

Bullying in School and Adolescent Sense of Empowerment: An Analysis of Relationships with Parents, Friends, and Teachers[†]

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ABSTRACT

We explore the development of bullying and victimization in school by investigating 11-, 13- and 15-year-olds' sense of interpersonal empowerment with parents, friends and teachers. A national sample of 4386 male and female students from 243 middle and secondary schools in Italy were surveyed. Boys were more likely than girls to be bullies and more likely to have been a bully/victim. Victimization and the likelihood of being both a bully and a victim declined with age. Bullying increased with age among boys whereas for girls it was slightly more prevalent at age 13 than ages 11 or 15. The sense of empowerment students experience with their teachers decreased in the older cohorts. Disempowered relationships with teachers consistently predicted bullying behaviour. Higher social competence was reported by 13- and 15-year-old bullies. Chronically bullied students had lower social competence in all age cohorts. Otherwise, predictors of victimization varied by age: 11-year-old victims felt less empowered by their teachers; 15-year-old victims reported more difficulties in negotiating cooperative relationships with parents. Bullies in all cohorts and younger bully/victims feel less empowered by their teachers. These findings suggest that students who are disempowered by teachers may either compensate by oppressing (bullying) peers or generalize the power differential with peers (become a victim). Copyright © 2007 John Wiley & Sons, Ltd.

Key words: bullying; power; empowerment; parenting; family; youth violence; adolescents; adolescence; HBSC

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INTRODUCTION

Several studies have suggested that bullying may be the most common form of school violence (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001), and may be a precursor to more severe forms of school violence (Leary, Kowalski, Smith, & Phillips, 2003). Unlike many other forms of youth violence, bullying is often defined in terms of a power differential between the victim and perpetrator. The definition of bullying set forth by Olweus (1993), for example, indicates that there has to be an imbalance of power, and specifically excludes fighting among students with the same psychological or physical strength.

Although the concept of power has been central to defining bullying, and bullies have been found to be higher in self-efficacy, at least in aggressive contexts (Andreou, 2004; Camodeca & Goossens, 2005), little is known about the dynamics of the power differential. For example, it is not clear how or why the bully–victim power differential develops, whether the power differential is unique to the bully–victim dyad, or is generalized in bullies’ and victims’ relationships to other friends, family and teachers. Although most of the research has focused on the assertion of power by bullies, a pattern of abdicated power may also contribute to chronic victimization. To our knowledge, no studies have investigated whether relationship power differentials are stable across adolescence.

The problem is that power, by definition, is relationship dependent; one only has power relative to others and uses it to influence those who are subject to that power. So power inevitably varies across relationships whereas *empowerment* is theoretically a more stable characteristic or resource developed by an individual or group. Empowerment has been defined as a process involving group participation, critical reflection and control over one’s environment, life and resources (Perkins & Zimmerman, 1995). Both community psychologist and feminist scholars have operationalized empowerment as participation in decision-making or having one’s voice or opinion heard/valued (Arnstein, 1971; Gilligan, 1982). Empowerment may be used coercively (‘power over’; Boulding, 1989), but is more associated with individuals’ ability or ‘power to’ accomplish goals and, especially, the third type of power—integrative, cooperative, or ‘power with’ or through one’s group or community. Studying adolescents’ perceived voice and influence in their important relationships is easier and more reliably measured than actual power. As the two concepts are related, however, such a study may provide insights into the role of both power and empowerment in bullying and victimization.

The research that addresses power in relation to bullying is most closely associated with the research on social rank and dominance. Pellegrini and Long (2004) define dominance as variable by which individuals are rank ordered according to their access to resources. These resources may range from toys and other instruments of play for children to romantic partners for adolescents. Rank may be established and maintained by a variety of behaviours including aggression and altruism. When placed in the context of bullying, power and dominance play an important role because the behaviours are used in strategic and calculating ways (Pellegrini & Long, 2004). Empowerment has been voluminously studied in adult populations, but the review by Prilleltensky, Nelson, and Peirson (2001) found that its role in children’s health, wellness and lives in general has been explored less and only recently.

Research has not directly addressed many of the issues related to power differentials and empowerment in a bullying context. However, reviews of the bullying literature clearly

suggest that aspects of children's relationships with parents, peers and school personnel may promote or discourage empowerment and that these aspects of the relationship may be associated with increased risk of being involved in bullying (Bernstein & Watson, 1997). In this study, we examine adolescents' sense of empowerment (rather than power, *per se*) in relationships with parents, friends and teachers, and how it relates to the development of both bullying and victimization.

Parental relationships and bullying

Characteristics of a child's relationship with their parents may be one of the primary mechanisms by which bullies and victims develop patterns of relating that may result in aggressive or passive behaviour. Parents model, condition and coach their children in how to form and maintain relationships in ways that often result in lasting relationship patterns (Curtner-Smith, 2000). However, there is little information on how particular parenting styles might affect bullying. Certain parenting styles might predispose youths to be involved in bullying by copying parental behaviours or through coping behaviour a child develops in response to parental behaviours. For example, the more coercive authoritarian style might lead youths to mimic the aggressive behaviour modelled by their parents in the case of bullies, or might encourage a compliant or submissive response in the case of victims. The responses to coercive parenting may result in generalized beliefs about power in relationships, and generalized strategies for dealing with power in relationships.

Theories of the relationship between parenting and bullying are ambiguous, but research seems to suggest that parents who are inconsistent, permissive or otherwise fail to control their child's early aggressive behaviour may foster later bullying behaviour. Olweus (1994), for example, found that parents of bullies tend to be tolerant of their child's aggression towards other children, and that bullies tend to come from families where parents are more physically and/or emotionally aggressive, or where other types of family problems exist including parental conflict and alcohol problems. For aggressive victims (children who report being bullied and bullying others), Schwartz, Dodge, Petit, and Bates (1997) found that aggressive victims tend to come from families where parents use harsh discipline including abusive behaviour, and are more likely than bullies to be exposed to aggression between parents. In contrast to this research, studies of passive victims suggest that parents (particularly mothers) use of over-protectiveness and over-involvement to control their children's behaviour places their children at increased risk for victimization (Ladd & Ladd, 1998). This includes Finnegan, Hodges and Perry (1998) who found that victims tend to have parents who coddle, overprotect and are over-involved, thereby undermining the child's confidence in their own ability to be appropriately assertive in peer relationships.

Peer relationships

Most of the research on bullying among adolescents has focused on the characteristics associated with bullies and victims rather than the nature of the power inequality among peers. Pellegrini and Bartini (2001) described a continuum of peer interactions that range from mutual exchanges in rough and tumble play to the power inequities found in bullying. They argued that physical and psychological changes during puberty, including the mixed-gender peer network and heterosexual interest, may make social dominance

important to boys in particular. There has not been much systematic study of power inequalities among peers in a bullying context. However, the research on social dominance and bullying supports the conclusion that children and adolescents vary in the power they wield in their interpersonal relationships and that bullies do have a power advantage over their victims.

Vaillancourt, Hymel, and McDougall (2003), for example, studied the relationship between bullying, social status and power in a middle and high school sample. They suggested that bullying might involve multiple types of power including explicit power ('power over', or overt behaviours that result in fear and submission) and implicit power (or 'power to', gained by virtue of one's competence, status and influence). The results indicated that some bullies are popular. Those popular, high power bullies tend to display many characteristics of implicit power as compared to low power bullies. Another indicator of the power differential that bullies enjoy is that they tend to target children who visibly display distress (Perry, Williard, & Perry, 1990). Perry and colleagues suggested that the distress of the victims may positively reinforce the behaviour of bullies.

Studies of victims of bullying support the idea that a lack of personal power is a quality consistently associated with victimization. Olweus (1993) characterized victims as unassertive and cautious, and Troy and Sroufe (1987) found that victims rarely fight back and long for approval from more powerful children even after they are rejected or victimized. Similarly, Schwartz et al. (1993) found that victims tend to display submissive behaviour prior to being victimized by their playmates. Studies of the cognitions of victims provide further evidence of the tendency of victimized children to generate and endorse submissive solutions to interpersonal problems (Deluty, 1983).

Relationships with teachers and school environment

Although several researchers have suggested classroom or school-wide preventive interventions (e.g. Olweus, 1993; Smith & Sharp, 1994), there have been relatively few studies of how relationships with teachers and the school environment affect bullying. Some studies have suggested that more student influence and autonomy results in increased student academic engagement (e.g. Grolnic & Ryan, 1987). These factors include classroom management, student autonomy and teacher relationship quality (Roland & Galloway, 2002; Bru, Stephens, & Torsheim, 2002). However, none of these studies has directly addressed bullying behaviour.

Bru et al. (2002), for example, found that students self-reported the most positive behaviours in environments where they had influence on the environment and received emotional support from the teacher. Student involvement in decision-making accounted for 28% of the classroom-level variance in behaviour problems. Doll, Song, and Siemers (2004) analyzed the relationship between self-determination and found that that self-determination was related to less peer aggression. However this relationship appeared to be moderated by the overall quality of the student-teacher relationship.

Summary

Despite the increased research attention to the problem of bullying, the role of perceived interpersonal power and empowerment in the development and maintenance of both bullying behaviour and bullying victimization is still unclear. The research suggests that

bullies are likely to engage in relationships where they can exercise control over their relationship with peers and feel powerful. Due to victimized children's relationship styles and lack of self-esteem and social competence, bullies may attempt to display more extreme and overt dominance in their relationships with their victims. Furthermore, their bullying may go unchecked in schools whose faculty and staff encourage and reward competitive behaviours and/or model relationships in which students are disempowered.

While the theories discussed in this review provide valuable insights into developmental aspects of bullying/victimization, they fail to address directly the relationship between bullying phenomena and perceived empowerment in children's important relationships. Also, they do not address whether importance of these characteristics are different at different developmental stages. It is possible that they may underestimate the importance of parallel processes of identity development and individuation that necessitate that youth begin to share power in their relationships with their parents, peers and teachers (Bumpus, Crouter, & McHale, 2001). As youths get older speaking up for oneself and making decisions for oneself are expected behaviours. These are behaviours that are likely to discourage chronic bullying. When youths report being victimized in later adolescence it may be an indicator of a delay in a child's psychosocial development that is also reflected in their difficulty engaging in cooperative decision-making with their parents and friends.

The first objective of this study is to investigate the stability of empowerment across relationships with parents, peers and school personnel in a sample of Italian secondary school children. Based on previous research, we hypothesize that victims will be less involved in decisions affecting them than will other children, and that their lack of power will be manifest across all relationship types. Conversely, we expect bullies will report feeling efficacious in peer relationships in particular.

The second objective of this study is to examine whether the relationship between empowerment and bullying is different at different developmental stages by comparing cohorts of younger and older adolescents. Consistent with previous research, we expect the overall levels of bullying and victimization to decrease, and the level of empowerment to increase among older youth. However for victims of bullying, we predict that analysis across cohorts will show increasingly lower levels of empowerment and deficits in social competence.

METHOD

Procedures

This study was conducted with a sample of Italian middle and secondary school students drawn from a research project that is part of the 'Health Behaviour in School-aged Children' (HBSC) project, a trans-national study carried out in collaboration with the European office of the World Health Organization (Aarø, Wold, Kannas, & Rimpelä, 1986). The research protocol included three age groups: 11, 13 and 15 corresponding to the 6th, 8th and 10th grade (1st and 3rd grade of Italian middle school, and 2nd grade of Italian secondary school).

The participants responded to the questionnaires as a part of the regular school day, and were assured of the confidentiality of their answers.

Participants

Participants were chosen through a 'sample clustering' approach: first, the schools were randomly selected from the National School Office's data base, then in each school one

class for each age group was selected randomly. Two-stage cluster sampling was used (Thompson, 1999): First, schools were randomly selected from a database of all public schools. Within each area of the region (Northwest, Northeast, Central, South and Island), samples were stratified to represent the distribution of students in grades 6, 8 and 10 (modal ages 11, 13 and 15) and to be representative of school student populations. Of the schools selected for the study, 77.4% completed the questionnaire. Then, in each of the sampled schools one class for each age group was selected randomly. Only 9% of sampled schools declined to participate. The sample includes all students in the selected classes. This particular design ensures a sample population that accurately reflects the referent population. The final data set was cleaned and 13.5% of the sample excluded. Criteria for exclusion included failing to complete the majority of the survey and failing to indicate age or gender (see Currie, Samdal, Boyce, & Smith, 2001, for a full discussion of the data cleaning criteria and procedures).

Both peer and student–teacher relationships in Italian schools may be influenced by differences in school organization compared to the United States and other countries. Students in Italian schools stay in the same class setting, and with the same class peer group and teacher, throughout the elementary school grades, changing only with changes of school (from elementary to middle school through, which typically occurs at age 11). Students and teacher also stay together for all the middle school years, and at least, the first 2 years of secondary school.

The questionnaire was completed by a total of 4386 students from 151 middle schools and 92 secondary schools. The average age of each of the three age groups 11.73 years ($N = 1524$); 13.78 years ($N = 1366$); and 15.93 years ($N = 1229$). The sample is made up of 2125 boys (48.4%) and 2261 girls (51.6%).

Measures

Data were collected through a self-report questionnaire, devised in 2001–2002 by the HBSC international group, focusing on health behaviours of early adolescents and adolescents. The present study will use data related to student reports of bullying and victimization, psychological adjustment (social competence & self-efficacy) and empowerment within relationships with parents, peers and teachers.

Demographics. Students reported their sex, year of school (grade), month and year of birth. Family SES was estimated by averaging occupational status and educational level of the student's father (Wold, Aaro, & Smith, 1993). Students were asked 'What is your father's job?' Based on the international protocol and the classification system used in the Italian national census, occupations were grouped into five professional categories (1 = low to 5 = high) according to the social prestige associated with them: (1) economically inactive, (2) unskilled manual, (3) skilled manual and clerks, (4) teacher and self-employed, (5) professional and managerial. The second measure of SES was the youths' self-report of their father's educational level. According to the Italian education system, the responses were rated on a 5-point scale: (1) 'elementary', (2) 'middle school', (3) 'vocational school', (4) 'high school', (5) 'university'.

Social competence. Social competence is assessed with a five-item social competence subscale that is part of the Self-Perception Profile for Adolescence (Harter, 1988): adolescents were asked about general difficulties in relating with friends (e.g. 'I find hard to

make friends', 'I am kind of hard to like'). The participants responded on a scale that ranged from (1) 'does not apply' to (4) 'applies fully'. The averaged score of these five items was used so that the higher score indicated a higher level of social competence. Alpha reliability for the five-item scale was 0.69.

Self-efficacy. The General Self-efficacy Scale (Scholz, Gutiérrez-Doña, Sud, & Schwarzer, 2002; Schwarzer, 1992) was used to assess a broad and stable sense of personal competence. Ten items were used to evaluate a general dimension of self-efficacy: adolescents were asked about the difficulty to deal effectively with a variety of stressful situations (e.g. 'I can always manage to solve difficult problems if I try hard enough', 'I can handle whatever comes my way'). The participants responded on a scale that ranged from (1) 'not at all true' to (4) 'exactly true'. The averaged score of these 10 items was used so that the higher score indicated a higher level of self-efficacy. Alpha reliability for the scale was 0.77.

Empowerment with parents. Empowerment with parents was conceptualized as the extent to which decisions involving adolescents' lives (e.g. regarding free time) were generally made by parents instead of by the adolescents themselves. This item was drawn and modified from a scale (Dornbusch et al., 1985; Steinberg, 1987) in which adolescents rated each of 13 types of decisions on a 5-point scale. The present measure was modified to a 4-point scale on just one of the 13 decisions: (1) 'I usually decide how I spend my free time outside school', (2) 'My parents and I decide, but I usually can do what I want', (3) 'My parents and I decide, but I usually do what my parents want me to do', (4) 'My parents usually decide'. Although the measure has been used as an interval scale (see for example, Fletcher, Steinberg, & Williams-Wheeler, 2004) in case it actually has nonlinear effects, we decide to create four dummy variables for each of the above items (from *EmpPar1*: 'I... decide...' to *EmpPar4*: 'My parents... decide...').

Empowerment with friends. Empowerment with friends was conceptualized as how a typical decision (what to do together) in adolescents' lives is generally made with friends (modified from the previous measure and piloted in six countries; Mullan, Currie, Boyce, Morgan, Kalnins, & Holstein, 2001). Adolescents were asked: 'How do you and your friends decide what to do together'. The participants responded as follows: (1) 'I usually decide what we will do', (2) 'My friends and I decide equally what we do', (3) 'My friends and I decide, but usually I do what my friends suggests', (4) 'One of my friends usually decides'. The same procedure described above was applied to compute four dummy variables (from *EmpFri1*: 'I... decide' to *EmpFri4*: 'One of my friends... decides').

Empowerment with teachers. Empowerment with teachers was conceptualized as students' perceptions that teachers encourage them to express themselves. One item was selected, according to the international protocol (Currie et al., 2001), from the Teacher and Classmate Support Scale (Torsheim, Wold, & Samdal, 2000): 'I am encouraged to express my own point of view in my class'. The participants responded on a scale that ranged from (1) 'strongly agree' to (5) 'strongly disagree'. Responses were reverse coded, and the higher score indicates a higher level of empowerment.

Bullying, victimization, and bullying/victimization. Two items assessed bullying and victimization. Students were given the Olweus definition of bullying (Olweus, 1993), and then asked questions about their involvement in bullying. The first item assessed *bullying* behaviour: 'How often have you taken part in bullying another student at school in the past couple of months?' The second item assessed bully *victimization*: 'How often have you

been bullied at school in the past couple of months?' Responses were rated on a 5-point scale (1 = never; 2 = once or twice; 3 = two or three times a month; 4 = about once a week; 5 = several times a week). Consistent with Olweus' (1993) studies, students were considered bullies, victims or bullies/victims when they reported being involved in the behaviour at least two or three times a month.

Plan of analysis

Prevalence of bullying, victimization, bullying/victimization and decision-making power with parents and friends were compared by age cohort and gender using χ^2 statistics. ANOVAs were conducted in the case of continuous variables. To evaluate the question of whether individual (social competence and self-efficacy), and relational characteristics (parents, friends and teachers) contributed as risk factors for adolescent bullying perpetration, victimization and both bullying/victimization logistic regression analyses were conducted. The three different cohorts (ages 11, 13 and 15) were analyzed separately to identify any differences in the relationships between our predictor and outcome variables across the different cohorts. To determine whether individual and relational characteristics added predictive information about adolescents' status as bullies, victims and bullies/victims these characteristics were entered in blocks. The result was four regression models for each cohort, with an additional block being added to each successive model.

Demographic characteristics (gender, age and SES) were entered into each model first; next, the individual psychological characteristics (social competence and self-efficacy) were added; the next block included the relationship with parents; and finally, relational characteristics with friends and teachers were added. This order of entry was selected for two reasons. First, because individual characteristics (social competence and self-efficacy) were entered in the equation first, it is possible to examine the potential mediators of these aspects. Second, by adding the relational characteristics (first the more proximal and then the more distal) to the equation along with the individuals correlates, it is possible to examine whether the relational characteristics made a unique contribution towards distinguishing the two groups, even after controlling for the influences of key aspects. Thus, these regression analyses address the question of whether relational characteristics contribute to our understanding of bullying, victimization and bullying/victimization over and above what may be learned by an examination of individual (demographic and psychological) predictors.

Because of the different metrics of the variables and to clarify the interpretation of the odds ratios, all the numeric variables (age, social competence, self-efficacy and teacher empowerment) were transformed to *z* scores before being entered.

RESULTS

Descriptive statistics

Just over 9% ($n = 397$) of the sample admitted to having bullied and 6.7% (294) reported having been victimized. Between 3 and 4% (152) of the sample admitted both experiences ('bullying/victimization'; see Table 1 for a summary of the prevalence of bullying and victimization by age and gender). Bullying behaviour was more common among males, and was more prevalent in the older cohort among boys whereas for girls it was less

Table 1. Percentage of student bullies, victims and bullies/victims* and empowerment with parents and friends scores by age and gender

Age	11		13		15		χ^2	
	Male	Female	Male	Female	Male	Female	Age (df = 1)	Gender (df = 2)
Bullies	8.6	4.8	14.0	6.2	17.7	5.5	16.31***	72.56***
Victims	8.6	6.2	7.9	9.1	3.0	4.2	27.84***	0.11
Bullies/victims	6.6	2.2	6.0	1.9	2.0	1.6	14.98***	34.27***
EmpPar1	35.8	23.2	47.8	38.9	44.8	39.3	70.24***	34.53***
EmpPar2	30.9	39.9	35.7	41.1	36.7	46.9	14.32***	31.30***
EmpPar3	20.7	27.4	11.9	16.1	15.0	11.4	74.29***	4.43**
EmpPar4	12.6	9.6	4.7	3.8	3.5	2.4	96.07***	7.57***
EmpFri1	8.8	3.3	4.8	2.4	4.8	1.3	20.50***	40.73***
EmpFri2	67.5	72.6	74.6	77.0	80.3	79.7	36.43***	4.76**
EmpFri3	15.5	18.4	16.3	15.5	12.3	16.2	2.97	2.98
EmpFri4	8.2	5.8	4.3	5.2	2.6	2.8	26.31***	0.93

*Bully, victim or bully/victim status = engaged in behaviour at least two or three times a month.

** $p < 0.05$; *** $p < 0.01$.

prevalent overall and slightly more prevalent at age 13 than for ages 11 or 15. Victimization tended to be equally distributed by gender, with the most prevalent victims (9.1%) being 13-year-old girls. Like bullying perpetration, bullying/victimization was more common among males (especially 11- and 13-year-old males, but unlike those who bully but are not victimized, it is less common the older the cohort).

Tables 1 and 2 present descriptive statistics by age and gender of the remaining variables included in the study.

Predictors of bullying behaviour

Table 3 presents the logistic regression for bullying perpetration. Among demographic characteristics, consistent with past research, boys were more involved than girls in this behaviour. In model 2, the psychological characteristics of adolescents make a unique contribution towards distinguishing bullies among both 13-year-olds ($\chi^2 = 10.92$,

Table 2. Means and standard deviations of student social competence, self-efficacy, and empowerment with teachers scores by grade and gender

Age	11		13		15		F	
	Male	Female	Male	Female	Male	Female	Age	Gender
Social comp.	3.24 (0.67)	3.19 (0.64)	3.25 (0.63)	3.10 (0.66)	3.18 (0.65)	3.00 (0.64)	15.19**	16.15**
Self-efficacy	2.85 (0.49)	2.78 (.51)	2.86 (0.45)	2.79 (0.43)	2.83 (0.46)	2.67 (0.46)	13.06**	46.37**
EmpTeach	3.86 (0.87)	4.01 (0.84)	3.64 (0.87)	3.74 (0.83)	3.36 (0.97)	3.29 (0.92)	166.49**	2.37

**† $p < 0.01$.

Table 3. Predictors of bullying behaviour by 11-, 13- and 15-year-olds

Variable	11			13			15		
	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)
Model 1			$\chi^2 = 9.76^*$			$\chi^2 = 33.76^{**}$			$\chi^2 = 37.80^{**}$
Gender (male = 1)	0.64**	0.25	1.90(1.17-3.08)	1.02**	0.19	2.78(1.93-4.02)	1.17**	0.21	3.23(2.13-4.91)
Age	0.61	0.60	1.84(0.58-5.85)	-0.56	0.47	0.57(0.23-1.42)	0.77	0.53	2.16(0.76-6.09)
SES	-0.16	0.12	0.86(0.67-1.09)	0.03	0.10	1.03(0.85-1.26)	-0.14	0.09	0.87(0.73-1.03)
Model 2			$\chi^2 = 2.49$			$\chi^2 = 10.92^{**}$			$\chi^2 = 14.01^{**}$
Gender	0.63**	0.25	1.89(1.16-3.06)	0.95**	0.19	2.58(1.78-3.74)	1.13**	0.22	3.08(2.01-4.74)
Age	0.62	0.59	1.85(0.58-5.94)	-0.65	0.47	0.52(0.21-1.31)	0.86	0.54	2.37(0.82-6.83)
SES	-0.18	0.12	0.84(0.66-1.07)	0.02	0.10	1.02(0.84-1.25)	-0.13	0.09	0.88(0.74-1.04)
Social comp.	0.17	0.13	1.18 (0.91-1.53)	0.24**	0.11	1.32(1.07-1.63)	0.45**	0.13	1.56(1.22-1.99)
Self-efficacy	0.05	0.12	1.05(0.83-1.33)	0.11	0.10	1.11(0.91-1.36)	-0.14	0.12	0.87(0.69-1.10)
Model 3			$\chi^2 = 5.62$			$\chi^2 = 1.69$			$\chi^2 = 9.97^*$
Gender	0.61**	0.25	1.84(1.13-3.01)	0.93**	0.19	2.53(1.74-3.68)	1.11**	0.22	3.02(1.96-4.66)
Age	0.65	0.60	1.91(0.59-6.13)	-0.68	0.47	0.51(0.20-1.28)	0.75	0.54	2.12(0.74-6.12)
SES	-0.18	0.13	0.84(0.66-1.07)	0.03	0.10	1.03(0.84-1.25)	-0.13	0.09	0.88(0.74-1.05)
Social comp.	0.17	0.13	1.18(0.91-1.53)	0.27**	0.11	1.31(1.06-1.62)	0.44**	0.13	1.55(1.21-1.99)
Self-efficacy	0.04	0.12	1.04(0.82-1.31)	0.11	0.10	1.11(0.91-1.36)	-0.14	0.12	0.87(0.69-1.10)
EmpPar1	0.77	0.50	2.16(0.81-5.73)	-0.13	0.46	0.88(0.36-2.17)	0.47	0.63	1.60(0.47-5.51)
EmpPar2	0.59	0.50	1.81(0.68-4.82)	-0.25	0.47	0.78(0.31-1.93)	0.24	0.64	1.27(0.37-4.41)
EmpPar3	0.11	0.54	1.11(0.34-3.21)	-0.48	0.52	0.62(0.22-1.72)	0.46	0.66	1.58(0.43-5.79)
Model 4			$\chi^2 = 21.62^{**}$			$\chi^2 = 8.79^*$			$\chi^2 = 21.70^{**}$
Gender	0.52*	0.25	1.68(1.02-2.77)	0.89**	0.19	2.43(1.67-3.54)	1.10**	0.22	3.00(1.94-4.64)
Age	0.74	0.62	2.10(0.63-7.04)	-0.70	0.47	0.50(0.20-1.24)	0.75	0.55	2.12(0.72-6.18)
SES	-0.21	0.13	0.81(0.63-1.04)	0.02	0.10	1.02(0.83-1.25)	-0.15	0.09	0.86(0.72-1.03)
Social comp.	0.20	0.14	1.22(0.94-1.60)	0.29**	0.11	1.34(1.08-1.66)	0.45**	0.13	1.57(1.23-2.01)
Self-efficacy	0.05	0.12	1.05(0.83-1.33)	0.11	0.11	1.11(0.91-1.37)	-0.08	0.12	0.92(0.73-1.17)

(Continues)

Table 3. (Continued)

Variable	11			13			15		
	<i>B</i>	SE	Odds ratio (confidence interval)	<i>B</i>	SE	Odds ratio (confidence interval)	<i>B</i>	SE	Odds ratio (confidence interval)
EmpPar1	0.70	0.51	2.01(0.74–5.48)	0.01	0.47	1.05(0.41–2.64)	0.65	0.64	1.92(0.55–6.72)
EmpPar2	0.56	0.52	1.76(0.61–4.86)	-0.07	0.48	0.94(0.36–2.40)	0.47	0.65	1.60(0.45–5.69)
EmpPar3	0.04	0.56	1.04(0.35–3.10)	-0.27	0.54	0.76(0.27–2.17)	0.71	0.67	2.04(0.55–7.64)
EmpPar4									
EmpFri1	1.09	0.74	2.97(0.69–12.75)	0.07	0.62	1.07(0.32–3.62)	0.33	0.80	1.40(0.29–6.73)
EmpFri2	0.59	0.65	1.80(0.51–6.37)	-0.25	0.47	0.78(0.31–1.95)	-0.10	0.65	0.90(0.25–3.23)
EmpFri3	0.66	0.69	1.93(0.50–7.45)	-0.07	0.50	0.93(0.35–2.47)	-0.62	0.72	0.54(0.13–2.21)
EmpFri4									
EmpTeach	-0.50**	0.11	0.61(0.49–0.75)	-0.24*	0.09	0.78(0.66–0.93)	-0.43**	0.10	0.65(0.53–0.79)

p* < 0.05; *p* < 0.01.

$p < 0.01$) and 15-year-olds ($\chi^2 = 14.01, p < 0.01$). The majority of this contribution is due to social competence, with higher social competence predicting more bullying in the 13- and 15-year-old cohorts. Contrary to recent studies (Andreou, 2004; Camodeca & Goossens, 2005), no significant effects were found for self-efficacy.

In model 3, power relations in decision-making between parents and adolescents were entered. This model was superior to the second model in terms of overall fit only for the 15-year-old cohort. Finally in the fourth model, relationships with friends and teachers made an independent and significant contribution for all three cohorts. Interestingly, this appears to be due more to students' relationships with teachers than with peers. Bullies feel less empowered in their relationship with their teachers.

Predictors of victimization by bullies

Table 4 presents the logistic regression predicting being the victim of bullying. In model 1, gender, age and socioeconomic status did not as a set significantly predict victimization in any cohort, although 11-year-old boys were more likely to be victims than girls of that cohort. In model 2, the psychological characteristics of adolescents made a unique contribution towards distinguishing victims in all three cohorts. Again, social competence was a significant predictor, indicating that adolescents who are victimized feel less positive about themselves. As with bullying, self-efficacy was not significantly related to victimization.

In model 3, the characteristics of the relationship between parents and adolescents were entered. This model was superior to the preceding model in terms of overall fit only for the 15-year-old cohort ($\chi^2 = 7.67, p < 0.05$). Adolescents being more involved in decision-making was associated with less victimization than having parents make decisions for them. Finally, when the characteristics of adolescents' relationships with friends and teachers were included, an independent and significant contribution was found just for the 11-year-old cohort. Again, the variable that made the greatest contribution was the relationship with teachers, indicating that adolescents who are victimized feel less empowered by their teachers.

Predictors of bullying/victimization

Table 5 presents the logistic regression predicting those who both bully and are themselves the victim of bullying. Among demographic characteristics, boys were more involved than girls in this phenomenon among 11- and 13-year-olds. In model 2, the psychological characteristics of adolescents make a unique contribution towards distinguishing bullies/victims among 15-year-olds ($\chi^2 = 8.96, p < 0.01$). The majority of this contribution is due to social competence, with lower social competence predicting more bullying/victimization.¹

In model 3, power relations in decision-making between parents and adolescents were entered. This model was superior to the second model in terms of overall fit for the 13- and 15-year-old cohorts. The most bullying/victimization occurred for those who let their parents make their decisions for them (EmpPar4) and the least for those who report 'My

¹We reanalyzed the data using a continuous measure of bullying and victimization, obtaining results similar to our initial analysis. Analyses are available upon request from the authors.

Table 4. Predictors of bully victimization for 11-, 13- and 15-year-olds

Variable	11			13			15		
	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)
Model 1									
Gender (male = 1)	0.54*	0.23	$\chi^2 = 6.43$ 1.71(1.10-2.67)	-0.24	0.20	$\chi^2 = 4.36$ 0.79(0.54-1.16)	-0.31	0.33	$\chi^2 = 1.81$ 0.73(0.38-1.40)
Age	-0.37	0.57	0.69(0.23-2.10)	0.69	0.51	1.98(0.73-5.38)	0.83	0.85	2.29(0.43-12.03)
SES	0.04	0.11	1.04(0.84-1.29)	0.13	0.11	1.13(0.91-1.41)	0.04	0.14	1.04(0.79-1.36)
Model 2									
Gender	0.57*	0.23	$\chi^2 = 8.16^*$ 1.76(1.26-2.76)	-0.13	0.20	$\chi^2 = 30.23^{**}$ 0.88(0.59-1.31)	-0.22	0.34	$\chi^2 = 11.14^{**}$ 0.80(0.41-1.56)
Age	-0.38	0.56	0.69(0.23-2.07)	0.96	0.52	2.60(0.93-7.23)	0.73	0.85	2.07(0.39-10.87)
SES	0.08	0.11	1.07(0.87-1.35)	0.12	0.11	1.12(0.90-1.40)	0.02	0.14	1.02(0.77-1.35)
Social comp.	-0.21*	0.11	0.81(0.66-0.99)	-0.51**	0.09	0.60(0.50-0.72)	-0.53**	0.16	0.59(0.43-0.81)
Self-efficacy	-1.54	0.11	0.86(0.69-1.06)	0.01	0.11	1.01(0.82-1.26)	0.06	0.17	1.06(0.75-1.49)
Model 3									
Gender	0.55*	0.23	$\chi^2 = 6.83$ 1.73(1.10-2.73)	-0.14	0.20	$\chi^2 = 0.53$ 0.87(0.59-1.30)	-0.31	0.34	$\chi^2 = 7.67^*$ 0.73(0.37-1.44)
Age	-0.39	0.57	0.68(0.22-2.07)	0.97	0.52	2.64(0.95-7.34)	0.76	0.86	2.15(0.40-11.52)
SES	0.09	0.11	1.09(0.87-1.36)	0.12	0.11	1.13(0.90-1.41)	0.02	0.14	1.02(0.77-1.35)
Social comp.	-0.21*	0.11	0.81(0.66-1.00)	-0.50**	0.09	0.61(0.50-0.73)	-0.55**	0.17	0.58(0.42-0.80)
Self-efficacy	-0.14	0.11	0.87(0.70-1.08)	0.02	0.11	1.02(0.82-1.27)	0.13	0.18	1.14(0.81-1.61)
EmpPar1	-0.06	0.39	0.94(0.45-2.02)	-0.18	0.47	0.84(0.33-2.10)	-1.15	0.60	0.32(0.10-1.04)
EmpPar2	-0.47	0.40	0.63(0.29-1.38)	-0.23	0.48	0.79(0.31-2.01)	-1.66**	0.63	0.19(0.06-0.65)
EmpPar3	0.28	0.39	1.33(0.62-2.84)	-0.05	0.51	0.96(0.36-2.58)	-1.98*	0.81	0.14(0.03-0.69)
Model 4									
Gender	0.47*	0.24	$\chi^2 = 11.39^*$ 1.59(1.01-2.52)	-0.15	0.20	$\chi^2 = 3.37$ 0.86(0.58-1.29)	-0.45	0.36	$\chi^2 = 5.79$ 0.64(0.32-1.29)
Age	-0.40	0.58	0.67(0.21-2.08)	0.92	0.52	2.52(0.90-7.03)	0.56	0.87	1.75(0.32-9.64)
SES	0.08	0.11	1.08(0.87-1.35)	0.12	0.11	1.13(0.90-1.42)	0.03	0.14	1.03(0.78-1.36)
Social comp.	-0.18	0.11	0.84(0.67-1.04)	-0.49**	0.10	0.62(0.51-0.74)	-0.59**	0.17	0.55(0.39-0.78)
Self-efficacy	-0.08	0.11	0.92(0.74-1.15)	0.04	0.11	1.04(0.83-1.29)	0.07	0.18	1.09(0.78-1.54)

(Continues)

Table 4. (Continued)

Variable	11			13			15		
	<i>B</i>	SE	Odds ratio (confidence interval)	<i>B</i>	SE	Odds ratio (confidence interval)	<i>B</i>	SE	Odds ratio (confidence interval)
EmpPar1	0.10	0.41	1.11(0.49–2.48)	-0.09	0.48	0.92(0.36–2.33)	-1.15	0.64	0.32(0.09–1.09)
EmpPar2	-0.34	0.43	0.71(0.31–1.66)	-0.13	0.49	0.88(0.34–2.28)	-1.71**	0.18	0.18(0.05–0.66)
EmpPar3	0.41	0.41	1.52(0.67–3.39)	0.05	0.52	1.05(0.38–3.88)	-2.11*	0.86	0.12(0.02–0.64)
EmpPar4									
EmpFri1	-0.96	0.63	0.38(0.11–1.31)	-0.02	0.68	1.02(0.27–3.86)	0.47	0.87	1.60(0.29–8.75)
EmpFri2	-0.56	0.38	0.57(0.27–1.21)	-0.13	0.44	0.88(0.37–2.07)	-0.93	0.67	0.39(0.10–1.44)
EmpFri3	-0.43	0.44	0.65(0.28–1.53)	0.33	0.46	1.39(0.56–3.42)	-0.87	0.77	0.41(0.09–1.89)
EmpFri4									
EmpTeach	-0.31**	0.11	0.73(0.56–0.90)	-0.01	0.11	0.99(0.80–1.23)	-0.11	0.19	0.183(0.54–1.38)

p* < 0.05; *p* < 0.01.

Table 5. Predictors of bullying/victimization for 11-, 13- and 15-year-olds

Variable	11			13			15		
	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)
Model 1			$\chi^2 = 20.87^{**}$			$\chi^2 = 17.62^{**}$			$\chi^2 = 4.07$
Gender (male = 1)	1.29 ^{**}	0.32	3.64(1.95–6.80)	1.02 ^{**}	0.31	2.77(1.50–5.11)	0.46	0.45	1.58(0.65–3.86)
Age	0.66	0.67	1.93(0.52–7.16)	-0.14	0.74	0.87(0.20–3.71)	-1.25	1.26	0.29(0.02–3.40)
SES	-0.03	0.14	0.97(0.75–1.27)	-0.42 [*]	0.18	0.66(0.46–0.94)	-0.31	0.21	0.74(0.49–1.11)
Model 2			$\chi^2 = 1.86$			$\chi^2 = 1.24$			$\chi^2 = 8.96^{**}$
Gender	1.25 ^{**}	0.32	3.62(1.94–6.78)	1.01 ^{**}	0.32	2.74(1.48–5.08)	0.46	0.47	1.59(0.64–3.95)
Age	0.63	0.67	1.87(0.51–6.90)	-0.16	0.74	0.85(0.20–3.64)	-1.51	1.26	0.22(0.02–2.61)
SES	-0.02	0.14	0.98(0.75–1.29)	-0.39 [*]	0.18	0.68(0.47–0.96)	-0.34	0.22	0.71(0.46–1.09)
Social comp.	-0.18	0.13	0.83(0.64–1.08)	0.16	0.17	1.17(0.84–1.63)	-0.66 ^{**}	0.22	0.52(0.34–0.79)
Self-efficacy	0.06	0.14	1.06(0.81–1.38)	-0.15	0.17	0.87(0.82–1.63)	0.40	0.24	1.48(0.93–2.38)
Model 3			$\chi^2 = 1.20$			$\chi^2 = 12.39^{**}$			$\chi^2 = 10.12$
Gender	1.26 ^{**}	0.32	3.53(1.87–6.64)	0.95 ^{**}	0.32	2.59(1.39–4.82)	0.42	0.47	1.53(0.61–3.83)
Age	0.63	0.67	1.88(0.51–6.93)	-0.21	0.75	0.81(0.19–3.52)	-1.32	1.29	0.27(0.02–3.36)
SES	-0.01	0.14	0.99(0.76–1.30)	-0.37 [*]	0.19	0.69(0.48–0.98)	-0.35	0.22	0.70(0.46–1.08)
Social comp.	-0.18	0.13	0.84(0.65–1.08)	0.17	0.17	1.19(0.86–1.65)	-0.68 ^{**}	0.22	0.51(0.33–0.78)
Self-efficacy	0.05	0.14	1.06(0.81–1.38)	-0.10	0.17	0.90(0.65–1.25)	0.47	0.25	1.61(0.97–2.62)
EmpPar1	0.04	0.46	1.04(0.43–2.54)	-1.02 [*]	0.49	0.36(0.14–0.94)	-2.07 ^{**}	0.76	0.13(0.03–0.56)
EmpPar2	-0.06	0.46	0.94(0.38–2.32)	-1.68 ^{**}	0.54	0.19(0.07–0.53)	-1.70 [*]	0.73	0.18(0.04–0.76)
EmpPar3	-0.36	0.50	0.70(0.26–1.88)	-2.07 ^{**}	0.73	0.13(0.03–0.53)	-2.20 [*]	0.99	0.11(0.02–0.77)
Model 4			$\chi^2 = 13.60^{**}$			$\chi^2 = 4.99$			$\chi^2 = 3.20$
Gender	1.17 ^{**}	0.33	3.22(1.70–6.10)	0.91 ^{**}	0.32	2.47(1.32–4.62)	0.35	0.48	1.41(0.55–3.63)
Age	0.73	0.69	2.08(0.54–7.97)	-0.26	0.75	0.77(0.78–3.34)	-1.43	1.30	0.24(0.02–3.03)
SES	-0.03	0.14	0.97(0.74–1.28)	-0.38 [*]	0.19	0.68(0.47–0.98)	-0.35	0.22	0.71(0.46–1.09)
Social comp.	-0.15	0.14	0.86(0.66–1.12)	0.20	0.17	1.23(0.88–1.71)	-0.63 ^{**}	0.23	0.52(0.33–0.82)
Self-efficacy	0.08	0.14	1.09(0.82–1.41)	-0.12	0.17	0.88(0.64–1.23)	0.45	0.24	1.57(0.98–2.53)

(Continues)

Table 5. (Continued)

Variable	11			13			15		
	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)	B	SE	Odds ratio (confidence interval)
EmpPar1	0.03	0.48	1.03(0.40–2.61)	-0.90	0.50	0.41(0.15–1.10)	-1.94**	0.79	0.14(0.03–0.67)
EmpPar2	-0.05	0.49	0.96(0.37–2.48)	-1.53**	0.56	0.22(0.07–0.64)	-1.58*	0.76	0.21(0.05–0.92)
EmpPar3	-0.42	0.53	0.66(0.23–1.86)	-1.89*	0.75	0.15(0.04–0.65)	-2.19*	1.03	0.11(0.02–0.84)
EmpPar4									
EmpFri1	0.69	0.71	2.00(0.50–8.03)	0.59	0.83	1.81(0.36–9.24)	-0.43	1.16	0.65(0.07–6.33)
EmpFri2	0.25	0.60	1.28(0.40–4.11)	-0.13	0.66	0.88(0.24–3.21)	-1.32	0.82	0.27(0.06–1.32)
EmpFri3	0.72	0.63	2.06(0.60–7.13)	-0.03	0.71	0.98(0.24–3.92)	-1.63	1.05	0.20(0.03–1.52)
EmpFri4									
EmpTeach	-0.41**	0.12	0.66(0.52–0.84)	-0.25	0.14	0.78(0.59–1.01)	0.06	0.24	1.06(0.67–1.69)

* $p < 0.05$; ** $p < 0.01$.

parents and I decide, but I usually do what my parents want me to do' (EmpPar3). Finally in the fourth model, relationships with friends and teachers made an independent and significant contribution for 11- and 13-year-old cohort. Again, bullies/victims feel less empowered in their relationship with their teachers.

DISCUSSION

The purpose of this study was to investigate the role of power in the relationships with parents, friends and teachers of adolescents identified as a bully, a victim of bullying, or both a perpetrator and victim. In general, our findings confirm the important role played by teachers in a tone that discourages bullying. Perhaps the two most surprising findings are the lack of influence on bullying or victimization of power relationships among friends (which would seem most relevant to peer violence) and that for both victims and aggressive victims the relationship that predicts behavioural problems shifts from teacher–student at age 11 to parent–child at age 15. One might expect parents to become *less* important and teachers relatively *more* important over time, but our data suggest the opposite.

Analysis of the study's hypotheses provided mixed results. The analysis of demographic variables indicated patterns similar to those reported in prior research on bullying (eg. Baldry & Farrington, 2000). For example, the prevalence of both bullying, and bullying/victimization was higher in males than females and the rate of victimization and bullying/victimization declined across the adolescent age cohorts. Social competence and self-efficacy also followed a predictable pattern with boys reporting higher social competence and self-efficacy than girls and both psychological resources declining slightly with age.

In relation to decision-making, the percentage of participants who reported that parents made most decisions did vary across the three cohorts, with the older two cohorts reporting less parental decision-making. This is consistent with the expectation that as adolescents develop, they experience more independence in their relationships with parents (Steinberg & Silverberg, 1986). It is interesting that those 13- and 15-year-olds who bullied and were themselves victims of bullying were *more* likely to let their parents make their decisions for them and *less* likely to decide with their parents (Table 5). The results of both those decision processes are generally the same—doing what the parents want. The difference may have to do with the kinds of behaviour parents model—those who make decisions for their adolescents without consulting them may be unintentionally modelling bullying behaviour (while also making the child identify with the victim role) whereas parents who model more collaborative decision-making with their children are modelling more pro-social behaviour. There were also clear gender effects, with girls less likely to report strong parental control than boys (but more likely to report they decide with their parents and to choose to do what their parents wanted). This may be due to a tendency for boys to be more assertive and to push the limits of parental control (e.g. Pinquart & Silbereisen, 2002). Similarly, there was an increase in the percentage of older adolescents who reported that they generally made their own decisions in their relationship with their parents.

In contrast, a relatively small percentage of students reported imbalances in the decision-making in their relationships with their friends. More boys than girls reported making decisions for their friends. In the youngest cohort, more boys had friends make decisions for them. The percentage of boys and girls reporting relationships in which they controlled activities or had their friends control activities decreased across the age cohorts.

These findings suggest that most students are able to develop cooperative relationships with their peers. However, there was a small percentage who remained passive in their decision-making with peers.

There was a striking pattern in the sense of empowerment students experience from their teachers. The sense of empowerment steadily decreases with age, especially for girls. While not surprising (see Bru et al., 2002), this suggests that teachers, schools and teacher training programs may need to work on developing teaching methods that support and maintain students' voice and choice throughout adolescence.

Examination of whether relationship patterns predicted involvement in bullying also provided mixed support for our hypotheses. Other than less bullying among 13-year-olds who decide what to do together with their parents but usually do what the parents want, decision-making with parents and peers appears to have no significant relationship with bullying perpetration in any of the cohorts. However, disempowered relationships with teachers were consistently found to predict bullying behaviour and bullying/victimization. Furthermore and consistent with previous studies (Andreou, 2004), higher social competence was reported by students who persisted in bullying in the older cohorts.

In contrast, analysis of the predictors of victimization indicated that chronically bullied children tended to have problems with social competence and imbalances in their decision-making with teachers at younger ages. Although the number of chronic victims decreased in the older cohorts, the older students who continued to experience chronic bullying reported more difficulties with social competence, and difficulties in negotiating cooperative relationships with parents. They reported no particular problems in their relationship with teachers. These results suggest that older students who continue to report both chronic victimization and bullying/victimization are likely to have generalized difficulty in negotiating cooperative personal relationships, in particular with their parents, and are likely to have corresponding difficulties with their social competence. This result is in agreement with the idea that relationship problems can be avoided by acquiescing to a parent who is asserting power to control the relationship (Dodge, Pettit, & Bates, 1997). Moreover, a more directive parenting style may be more deleterious during these adolescent's development. The fact that similar problems were not evident in victims' relationship with teachers may reflect either teachers' efforts to address the lack of assertiveness and social competence issues of chronic victims or simply an instrumentation effect associated with the different measure used in assessing relationships with teachers.

The lack of a relationship between the quality of peer relationships and bullying is contrary to the findings of previous studies (e.g. Vaillancourt et al., 2003). Since conflict resolution is particularly culture-bound (Osterman, Bjorkqvist, Lagerspetz, Landau, Fraczek, & Pastorelli, 1997), the idea that certain kinds of bullies are more popular may be culturally centred, in particular in American culture. Future cross-cultural studies are needed to verify this hypothesis.

Limitations and strengths

There are several important limitations to this study. First, the cohort design requires that conclusions drawn about changes over time be qualified. Since we did not employ a longitudinal design, we cannot confirm the developmental trajectory for chronic bullies and victims. While it is likely that each of these cohorts do reflect the normative

developmental changes of adolescence, this would best be assessed by following a cohort throughout their adolescent development.

Also, decision-making may provide a limited assessment of power differentials and students' sense of power. Although the type of decision asked about (what to do with free time) is very common, other topics may be decided on differently or have different effects. Second, decision-making is a key aspect of power and a sense of empowerment, but is only one dimension of the larger construct. Other dimensions, such as physical strength and minority status (e.g. racial, SES, ability, sexual orientation) could have independent effects on one's sense of power or could have interactive effects on one's approach to decision-making. The single item used to measure empowerment with teachers (i.e. students' perceptions that they are encouraged to express their own points of view) may be even more limited than, and are different from, the measure of empowerment with parents and friends. These results should be replicated in other populations using a consistent and more comprehensive measure of empowerment, but one, like ours, that is context-sensitive (Zimmerman, 1995).

The study also has several strengths, especially in using a large and representative sample across three adolescent age cohorts. The use of mostly standard measures, which have been used in the largest ever international, cross-cultural study of adolescent health behaviours, is another strength. Finally, the comprehensiveness of our model in considering both bullies and victims and their relationships with parents, peers and teachers is perhaps this study's greatest strength.

Implications for theory and intervention

Overall these results provide important information that both validates and challenges some of the current practices in the prevention of chronic bullying. The importance of relationships with teachers in predicting bully perpetration and victimization validates the emphasis of current prevention efforts on working with teachers to change the school and classroom environments (Vieno, Perkins, Smith, & Santinello, 2005). Whole-school programs place an emphasis on setting school rules, and teachers supervising and intervening in bullying situations and on students developing relationships characterized by mutual respect. Evaluations of these programs have consistently reported decreases in bullying, however, these results suggest that careful attention to including students in development of school rules related bullying may enhance these programs effectiveness. It also suggests that even more efforts might be directed towards developing the relationships of teachers, school counselors and administrators with children who are at risk for bullying or being victimized.

Finally, these results also suggest that older students who are chronically victimized may experience a variety of adjustment problems, including low social competence and passivity in letting their parents decide how the adolescent spends free time outside school long after their peers have taken a more active role in such decisions. These problems may require direct intervention. A review of bullying prevention and intervention programs found that most provided no direct assistance to chronic victims (Nation, 2007). These findings challenge youth programs and schools to provide assistance to chronic victims while making sure that they are not blamed for bullies' behaviour. The fact that 15-year-old victims reported problems with social competence, parent relationships and peer relationships suggests that preventive interventions may need to venture beyond the school

environment and teacher relationships, and engage parents and other parts of the child's support network.

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