Appendix V

Proceedings:

Risk factors associated with bullying in Pattani primary schools

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Risk factors associated with bullying in Pattani Primary Schools

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Background

Bullying behaviour in the primary school is well-known to students, teachers, educational personnel, and parents. Bullying has been extensively defined as a person's actions that cause physical or psychological harm to another weaker student, by a more powerful individual or by a gang (Farrington, 1993; Olweus, 1999). Bullying might be classified in a variety of ways including physical assaults (kicking, hitting, pushing, beating, and pinching), and psychological harassment (name calling, teasing, insulting, threatening, and taunting) (Beale, 2001; Gini, 2004).

Children who bully others enjoy exercising power and status over their victims (Besag 1989), and other reasons include boredom, jealousy, attention seeking, showing off, anger, revenge, and self-protection (Besag 2006). There are consequences of bullying. Bullying eases the way for children who bully to be drawn to a path of delinquency, vandalism and criminality (Farrington, 1993). Whereas, the victimized children are more likely to become anxious, insecure, lonely, depressed, to be rejected by their peers, drop out of school, feud, and decide to protect themselves (by carrying guns/weapons to school) than are non-victimized children (Boulton and Underwood, 1992; Craig, 1998).

Several studies have shown that the prevalence of bullying is high. For example, Baldry (2003) reported that 37% of students in Rome had been bullying others with direct bullying and 29% with indirect bullying. Perreira et al (2004) concluded that 54% of Portuguese children had bullied by calling others nasty names, whereas 34% had bullied by physically hurting or hitting. McLaughlin et al (2005) found that 17% of students in England reported having bullied others many times in a name-calling way, 16% told lies about others, 11% were hurtful in their teasing, 10% hit or kicked, 8% threatened with harm, and 6% deliberately excluded others. Rigby and Johnson (2005) reported that 22% of Australian primary students had verbally bullied, and 19% had physically bullied.

The major risk factors of bullying are multiple and are associated to the individual, but also to the socio-family environment; the children living with domestic violence were found to be at increased risk of experiencing emotional or physical abuse. (Espelage and Swearer, 2003; Pepler and Sedigheilami, 2003). The children preferring cartoon violence were observing many models of aggressive behaviour (Kirsch, 2006; Blumberg, et al, 2008).

Objectives

The present study aims to find an appropriate statistical model that includes the risk factors that affect the outcome variable 'type of bullying' in Pattani primary schools, based on age groups, gender, school location, parental physical abuse, preferred carton type, and number of close friends. If the model can identify students who are at high risk of particular

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types of bullying, such a model could assist educational authorities to introduce better strategies for preventing the problem.

Methodology

1. Participants

The participants in this study were 1,440 primary students from three public schools of Basic Education Office (B.E.O.), two public schools of municipalities (Thesabans), one private Islamic school and one private Chinese school, in each of the districts Saiburi and Pattani City, within Pattani province. We selected participants by using a multi-stage sampling method. Initially classifying four types of school by using cluster sampling and then selecting two districts by using purposive sampling (only two districts had four types of school). The third stage involved selecting both B.E.O. and Thesabans public schools by using simple random sampling technique, and both Islamic and Chinese private schools by purposive sampling (only one school per each category). Finally, participants in each grade were selected by using systematic sampling technique: choosing every 4th seat number where there was a single class in a grade; and choosing every 6th seat number where there was more than one class in a grade.

2. Data collection

A cross-sectional study design was employed. The collection assistants were teachers in target schools, who were studying for a Graduate Diploma in Teaching at Yala Islamic University. They were trained in interviewing techniques and the details of the questionnaire, and also to record accurately and authentically. These teachers interviewed individual Grades 1-3 students face-to-face (approximately 20 to 30 minutes) and surveyed Grade 4-6 students (40 to 60 minutes), after permission was granted by the school principal.

3. Measures

Bullying was assessed by a set of dichotomous response questions (0=never or 1= ever) where students were asked about their specific experiences in school over the past year: 7 items of physical bullying and 5 items of psychological bullying.

Exploratory factor analyses using principal component extraction method with varimax rotation, eigenvalue greater than one, and item loadings greater than 0.30 (Hair, 1998). A scree test or sedimentation test was visualized to determine the number of factors.

A four factors structure emerged (see Table 1). The new scores were calculated by using discrete scores to compare with the criteria that were adapted from a Likert rating scale; loadings 0.00-0.25 scored as 0, 0.26-0.50 scored as 1, 0.51-0.75 scored as 2, and 0.76-1.00 scored as 3. The resulting scores are thus as follows: serious physical bullying (scores 0-7): (3*hit)+(3*kicked)+bit; general physical bullying (scores 0-9): (3*pinched) + (2*beat) + (2*threw something at) + pushed + scolded; psychological bulling by maligning a parent (scores 0-4): (3*insulting parent's occupations)+ insulting parent's names; and psychological bulling by maligning the student (scores 0-4): (3*insulting economic status)+insulting appearance. The new scores were then transformed into Z-scores and 'bullying' outcome divided into two categories (bullied or not bullied); a student with a standardized score more than 1 was classified as having bullied (Scholte et al, 2007; Gini, 2008).

Table 1: Factor analysis of type of bullying

	Factor loadings			
	Serious physical bullying	General physical bullying	Psychological bulling (Maligning parent)	Psychological bulling (Maligning student)
Kicked	**0.822**			
Hit	**0.825**			
Bit	**0.380**			
Pushed		**0.458**		
Throwing something at		**0.507**		
Beat		**0.587**		
Pinched		**0.783**		
Scolding/ name-calling		**0.366**		
Insulting parent's occupation			**0.878**	
Insulting parent's name			**0.399**	
Insulting appearance				**0.448**
Insulting economic status				**0.765**
Eigenvalue	1.85	1.77	1.21	1.01
Variance explained	15.4%	14.7%	10.1%	8.4%

4. Variables

The determinants of interest were school's rural/urban location, age groups, gender, witnessing parental physical abuse, preference for cartoon type, and number of close friends. The outcome of interest was bullying, of four types.

5. Statistical Analysis

Factor analysis was first conducted to identify possible factors for future analysis. Descriptive statistics were calculated as measures of the prevalence of bulling. Pearson's chi-squared test was used to assess the associations between the outcome and the various categorical determinants. Logistic regression was used to estimate the relative odds of having bullied others, for risk factors.

Findings

The distribution of six determinants in this study involved half of all students being from an urban school and 55.4 percent being girls. With similar numbers in each of three age groups, 8 years or less (34.5%), 9-10 years (34.0%), and 11 years or more (31.5%). The majority of the students (79.7%) reported that they had not witnessed physical abuse between parents. Most (48.2%) preferred 'mystery' cartoon type, 26.0% preferred 'action' and 25.8% 'comedy'. With respect to friends, 41.4% had 3-5 close friends, 32.2% had two close friends or less and 26.4% had six close friends or more.

The prevalence of each type of bullying: 19.2% of the students reported having bullied others in ways that were classified as 'a serious physical way', 13.7% in 'a general physical way', 25.9% psychologically by maligning a parent, and 14.9% psychologically by maligning the student.

Table 2 shows the associations between the outcome (type of bullying) and the categorical determinants. There were statistically significant associations between both gender and cartoon type preferred and two types of bullying (p= 0.000). More boys than girls, and more students who preferred action cartoons than those who preferred mystery cartoons and

comedy cartoons, were classified as serious physical bullies and psychological bullies by maligning a parent.

There were statistically significant associations between each age group and three types of bullying, but not for psychological bullying by maligning the student (p= 0.032 or less). The older students were more likely to report having bullied others. There were statistically significant associations between parental physical abuse and all types of bullying (p= 0.000). The students who had seen physical abuse between parents reported more episodes in which they had bullied others than did those who had never witnessed physical abuse between parents, for all types of bullying.

The results from fitting the logistic regression models are shown in Figure 1.

From Figure 1 it can be seen that for serious physical bullying, there were statistically significant associations with gender, age, parental physical abuse, and cartoon type. Boys more often than girls reported having bullied others (OR 3.58, 95% CI 2.70-4.74). Older students (11+ years) were more likely to bully than were students aged 8 years or less (OR 1.55, 95% CI 1.12-2.13). Seeing parental physical abuse led to the individual being more likely to bully others than those who did not report physical abuse between their parents (OR 3.53, 95% CI 2.65-4.70). The students who preferred action cartoons tended to bully more than did students who preferred comedy (OR 5.22, 95% CI 3.54-7.69).

For general physical bullying, there were statistically significant associations with school's location, age, and parental physical abuse. Students at rural schools were more likely to bully than were students at urban schools (OR 1.33, 95% CI 1.05-1.96). Older students (11+ years) more often bullied others than did younger students, those 8 years or less (OR 1.54, 95% CI 1.07-2.22). Students having seen physical abuse between parents were more likely to bully others (OR 3.88, 95% CI 2.82-5.33).

For psychological bullying by maligning a parent, there were statistically significant associations with gender, age, parental physical abuse, and cartoon type. Boys were more likely to bully others (OR 1.98, 95% CI 1.56-2.51). Older students (11+ years) more frequently bullied than younger students (8 years or less) (OR 2.23, 95% CI 1.61-3.07). Witnessing parental physical abuse led to the individual being more likely to bully than those who did not report physical abuse between their parents (OR 5.94, 95% CI 4.51-7.82). The students who preferred action cartoons and mystery cartoon tended to bully more than did students who preferred comedy (OR 3.30, 95% CI 2.34-4.63; OR 1.45, 95% CI 1.05-2.01).

For psychological bullying by maligning the students, there was a statistically significant association with parental physical abuse. Students who witnessed physical abuse between parents were more likely to bully others psychologically by maligning the student than were those who had never witnessed this physical abuse between parents (OR 3.28, 95% CI 2.40-4.47).

Discussion

The major findings of the present research study show that parental physical abuse and cartoon type were the most strongly statistically significant associations with bullying others (p= 0.000). Witnessing parental physical abuse was a major risk factor for all four types of bullying, whereas preference for 'action cartoon' type was a risk factor for two types of bullying. So, the students who witnessing parental physical abuse and preferred action cartoons were found to be related to negative behaviour of students. One possible explanation for this association might be that children often copy the physical actions of parents or action cartoon characters, that are coercive, aimed at making someone else do something in particular. The children learn to be aggressive through their life experiences; include personally observing others acting aggressively to achieve some goal, and children learn to act aggressively when, as children, they model their behaviour on the violent acts of adults.

With this modeling, the child might then become a bully to gain success in his or her own social interactions.

This explanation is in line with Bandura (1975) who found that most human behaviour is learned observationally through copying: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action. Siegel (1998) reported that children use the same aggressive tactics that they observe, they learn to act aggressively when they model the behaviour of violent acts. Williams (2007) showed that children are more likely to copy someone they are looking at, and children have a greater tendency to imitate the fashions and customs of those with whom they have the most contact.

The children witnessing domestic violence are at risk of increased emotional and behavioural problems (Daro et al, 2000; Espelage and Swearer, 2003; Pepler and Sedigheilami, 2003; Kuning, 2004). Some students preferred action cartoons, which contain violence and may have a negative impact on young children's behaviour, with cartoon aggression offering many models of aggressive behaviour to children. (Larson et al, 2003; Bushman, et al, 2006; Kirsch, 2006; Blumberg, et al, 2008)

Conclusion

Factor analysis resulted in the classification of four types of bullying. Family violence between parents and cartoon violence were the major risk factors for four types of bullying. Findings from this study could help in the development of preventative strategies in primary schools. Social workers, welfare agencies for the protection of children, school advisors counselors, and parents should work together to create an intervention and prevention plan that is broad in its aims and perspectives

Recommendation

The prevalence of bullying others was high in Pattani primary schools, and witnessing parental physical abuse and preferring action cartoon were the highest risk factors associated with bullying others. Findings from this study could help in the development of preventative strategies in primary schools. The findings support the view that bullying should be addressed in a broad framework by adopting the 'cycle of violence' theoretical model. The cycle of violence is repeated in later generations. Social workers, welfare agencies for the protection of children, school advisors counselors, and parents should work together to create an intervention and prevention plan that is broad in its aims and perspectives.

Table 2: Comparison between 'those who had bullied others' and determinants (percentages)

	All students	Serious physical bully		General physical bully		Psychological bully (Maligning parents)		Psychological bully (Maligning student)	
		Had bullied	p value	Had bullied	p value	Had bullied	p value	Had bullied	p value
School location			0.053		0.078		0.104		0.209
Urban	720	21.3		12.1		27.8		16.1	
Rural	720	17.2		15.3		24.0		13.8	
Gender			0.000		0.173		0.000		0.243
Girl	798	10.7		14.8		20.1		15.9	
Boy	642	29.9		12.3		33.2		13.7	
Age			0.026		0.032		0.000		0.432
8 yrs or less	497	16.3		11.9		20.7		15.3	
9-10 yrs	489	18.6		12.3		23.7		16.2	
11 yrs or more	454	23.1		17.2		33.9		13.2	
Parental physical abuse			0.000		0.000		0.000		0.000
No	1,147	14.6		9.7		18.0		11.2	
Yes	293	37.5		29.4		56.7		29.4	
Cartoon type			0.000		0.169		0.000		0.360
Comedy	371	10.8		10.8		17.0		13.5	
Action	375	38.7		14.8		40.3		17.1	
Mystery	694	13.3		14.7		22.9		14.6	
Close friends			0.268		0.332		0.712		0.897
2 persons or less	464	17.5		11.9		25.9		15.1	
3-5 persons	596	19.0		14.1		25.0		15.3	
6 persons or more	380	21.8		15.3		27.4		14.2	

Figure 1: Reduced model of association between determinants and the outcome of bullying, final model.
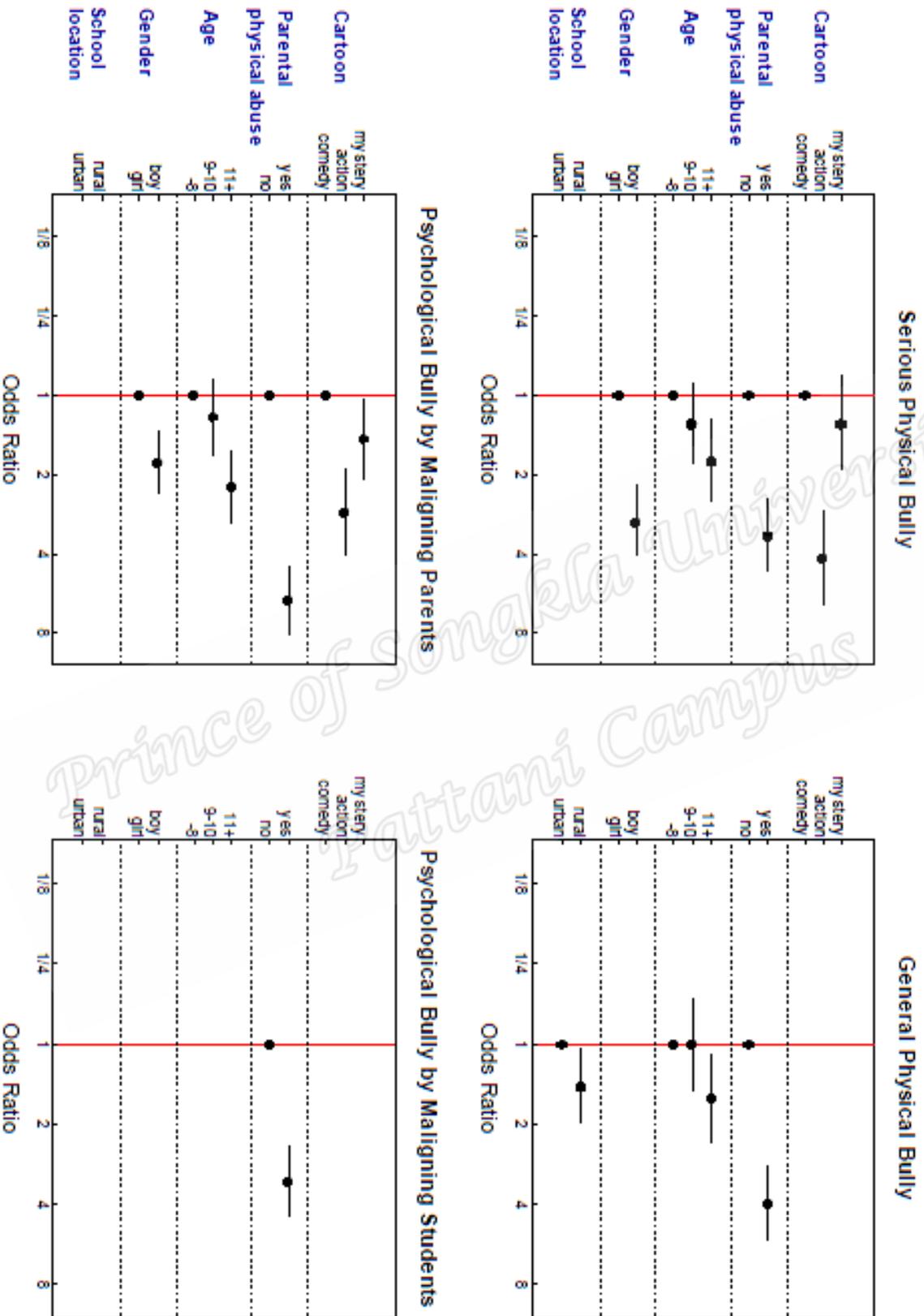
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