Bronfenbrenner, 1986). This work contributes more knowledge than currently exists on the development of effective strategies and policies to prevent bullying, especially in Portugal. Assuming that bullying can break down our natural equilibrium (ecology) and that it is possible to prevent it, the thesis analysed Process – the relationship between young people and different settings; Person – the differences between victims, bullies, bully/victims and non-involved adolescents (in terms of individual behaviours and perceptions); Context – family, peers, school (microsystem), relationships between the different microsystems (mesosystem), the influence of macroeconomic indicators and different cultures (macrosystem); and Time – the influence of different age levels in the developmental process (chronosystem).

Based on what is presented, the following research questions were formulated:

Q1. What is their prevalence, and how do bullying behaviour relate to health behaviours and perceived health for those who have bullied others, those who have been bullied and those who are bully/victims in Portugal?

Q2. How do support from family, peers and school correlate with being a victim, a bully or a bully/victim across countries?

Q3. Is the prevalence of bullying a macroeconomic related problem?

The strengths of this study relate to its comparison of the amounts of bullying and related correlates across different countries. With the use of the same questionnaire in all countries involved in the study, and with a well established research protocol (Currie et al., 1998) followed by all countries, it was possible to systematically make an international comparison.

METHODS

The study is divided into three sub-studies: the first study - in which the consequences for the perceived health and well-being and reported health behaviours of victims, bullies, and bully/victims in Portugal will be analysed; the second study - in which the relationship between bullying and perceived



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social support will be analysed; and the third study - in which we will analyze the relationship between bullying and Gross Domestic Product (GDP) will be analysed.

Subjects/sample

All studies were based on the Health Behaviour in School-aged Children (HBSC) surveys conducted in 1997/1998 and 2001/2002 in which students with average ages of 11.5, 13.5 and 15.5 years participated.

For Study I, data collected from 131 Portuguese public schools ($n=6131$) were used. For Study II, data collected in the 2001–2002 HBSC Study from four countries, Austria to represent Central Europe, Lithuania to represent Eastern Europe, Norway to represent Northern Europe, and Portugal to represent Southern Europe were used. For the 4 countries included, sample sizes ranged from 2940 to 6383. For Study III, a total of 29 countries and regions participated in the 1997-98 WHO HBSC study (Currie, Hurrelmann, Settertobulte, Smith & Todd, 2000). For the countries included in the survey, sample sizes ranged from 1648 to 6567.

Measures

The HBSC questionnaire was designed by the international HBSC members. This self report measure consists of questions on: Bullying; Individual characteristics/behaviours; Relationship with family; Relationship with peers; Perceived school environment.

Procedure

All countries followed standardized protocols and data collection procedures (Currie, Samdal, Boyce & Smith, 2001). Subjects filled in the HBSC questionnaire, individually, in the school setting. Participants were assured of confidentiality and anonymity.

Data analysis

To explore our research questions, descriptive and logistic regression analyses were used to the first research question, structural equation models were used to the second research question, and multiple regression analyses were used to the third research question.

The statistical analyses were conducted by using two statistical tools: Statistical Package for the Social Sciences (SPSS) for Windows (version 15.0) and Analysis of Moment Structures (AMOS) for Windows (version 5.0).

RESULTS

Study I identified the extent of bullying in Portuguese schools and showed the consequences associated with being bullied, bullying others and being a bully/victim. The results showed that 13% were victims, 5% were bullies and 6% were bully/victims, boys being more involved than girls. Bullying others is more prevalent among 15-year-olds and being bullied or a bully/victim is more prevalent among 11- and 13-year-olds. Higher levels of subjective health complaints, lower levels of subjective health and life satisfaction, bad eating habits, injuries, weapon carrying and fighting were associated with all the groups involved in bullying compared with those not involved. The bullies report a higher likelihood of health-compromising behaviours such as smoking, alcohol and drug use, and weapon-carrying. Victims are more prone to report low happiness and life satisfaction. Further, the bully/victim group frequently had a higher likelihood than bullies and victims to report subjective health complaints and be involved in aggressive behaviours, such as fighting.

Study II revealed the relationship between bullying and perceived social support, both outside and within the school, in Austria, Lithuania, Norway and Portugal. For each country, within the school, vic-



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tims and bully/victims reported lower levels of support from classmates compared with those not involved, and bullies and bully/victims received similar support from teachers. Outside school, victims reported lower levels of support from friends than did the non-involved group.

Study III identified considerable variation between countries in the frequency of bullying behaviour. The percentage of victims ranged from 6% in Sweden to 40% in Lithuania, and the percentage of bullies ranged from 3% in England to 34%, also in Lithuania. Based on aggregated data for 29 countries and regions a U-shaped curve relating GDP and both the extent to which people bullied others or were bullied themselves was found for all age groups and the total sample of the two bullying behaviour groups. Countries with low and high GDP showed a high frequency of bullying behaviour reported by victims and bullies, and countries with a middle range of GDP showed a lower prevalence of bullying behaviour reported by both groups involved in bullying.

CONCLUSION

These findings suggest that involvement in bullying is associated with unhealthy individual behaviours. The perceptions of young people, as distinct from victims, bullies and bully/victims, are that victims are usually highly associated with internalizing behaviours such as subjective health complaints, bullies frequently indicate a high association with externalizing behaviours such as fighting and weapon-carrying, and bully/victims often have strong associations with excessive and extreme behaviours of both an internalizing and an externalizing type such as subjective health complaints and smoking. Victims, bullies and bully/victims engaged in different types of non-functioning relationships with family, peers, school and community. Overall, victims and bully/victims reported lower support from friends and classmates, whereas bullies and bully/victims reported lower support from teachers. Across nations, bullying attained its highest prevalence, for both victims and bullies, in the lower and higher GDP countries. These findings support the assumption that involvement in bullying will damage the healthy development of young people and turn the world into malfunctioning societies in terms of both their social environment and societal characteristics. It is important for society to develop strategies that might prevent bullying, and school is considered to be a particularly important setting for implementing systematic approaches towards preventing bullying behaviour as this is a setting where young people spend a lot of time and develop social skills and relationships. Furthermore, school is in a position to initiate collaboration with both parents and local community which is important for wide reaching impact of the prevention strategies.

SUMMARY AND RECOMMENDATIONS FOR ACTION

To summarise, this work suggests that (1) bullying is related to personal behaviours and perceptions by victims, bullies and bully/victims; (2) social support is a relevant factor for students involved in bullying behaviour; (3) social support produces effects on proximal processes (adolescent–family, adolescent–peers, adolescent–school); (4) family is the most important source of support for students involved in bullying at school; (5) for victims, interaction with classmates is a major source of problems, as is interaction outside the school, that is, victims–peers; (6) for bullies, interaction with teachers is the major source of problems, that is, bullies–teachers; (7) for bully/victims, interaction with classmates is a major source of rejection, as is interaction with teachers, that is, bully/victims–school; (8) bullying behaviour vary as a function of the context (macroeconomic indicators and countries); (9) with time, bullying others increases and being bullied decreases.



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The present study intends to constitute a basis for the development of universal interventions to prevent bullying, especially for the Portuguese population, but also universally. The findings suggest that young people need to have successful relationships with parents, peers and teachers. The problems that young people and their families have to deal with are also caused by macroeconomic factors. Health and education professionals should try to support families and students in creating environments that make possible the establishment of good relationships and, subsequently, healthy development. Based on the findings it is also relevant to advocate for the creation of political and economic policies that support such ecological development. This work must be done by all: young people, parents, teachers, extended family, neighbours, professionals, work supervisors, legislators and politicians.

Even though most bullying occurs at school, its prevention should focus on the entire community. Everyone has an important role to play.

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Fecha de recepción: 28 febrero 2009

Fecha de admisión: 19 marzo 2009

