Appendix III

Paper I:

Bullying in Pattani primary schools in southern Thailand

Child: care, health and development

Bullying in Pattani primary schools in southern Thailand

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Abstract

Background The purpose of this research was to examine risk factors that affect the likelihood of students in Pattani primary schools bullying other children. Risk factors investigated include school rural/urban location, age, gender, religion, family physical abuse and preference of cartoon type. Identifying students who are at high risk of bullying could assist educational authorities to introduce better strategies for reducing the problem.

Methods A total of 1440 students at public and private primary schools in Pattani province were interviewed to collect relevant data. Pearson's chi-square test was used to assess the associations between the likelihood of bullying and possible risk factors. Logistic regression was used to investigate independent associations between the predictor variables and the outcome.

Results We found that 32.9% reported that they had (ever) bullied other children. Bullying was significant associated with age (odds ratio 1.56 for 11+ years, 95% confidence intervals 1.23, 2.18) and family physical abuse (odds ratio 4.50, 95% confidence intervals 3.40, 5.89). In addition, Those students who preferred action cartoons tended to bully others 1.87 times more than those who preferred watching comedy cartoons.

Conclusions There are significant differences in our population in rates of bullying others that vary according to age, preferred cartoon type and whether or not family (parental) physical abuse has been witnessed. The factor 'preference for cartoon type', not examined in previous research, remained significant after multivariable adjustment. Although there is an association, the cause of this is not clear but merits further examination.

Introduction

The bullying problem in school is well-known to students, teachers, educational personnel and parents. School bullying is a serious personal, social and academic problem that affects a substantial proportion of school children. Not only does bullying cause harm and distress to the children who are bullied (Besag 1989; Farrington 1993; Rigby 1996), but it also inflicts psychological, emotional, physical and developmental scars that can persist into adolescence and beyond (Kochenderfer & Ladd 1996).

Bullying has been defined as any physical or psychological behaviour repeatedly inflicted by a more powerful and stronger student or student's gang towards a weaker one (Farrington 1993). They sometimes are the best friends, and the next time they have quarrelled, are at daggers drawn and become enemies (Besag 2006). Victims of bullying are not only those who are adversely affected, sensitive, insecure and scared. Children who

bully others enjoy exercising power and status over victims (Besag 1989) but fail to develop empathy for others (Rigby 1996). The other reasons of bullies were boredom, jealousy, seeking attention, showing off, getting thing or money, anger, revenge, self-protection and power (Besag 2006). In this way, bullying eases the way for children who are drawn to a path of delinquency, vandalism and criminality or experiencing illegal (Farrington 1993).

Ahmed and Braithwaite (2004) reported that 35% of students in the Australian Capital Territory were bullies. Gini (2004) found that in Italian schools 42% of primary school children reported having experienced being bullied over a 3-month period. The American Medical Association (2005) reported that nearly 30% of American school children were bullies.

Causes of bullying are multiple and are related to the individual, but also to the socio-family environment. Family violence is the major risk factor for bullying in some countries. Exposure to parental domestic violence, although not always considered a form of child abuse, may be associated with a series of childhood problems, primarily behavioural and emotional. Child witnesses of domestic violence on average exhibit more aggressive and antisocial, fearful and inhibited behaviours than children who do not witness such violence (Fantuzzo *et al.* 1991). Farrington (1993) stated that parental domestic violence is the highest risk factor for the development of bullying behaviour. Rossman (1998) suggested that exposure to domestic violence can affect cognitive functioning. This explanation is in line with Daro and Cohn Donnelly (2000) who argued that a significant risk factor for becoming a child abuser, domestic violence perpetrator and violent juvenile offender is having been abused and/or witnessing violence at home. In the United States of America, children living with domestic violence were found to be at increased risk of experiencing emotional or physical abuse (National Research Council 1993).

The present study aims to examine risk factors that affect the likelihood of bullying by students in Pattani primary schools, including school rural/urban location, age, gender, religion, family physical abuse and preferred type of cartoon. Identifying students who are at high risk of bullying could assist educational authorities to introduce better strategies for reducing the problem.

Methods

Participants

The participants were 1440 primary school students in Pattani province. These students were drawn from five public schools,

one private Islamic school and one private Chinese school, in each of the two districts Saiburi and Pattani City within Pattani province. Each of these two districts contains one of each type of private school and approximately 30 public schools (plus six other school/local administration centres called 'Thesabans'). In the first stage, purposive sampling was used to select these two districts. In the second stage, cluster of three types of school were public school, Islamic private school and Chinese private school. The public schools were selected by using simple random sampling technique, and Islamic private school and Chinese private school were selected by purposive sampling (only one school per category). Finally, participants in each grade were selected by using systematic sampling technique. The selection was done proportionate to population size. There were no students who refused to participate in this study.

Data collection

A cross-sectional study was conducted. Data were collected between 1 November, 2005 and 31 March, 2006. Verbal consent to participate in the study was obtained from students after assurance of interview confidentiality was given. The interviewers/readers (22 interviewers and 34 readers) in face-to-face collection of data were teachers studying for a Graduate Diploma in Teaching at Yala Islamic University who volunteered to participate. Some of these teachers were teaching at Islamic schools and some were teaching at public schools.

These interviewers were briefed about interview techniques and the questionnaire. They were asked to take care not to rush through the questionnaire and also to record accurately and authentically, without bias. Individual interviews with each younger student (1:1) were over a duration of approximately 20–30 min. Group-administered (narrated) surveys of older students were of a duration of approximately 40–60 min.

The younger students (grades 1–3; aged 7–10 years) were interviewed and the interviewer recorded their responses. With older students (grades 4–6; aged 10–13 years), the interviewer read the instructions to them and then allowed the student to write their own responses. Most of these responses were uncomplicated and involved just ticking a box.

The teachers interviewed students in the school where they worked, after permission was granted by the principal of that school. Some interviewing was arranged during class time and some outside class time, during school hours but in recreation time.

Measures

In this study we defined 'bullied' as a person's actions to cause physical or psychological harm on another person. We measured it by asking students two basic questions: 'Have you ever harmed anyone bodily?' and 'Have you ever hurt the feelings of anyone?'. There were follow-up questions asked of all students who said 'yes' to either of the above questions. To provide a common understanding of what was meant by each of the two categories, all students either read or heard what the follow-up categories were. For 'Have you ever harmed anyone bodily?', the categories were 'kick', 'hit', 'bit', 'pushed', 'throwing something at', 'beat', 'pinched' and 'other'. For 'Have you ever hurt the feelings of anyone?', the categories were 'name-calling', 'insulting parents' occupation', 'insulting parents' name', 'insulting appearance', 'insulting economic status', 'insulting academic achievement', 'insulting by stating a physical disability' and 'other'.

Those who answered 'yes' to either of the basic questions were then asked the relevant follow-up questions to identify the type of bullying. Students who admitted to bullying in more than two of the follow-up categories were considered to have 'bullied'. Those who admitted to bullying under only two or fewer categories were considered, in this study, to have 'not bullied'.

Data analysis

The risk factors of interest were school rural/urban location, age, gender, religion, family physical abuse and preference of cartoon type (only watching on television).

The outcome was divided into two categories, namely: (1) not bullied others; and (2) bullied others.

All the risk factors of interest were categorical. Pearson's chi-square test was used to assess the associations in the univariate analyses. Multivariate analyses were performed to investigate any independent associations between the predictor variables and outcome categories ('had bullied others'/'not bullied others') using a logistic regression method (Kleinbaum & Klein 2002) and variables were eliminated from the model by backward method.

Results

There were 1440 students in this study, with similar numbers in each of the three age categories (8 years or less, 9–10 years and 11 years or more). Half of all students in the study were from an urban school. Of the students, 54.4% were girls and 54.0% were Muslim.

The most preferred cartoon type was 'mystery' (48.5%), while 26.0% preferred 'action' and 25.8% 'comedy'. The majority of the students (79.7%) reported that they had not had an experience of family physical abuse.

Of all of the students in this study, 32.9% reported having bullied others, and 67.1% of bullies reported that they bullied others in the classroom. Some bullied in the playground and other places. Lunch breaks (32.3%) and playtimes (22.4%) were common times when bullying occurred. From the information supplied by the bullies, it appears that the majority of bullies bullied others of the same age (85.7%), bullied while alone (67.5%) rather than as part of a gang and some bullied both boys and girls (49.6%).

Table 1 shows the associations between bullying and potential risk factors. There were statistically significant associations with gender, age, the preferred type of cartoon and family physical abuse ($P = 0.026$ or less). More boys than girls reported that they bullied others ($P = 0.026$). Older students in the study more frequently reported that they bullied: '11-year-olds or more' more than '9- to 10-year-olds', and '8-year-olds or younger' reported even less bullying ($P = 0.002$). Regarding the preference of cartoon type, students who preferred action cartoons were more likely to bully others than those who preferred comedy cartoons and mystery cartoons ($P = 0.00002$). The students who had seen family physical abuse (between their parents) were more likely to report bullying other children than those who had not (61.4% and 25.6%, respectively).

Table 2 shows the results of the logistic regression model examining the association between risk factors and the likelihood of bullying. Associations with age, cartoon type and witnessing family physical abuse remained statistically significant in the multivariate analysis.

Older students (11+ years) were more likely to bully others than students aged 8 years or younger (odds ratio 1.56, 95% confidence intervals 1.23, 2.18).

The students who preferred action cartoons tended to bully more than students who preferred comedy (odds ratio 1.87, 95% confidence intervals 1.32, 2.51). Students having family (between parents) physical abuse experiences were 4.50 times more likely to bully others than those who had never witnessed family physical abuse (95% confidence intervals 3.40, 5.89).

Discussion and conclusions

A minority (32.9%) of the students in the study reported having bullied others. Compared with other studies of similar populations, the prevalence of bullying others was similar, namely 35% of Australian students (Ahmed & Braithwaite 2004), 42% of Italian children (Gini 2004) and 30% of American students (The American Medical Association 2005).

Table 1. Associations between 'those who had bullied others' and risk factors

	Bullied other			
	All students	Not bullied	Had bullied	P-value
Location of school				0.654
Urban	720	66.5	33.5	
Rural	720	67.6	32.4	
Gender				0.026
Girl	798	69.5	30.5	
Boy	642	64.0	36.0	
Religion				0.447
Islamist	777	68.0	32.0	
Buddhist	663	66.1	33.9	
Age (years)				0.002
8 or less	497	71.0	29.0	
9–10	489	68.9	31.1	
11 or more	454	60.8	39.2	
Cartoon type				0.000
Comedy	371	70.6	29.4	
Action	375	56.0	44.0	
Mystery	694	71.2	28.8	
Family physical abuse				0.000
No	1147	74.4	25.6	
Yes	293	38.6	61.4	

Table 2. Associations between risk factors of bullying in the multivariate analysis

Factors	Odds ratio	St. error	P-value
Constant			
Yes/no	0.245	0.156	0.000
Age (years)			0.003
8 or less	0		
9–10	1.028	0.145	0.849
11 or more	1.559	0.144	0.002
Cartoon type			0.000
Comedy	0		
Action	1.870	0.160	0.000
Mystery	0.974	0.147	0.860
Family physical abuse			0.000
No	0		
Yes	4.495	0.140	0.000

The estimated prevalence of bullying others depends on the study design, definitions of bullying, methods and techniques of data collection, time of data collection and the same nature of primary school children.

In univariate analyses we found associations between the bullying and gender, age, the preferred type of cartoon and family physical abuse. However, gender was not significant in the multivariate model. A lack of association with gender has been reported in other studies (Kass 1999; Sutton *et al.* 1999; Colorosa 2003; Boxer & Tisak 2005; Besag 2006).

Witnessing family physical abuse was clearly the most strongly associated determinant [4.50 times more likely to bully others than those who had never witnessed family (parental) physical abuse]. One possible explanation for this association might be that children witnessing family physical abuse copy the parent's physical actions that are coercive. With this modelling, the child might then become a bully to gain success in his or her own social interactions.

This explanation is in line with Rossman and colleagues (2000) who reported that children living with domestic violence are at risk for increased emotional and behavioural problems. Baldry and Farrington (1998) found that the family-related risk factor (conflicting parents) was positively associated with bullying. Bandura (1986) reported that displays of aggressiveness in parents' behaviour can serve as a model for children who bully others. Singer and colleagues (1998) reported that children living with domestic violence are likely to display increased violent behaviour.

Findings from this study could help in the development of preventative strategies in primary schools. The findings support the view that bulling should be addressed in a broad framework by adopting the 'cycle of violence' theoretical model (Widom 1989). According to this model, family physical abuse actions by an individual are associated with having bullied others. Social workers, welfare agencies for the protection of children, school advisor counsellors and parents should work together to create an intervention and prevention plan that is broad in its aims and perspectives (O'Brien 2001).

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In conclusion, our studies show that bulling is a problem in primary schools, with similar rates to those found in other countries. In line with results from other countries, we conclude that there are significant differences in rates of bullying others that vary according to age, preferred cartoon type and whether or not family (parental) physical abuse has been witnessed. The factor 'preferred type of cartoon', not examined in previous research, remained significant after multivariable adjustment. Although there is an association, the cause of this is not clear but merits further examination.

In addition, we found that most of the bullying occurs in the classroom and playground, and most occurs during the lunch break and afternoon recreation hour just before the end of the school day. Programmes aimed at reducing bullying problems need to be developed in schools and global policies in education should be implemented to improve provision and supervision in playgrounds (Smith & Sharp 1994). In the primary schools of Thailand specifically, national policies have been introduced to support teachers of children with learning problems and to improve each child's skills, motivation and interest in school, with the aim of preventing and reducing the rates of grade retention. These and other policies need to be reinforced, taking into account the needs of particular children, both those who are bullied and those who bully others, to prevent the involvement in the unacceptably high rate of bullying that this study has revealed.

Key messages

- Almost one-third of the 1440 primary school students who studied in southern Thailand admitted that they had bullied others.
- The bullying often took place at lunchtime or playtime, usually when unsupervised.
- Students who bullied showed a statistically significant preference for action (violent) cartoons above comedy and mystery cartoons.

Acknowledgements

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