

## **The Nature of School Bullying and the Effectiveness of School-Based Interventions**

**Peter K. Smith<sup>1,3</sup> and Katerina Ananiadou<sup>2</sup>**

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*School bullying has become a topic of public concern and considerable research in various countries around the world in the last two decades. We summarise characteristics such as types and causes of school bullying, based on findings from various studies. We further review a variety of large-scale, school-based intervention programmes, implemented in different countries and school settings, that have been systematically evaluated. These programmes have varied substantially in their effectiveness in reducing levels of bullying at schools. Reasons for these mixed outcomes are discussed, together with suggestions for improving the effectiveness of future interventions.*

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**KEY WORDS:** bully; victim; school intervention.

Bullying is usually defined as a subset of aggressive behavior (Olweus, 1999a). It is characterized by repetition—a victim is targeted a number of times—and by an imbalance of power—the victim cannot defend him/herself easily, for one or more reasons (he or she may be outnumbered, be smaller or less physically strong, or be less psychologically resilient, than the person(s) doing the bullying). The definition “a systematic abuse of power” (Smith & Sharp, 1994, p.2) also captures these two features.

Although these two criteria (repetition, and power imbalance) are not universally accepted, they are now widely used. In the sense defined, then, bullying is likely to have particular characteristics (such as fear of telling by the victim), and particular outcomes (such as development of low self-esteem, and depression, in the victim). The relative defenselessness of the

<sup>1</sup>Department of Psychology, Goldsmiths College, University of London, London, UK.

<sup>2</sup>Institute of Education, University of London, London, UK.

<sup>3</sup>Correspondence should be directed to Peter K. Smith, Ph.D., Department of Psychology, Goldsmiths College, University of London, New Cross, London SE14 6NW, UK; e-mail: pss01pks@gold.ac.uk.

victim also implies an obligation on others to intervene, if we take the democratic rights of the victim seriously.

## HOW DO WE FIND OUT ABOUT BULLYING?

There are obvious difficulties in getting data on school bullying. Nevertheless a number of methods can be used. The main methods are:

- Teacher and parent reports; these are of limited value, however, as teachers and parents are usually unaware of a lot of the bullying which is occurring.
- Self-reports by pupils as to whether they have been bullied, or taken part in bullying others (usually, over a definite time period); these are widely used in anonymous questionnaires, two common instruments being the Olweus questionnaire (Olweus, 1992) and the Life in Schools questionnaire (Arora, 1994a).
- Peer nominations, in which class-mates are asked who is a bully, or a victim. This may be the most reliable method, for class based work. Two common instruments are those of Rigby and Slee (1991) and the Salmivalli Participant Role Scale (Salmivalli, Lagerspetz, Bjorkqvist, Osterman & Kaukiainen, 1996).
- Direct observations of behaviour, for example in the playground. Pepler and Craig (1995) for example, have used radio microphones plus a telephoto camera. Observations have high validity but are expensive and time-consuming to carry out and analyse.
- Interviews with individuals, focus groups with say 4–8 pupils, and incident reports kept by a school, are other ways of getting information.

## TYPES OF BULLYING

While a number of typologies of aggression and of bullying exist, the main types include

*Physical*: hitting, kicking, punching, taking belongings

*Verbal*: teasing, taunting [plus new forms such as email bullying, telephone bullying]

*Social Exclusion*: systematically excluding someone from joining in normal social groups

*Indirect*: spreading nasty rumors, telling others not to play with someone  
Typically boys use more physical forms of bullying, girls more indirect forms and social exclusion.

## **ROLES IN BULLYING**

The traditional roles derived from questionnaire and peer nomination data are: Bully, Victim, Noninvolved (neither a Bully nor a Victim), plus Bully-Victim (pupils who are both a Bully and a Victim). In addition, Victims often divided into Passive Victims, and Aggressive Victims, depending on their typical response; the latter category may overlap with Provocative Victims or Bully-Victims.

Salmivalli et al. (1996) refined this by describing six Participant Roles in bullying. They describe Ringleader bullies (who take the initiative), Follower bullies (who then join in), Reinforcers (who encourage the bully or laugh at the victim), Defenders (who help the victim) and Bystanders (who stay out of things), as well as the Victims themselves.

## **SOME STRUCTURAL FEATURES OF BULLYING**

A great deal has been found out about the nature of bullying, mainly from large-scale surveys using anonymous self-report questionnaires. Many findings replicate across studies and across cultures (Smith, Morita, Junger-Tas, Olweus, Catalano & Slee, 1999).

One finding, very important for intervention work, is that a substantial proportion of self-reported victims say that they have not told a teacher, or someone at home, about the bullying. This proportion that have not told, increases with age. Also, boy victims are less likely to tell anyone, than girl victims.

Another finding relates to attitudes about bullying in the peer group as a whole. Although most pupils say they do not like bullying, a significant minority do say they could join in bullying. Perhaps surprisingly, these “probullying” or “antivictim” attitudes increase with age up to 14–15 years (after which they start to decline). Such anti-victim attitudes are more marked in boys than girls—and especially for boys as regards boy victims (Olweus & Endresen, 1998).

## **CAUSES OF BULLYING**

Aggressive behavior and inequalities of power are commonplace in human groups, including peer groups in school, so bullying can be a temptation. Schools may provide greater or lesser opportunities for bullying to take place; in terms of the nature of the school environment, the kind of school ethos prevailing, whether there is an effective school

policy and sanctions against bullying, and what are the attitudes of the main peer groups in the school. In addition, some children are at greater risk of victim status, while some others get particular satisfaction from bullying.

### **INDIVIDUAL RISK FACTORS IN BEING A VICTIM**

The peer group context has been found to be an important predictor of risk in being or not being a victim. Hodges, Malone and Perry (1997) suggest that risk factors comprise having few friends, especially friends who can be trusted or who are not themselves of low status; and sociometric rejection (dislike by peers).

Another group of risk factors relates to family background. For example, there is evidence that some victims come from overprotective or enmeshed families (Smith & Myron-Wilson, 1998). Perhaps they have not developed, within the family, skills of assertion and independence that would be useful in the peer group.

### **CHILDREN WITH A DISABILITY**

Having a disability or special educational needs is another risk factor for being a victim. Children with special needs are 2 to 3 times more at risk of being bullied; they are also more at risk of taking part in bullying others (Nabuzoka & Smith, 1993). Particular characteristics (such as a stammer, or clumsiness) may make them an obvious “target”; in mainstream settings these children are usually less well integrated socially and lack the protection against bullying which friendship gives; also those with behavioral problems may act out in an aggressive way and become “provocative victims.”

### **RACIST AND HOMOPHOBIC BULLYING**

Children can experience racist teasing and name-calling, and those of non-White ethnic origin have been shown to experience more racist name-calling (though not necessarily other forms of bullying) than White children of the same age and gender. In secondary schools, children may be teased about their sexual orientation, and even physically assaulted or ridiculed about this by other pupils or teachers (Rivers, 1995).

## RISK FACTORS FOR BULLYING OTHERS

Besides temperamental factors (such as being hot-tempered), family factors have been commonly implicated as risk factors for children who persistently bully others. They are more likely to come from families lacking warmth, in which violence is common, and discipline inconsistent. Fathers who were bullies at school are likely to have sons who were bullying at school (Farrington, 1993; Olweus, 1993). Children who are both bullies and victims (aggressive victims) may come from particularly troubled or abusive families (Schwartz, Dodge, Pettit & Bates, 1997).

## EFFECTS OF BEING BULLIED

Victims of bullying often experience anxiety and depression, low self-esteem, physical and psychosomatic complaints (Williams, Chambers, Logan & Robinson, 1996). In extreme cases, they may commit suicide (Kaltiala-Heino Rimpela, Marttunen, Rimpela & Rantanen, 1999). Hawker and Boulton (2000), carrying out a meta-analysis of many studies, found that victimization was most strongly related to depression, moderately associated for social and global self-esteem, and less strongly associated with anxiety. There are issues of cause and effect in interpreting these findings. It could be that victimization causes these negative effects; or, it could be that being depressed and having low self-esteem help make a pupil more susceptible to being bullied. Nevertheless, retrospective studies with adults suggest the possible impact of victimization in childhood, and indicate that some effects can be long-term (Hugh-Jones & Smith, 1999). Also, longitudinal studies suggest both processes may be at work (Kochenderfer & Ladd, 1996).

## TYPES OF SCHOOL BASED INTERVENTION

Parts of the causes for bullying lie in human nature, in socioeconomic stresses on families and family rearing, and in cultural aspects including attitudes to violence and portrayals in the mass media. Nevertheless, schools—even with pupils from similar backgrounds—vary a lot in the incidence of bullying. School-based factors thus appear to be important. Because of this, and because it is relatively easier to work in schools than deal with the wider social and family issues, school-based interventions have been a normative approach to coping with bullying. In this section we review the large-scale school-based intervention programs that have been systematically evaluated.

The first large-scale intervention took place in Norway in 1983. This was a nationwide campaign across Norway against bullying, following several suicides. The intervention, supported by the Ministry of Education, included surveys in schools, materials and a video for teachers, advice for parents, and mass publicity. However, the effects of the program were systematically evaluated only in two subsamples of schools, in the areas of Bergen and Rogaland.

### **THE BERGEN ANTI-BULLYING PROGRAM**

The Bergen sample consisted of approximately 2,500 students from 42 primary and secondary schools. The age of the participating students ranged from 11 to 14 years at the time of the initial evaluation, in May 1983. This evaluation took the form of an anonymous questionnaire survey using the Olweus Bully/Victim Questionnaire; two follow-up surveys were conducted 8 and 20 months after the start of the intervention in order to assess the effectiveness of the program. The questionnaire first provides students with a simple definition of the term bullying (see above) and includes questions that aim to collect information on aspects such as: number and percentage of students who report being bullied and/or bullying others; frequency and location of bullying episodes; forms of bullying behavior; and frequency with which adults (e.g. parents, teachers) have been told about the bullying. In addition to the Bully/Victim Questionnaire, a questionnaire on participation in other antisocial behaviors and a four-dimensional measure of classroom climate were also administered to students. Furthermore, teachers were asked to provide ratings of the level of bullying problems in class.

The results of the program were quite positive. There were substantial reductions—of around 50%—in the students' reports of bullying for all age and sex groups, with evidence that these positive effects were stronger after 20 months of intervention compared to 8 months. There was a marked reduction in other anti-social behavior (such as theft, vandalism etc) and an improvement in general “school climate.” Finally, the program seemed to have also had secondary prevention effects, in that a reduction was also found in the number and percentage of new victims of bullying.

The Bergen Anti-Bullying Program was developed by Olweus in the early 1980's as part of this nation-wide campaign. The program was developed on the basis of previous findings regarding the development and modification of aggressive behavior (Olweus, 1993; 1997). Olweus argued that a great deal of bullying behavior occurs because of the intention on the part of the bully to gain some kind of social reward (e.g. status among peers); as a result, he argued that an antibullying program should aim to restructure the

school environment in a such a way so as to remove the positive and increase the negative consequences of bullying behavior. This could be achieved by means of introducing clear and firm rules against such behavior and creating a warm and positive school environment. Adults (both parents and teachers) as well as peers should be actively involved in this process, with adults assuming an authoritative (but not authoritarian) role in their interactions with children.

The above underlying principles of the program resulted in a number of anti-bullying measures working at three levels: *school, classroom and individual*. The “core” components of the program at the school level include the administration of the Olweus Bully/Victim Questionnaire (Olweus, 1992) which assesses the nature and prevalence of bullying at each school; a school conference day during which school staff and program consultants can discuss aspects of the program and its forthcoming implementation; the formation of a coordinating committee to guide the implementation of the program at each school, consisting of teachers, school administrators, and representatives of parents and students; and finally increasing supervision in locations where bullying is most likely to occur according to the questionnaire survey results.

At the class level, core measures include establishing a set of specific rules against bullying and ensuring that these are enforced. Regular class meetings should also be held, where students can talk about bullying or other antisocial behaviors or participate in activities that can help them to develop effective coping strategies (e.g. role playing, drama work etc).

Finally, the program includes additional core components aimed at individual pupils known (or strongly suspected) to have directly participated in bullying situations, either as bullies or victims, consisting mainly in serious talks with the students and their parents.

## RESULTS IN ROGALAND

Working in Stavanger, Roland has also reported an evaluation of the 1983 nationwide campaign in Norway. His follow-up survey of 37 schools in Rogaland (S.W. Norway) took place three years after the start of the intervention, in October 1986, using the same instruments for measuring levels of bullying (Roland, 1989; 1993). In contrast to Bergen, the results of the program in the Rogaland schools were quite disappointing: not only were levels of reported bullying not reduced among the students, for boys they increased slightly in the course of the three years: percentages of those reporting “having been bullied” rose from 3.6% in 1983 to 5.2% in 1986; reports of “bullying others” rose from 4.1% to 5.1%. However, Roland considers that

the results in Rogaland are consistent with the general trend of increased levels of bullying across the country between 1983 and 1986, in spite of the campaign. In Roland's words, "the results are not a consequence of the campaign, but a tendency that appeared in spite of it" (Roland, 1993:23). Finally, Roland also found that schools that put more effort in the implementation of the program obtained more positive results. Olweus (1999b) has also reported this.

Olweus (1999b, p.39) considers that the different findings from these two evaluations are due to "planning, data quality, times of measurement, and contact with the schools." Roland (1993) argues that at least part of the difference in the two areas can be explained in terms of the longer period (three years rather than one) between the baseline and follow-up surveys in the case of Rogaland; the intervention program would appear in that case to have had only short-term effects (against a possible national trend in the opposite direction). However, Roland did not give any extra help to the schools (beyond the national materials). Olweus did; it appears that he was developing his Anti-Bullying Program at this time (though the extent to which the schools experienced the full program, in 1983–85, is not well documented). This different level of support for the schools could be expected to make a substantial difference.

## FURTHER DEVELOPMENTS

More recent work in Norway directed by Roland (2000) is more focussed on class climate generally (rather than specifically on bullying) and makes more use of pupils and expert teachers, but this initiative has not yet been evaluated. A new large-scale intervention has recently been implemented in Bergen by Olweus (Olweus & Limber, 1999). This new project worked with 14 intervention and 16 comparison schools (comprising a total of 3,200 students aged 11–13 and 15 years) over a period of 6–7 months (late 1997 to June 1998). Although final analyses of the results have not been published yet, the preliminary findings of the study showed a reduction in the reported frequencies for having been bullied and bullying others by 25 to 30% at the intervention schools.

Given the success of the Anti-Bullying Program in Bergen reported in the later 1980s, a number of programs with similar aims have been developed and implemented in different countries, including the UK (England), Canada, USA, Germany and Belgium. Some of these projects are more or less direct replications of the original Bergen program, whilst others (notably the Sheffield project) have more independent features. Summaries of the content and outcome of these projects are presented below.

## SHEFFIELD, ENGLAND

The DFE Sheffield Anti-Bullying Project was funded by the Department for Education (DFE) from 1991–93. Directed by Smith, the project was inspired by the Bergen results; but the actual interventions made use of existing ideas in the UK and other countries and were conceptualized as targeting some risk factors for bully/victim occurrences—the school climate, the school (physical) environment, the peer group, the behavior of individual bullies and victims (see Table I).

The project worked with 23 schools in Sheffield, a north midlands industrial town. All schools were asked to develop a whole school policy on bullying; this was a written document, accessible to everyone in the school, developed democratically by discussion through the school community. It defined bullying, made responsibilities clear, and outlined sanctions against persistent bullies. The actual form and content of the policy was, however, left to the school to decide in relation to its own philosophy and needs.

In addition, schools were offered support (materials, teacher training) in a range of “optional interventions.” These covered

- curriculum work (drama, video, quality circles) carried out in the classroom and affecting all pupils;
- working with individuals and small groups (the Pikas method for changing behavior of bullies; assertiveness training for changing behavior of victims);
- playground work (improvements in the playground environment, training for lunchtime supervisors), to tackle the venue where bullying behavior had been found to be most frequent.
- peer support schemes (to change the peer group context) were developed in two schools as these methods began to be proposed during the course of the project.

Although Olweus (1999b, p.41) describes the Sheffield project as having “the basic approach, containing most of the core elements of the [Bergen] program,” some differences should be noted. The Sheffield project gave

**Table I.** Types of School-Based Interventions

	Whole school policy	Play ground	Peer Curriculum	Bully support	Pikas/ court	Assertiveness no blame	training
Bullies	X		X		X	X	
Victims	X		X	X	X	X	X
Peers	X		X	X			
School environment		X					
School ethos		X					

more scope for schools to choose interventions tailored to their individual needs and situation (in the whole school policy, and choice of options). The Pikas method—used quite successfully in the Sheffield project—formed no part of the Bergen project and indeed Olweus has strong doubts of its scientific validity (Olweus, 1999a, pp.22–23). The Sheffield project included other elements—the playground physical environment, quality circles and peer support—not in the Bergen program. But, it did not include the “class rules,” which were a core feature in the latter.

A slightly modified version of the Olweus Bully/Victim questionnaire translated into English was used for the pre- and postintervention assessments, which were 2 years apart. An age-cohort design, similar to that of the Bergen study, was used. The findings were reasonably encouraging. After 4 school terms, the primary schools achieved an average 17% increase in the number of pupils reporting not being bullied and 7% reduction in the pupils who reported bullying others. In the secondary schools the reductions were smaller, around 3–5% in most cases, but there were substantial increases in the proportion of bullied pupils who told a teacher about it (mean 32%) and in the proportion of bullying pupils who said someone had talked to them about it (mean 38%). Schools which put more time and effort into anti-bullying measures, and which consulted widely in whole school policy development, had the best outcomes. Success in taking action required the commitment of at least one member of staff as coordinator, and the clear support of senior management (Smith & Sharp, 1994; Thompson & Sharp, 1994).

The Sheffield project outcomes led to the production of a government pack, “*Don’t Suffer in Silence*” (1994), with advice for schools. The pack was evaluated in 1997 (Smith & Madsen, 1997), and schools reported it to be generally useful. Suggestions for revision were noted and incorporated in a second edition of the pack, issued in December 2000. The pack is available free to any state school in England requesting it.

## **OTHER INTERVENTIONS IN ENGLAND**

The Safer Schools—Safer Cities program funded a project in Wolverhampton in 15 schools (1991–94), with interventions similar to that in the Sheffield project. An adaptation of the “Life in School” booklet was used for evaluation. Reductions in bullying were rather small, of the order of 1% to 4% in the five secondary schools (G. Smith 1997; Arora, 1994b). This project provided the video for use with the first (1994) DFE pack *Don’t Suffer in Silence*.

The Police Research Group of the Home Office funded a project carried out in deprived inner city areas in London and Liverpool (1991–93). In

**Table II.** Types of Peer Support Schemes

	5–9 yrs	9–11 yrs	11–18 yrs
Cooperative group work	Yes	Yes	Yes
Circle time	Yes	Yes	Yes
Circles of friends	Yes	Yes	Yes
Befriending	No	Yes	Yes
School watch	No	Yes	Yes
Conflict resolution/mediation	No	Yes	Yes
Counselling based approaches	No	No	Yes

each area, one primary and secondary school took part, as well as a staff-student anti-bullying working party. The primary schools included a video and peer support program; the secondary schools used assertiveness training and conflict mediation skills (Pitts & Smith, 1995). Self reports of being bullied decreased in both primary schools, by up to 40%; attitudes improved, and teachers and lunchtime supervisors were perceived as doing more about bullying. Bullying also reduced in the Liverpool secondary school, by about 20%. In the London secondary school it increased by around 7%; this school was affected by an increase in racial tension in the neighbourhood during this period. The surrounding community may be an important factor in school bullying (Randall, 1996).

More recent developments in the U.K. (featuring in the second edition of the DfEE pack) have included many developments in peer support systems—see Cowie and Wallace (2000), and Table II. These appear to be promising, but have not yet been systematically evaluated on a large scale.

## TORONTO, CANADA

The Toronto Anti-Bullying Intervention program (Pepler, Craig, Ziegler & Charach, 1993; 1994) was commissioned by the Toronto Board of Education in 1991, following results of an earlier bullying survey in Toronto schools that found that 20% of children reported having been victimised more than once or twice a week during the term (Ziegler & Rosenstein-Manner, 1991). This intervention program worked with approximately 1000 children aged 8 to 14 from 4 elementary (primary) schools. The intervention was modeled after the Bergen Anti-Bullying program, working at school, classroom and individual levels. Pepler *et al* (1994) stress, however, that the Toronto project was a lot more modest in scope compared to the Bergen one, since it was not embedded in a nation-wide campaign (as was the case in Norway), but relied almost exclusively on teachers and other school staff for development and implementation.

The program components included the development of a code of behavior in all four schools, increased supervision on the playgrounds and corridors, the establishment of class rules and the introduction of various activities in the classroom, such as the use of drama and language work with bullying themes to encourage discussions of the problem. Three of the four Toronto schools also implemented a peer conflict-mediation program (which did not form part of the Bergen model). This program trains children on how to intervene in conflict situations at school and elsewhere, and even though it is aimed at any type of interpersonal conflict, it encompasses bullying situations as well.

A slightly modified version of the Olweus Bully/Victim questionnaire translated into English was used for the pre- and post-intervention assessments. The second testing took place 18 months following the implementation of the intervention program. In addition, a classroom activities questionnaire was administered to the teachers in order to collect information on the components used by the various schools at the classroom level. Finally, qualitative data on the implementation of the program were collected by means of face-to-face interviews with the team-leaders of the four schools.

The results of the questionnaire survey showed no significant changes in the proportion of children who had been bullied more than once or twice a term, but a small, significant reduction (about 5%) of children reporting having been bullied at least once in the last five days. On the other hand, significantly more children reported having bullied others more than once or twice a week during the term and at least once during the last five days over the 18-month period. Very small changes were found in other behavioral and attitudinal measures studied, such as teachers and parents' reactions to bullying and level of peer involvement in bullying situations. Discussing the program's results, Pepler *et al* (1994) point out the lack of support at national level and the rather short time available for the implementation of the project.

### **SCHLESWIG-HOLSTEIN, GERMANY**

The implementation of an Anti-Bullying Program in the state of Schleswig-Holstein in Germany, funded by the state Ministry of Education and Research, took place between 1994 and 1996 (Hanewinkel & Knaack, 1997; Hanewinkel & Eichler, 1999). Forty-seven schools participated in the initial, preintervention survey in 1994 comprising approximately 14,500 students; however, only 37 schools (10,600 students) participated in the follow-up survey one to two years later. The sample consisted of primary and secondary schools, with ages of students ranging from 8 to 18 (a difference

from the other programs reviewed here, which were aimed at students up to 14–16). An age-cohort design, similar to that of the Bergen study, was used.

The program was based closely on the Norwegian one, including core intervention measures at school, classroom and individual levels. A German version of the Olweus Bully/Victim Questionnaire was used in the pre- and post-intervention evaluation surveys.

The evaluation of the study showed a modest reduction in the reported frequencies of having been directly and indirectly bullied<sup>4</sup> “now and then” or more frequently (an average of 2% up to grade 10, or age 16), with a substantial change in the opposite direction (i.e. an increase of reported victimization) in grades 11 and 12 (ages 17–18). Similarly, small reductions were found in the frequencies of self-reports for bullying others, again up to age 16, with ages 17–18 showing a change in the opposite direction (increase in the number of reports of bullying others). It is important to note here, however, that the percentages of reductions in levels bullying reported by Hanewinkel and his colleagues refer to the *whole* sample of children participating in the study, rather than the sub-sample of victims only, as it has been the case with the other studies reviewed here.

The authors discuss the relative failure of the program in terms of the differences between schools both in terms of baseline (i.e. pre-intervention) frequencies of bullying behavior (which ranged from 11% to 49% across schools) and also in terms of the extent of implementation of different aspects of the program. The authors also point out that at least part of the apparently “negative” effects observed in the higher grades may be due to “sensitisation,” meaning that students who have been made aware of the problem as a result of the intervention program may be more likely to identify and report victimization. The same point had been made regarding the Sheffield project (Smith & Sharp, 1994, p. 54).

## SOUTH CAROLINA, USA

The Office of Juvenile Justice and Delinquency Prevention awarded funding to researchers at the University of South Carolina in order to implement an Anti-Bullying Program in schools in rural communities of South Carolina (Melton, Limber, Cunningham, Osgood, Chambers, Flerx, Henggeler & Nation, 1998; Olweus & Limber, 1999). Thirty-nine schools participated in the program with a total of approximately 6250 students in grades four to six (ages 9–11) who were followed during two years of intervention (March 1995–March 1997). During the first year of the intervention,

<sup>4</sup>Indirect bullying here refers to social exclusion.

11 schools received intervention with 28 schools acting as controls and the findings reported here refer to the comparisons between intervention and control schools after the first year of intervention (1995–96).<sup>5</sup>

The overall nature and goals of the project were generally similar to the original Norwegian program, including core intervention measures at all three levels: school, classroom and individuals. However, the program was adapted to meet the particular needs of the target population. Some important additions included the development of additional supportive materials for school staff (e.g. teacher guide books) and the involvement of members of the local community in the anti-bullying initiative, which included efforts to inform a wide range of local residents of the program and to engage them in the anti-bullying activities within the schools or the community.

The results of the evaluation study showed no significant effects for students' reports of being bullied, but did show a significant reduction in students' reports of bullying other children (by approximately 25%) in the intervention schools, with a corresponding increase in the control schools. With regard to the frequency of general anti-social behavior (such as vandalism and school misbehavior), there was no increase or a very slow rate of increase in the intervention schools, while an expected increase over time was observed in the control schools.

## FLANDERS, BELGIUM

Stevens, de Bourdeaudhuij and van Oost (2000) report the results of an Anti-Bullying Intervention program implemented in the Flemish part of Belgium between 1995 and 1997. The Flemish program worked with 18 primary and secondary schools and a total of 1104 students aged 10–16 years. The intervention drew on both the Bergen and Sheffield programs, comprising components at school, classroom and individual levels, and including developing a whole-school anti-bullying policy, which included establishing relevant class rules, introducing classroom activities in order to increase awareness and provide training for coping and/or intervening with bullying problems, and measures addressed specifically at bullies and victims.

Given the rather mixed results of previous efforts in implementing similar large-scale interventions, Stevens and her colleagues were interested in finding out among other things whether additional support provided by

<sup>5</sup>During the second year of the program 7 schools out of the control ones started receiving intervention as well, thus increasing the number of the intervention schools to 18 (with 21 in the control group). The authors, however, limit their reports of the results to the first time period only, stating that the analyses from subsequent testings are less interpretable due to the design of the study (Olweus & Limber, 1999).

the research group to the participating schools results in greater improvements on bully/victim relations. This hypothesis was based on the observation that the successful implementation of the anti-bullying program in Bergen was accompanied by extensive support to the schools by Olweus and his colleagues, whereas the less successful implementation of the project in Rogaland relied almost entirely on the schools themselves for implementing the program.

An experimental design was employed, with random assignment of schools to one of three conditions: Treatment with Support, Treatment without Support and Control. Three primary and three secondary schools were assigned to each of these three conditions. Schools in the two treatment conditions took part in the intervention program. In order to test the hypothesis concerning external support, schools in the Treatment with Support condition also received approximately 25 hours worth of training and individualized feedback on implementing the anti-bullying measures. Control schools had neither treatment nor support.

An assessment survey was carried out before the start of the intervention program using the Olweus Bully/Victim Questionnaire and the Life in School checklist (Arora, 1994a), which includes items on the frequency of various types of bullying behavior, but also on positive interactions among students. The same instruments were used at the two post-intervention surveys conducted 8 and 20 months later.

A main finding of the study concerns the differential impact that the intervention had on primary and secondary school students. Specifically, primary school students of schools in the two Treatment groups (with and without Support) showed no increase or a slight decrease in bullying behavior compared with children in the control schools, whose bullying behavior increased over time. However, no significant differences were found between the two intervention groups and the control group in frequencies of having been bullied. With regard to secondary school students, no significant differences were found between the two intervention groups and the control group. Finally, providing external help (Support) did not seem to have an impact on the effectiveness of the program either at primary or secondary schools.

## SUMMARY OF SCHOOL-BASED INTERVENTION RESULTS

It is clear from the above review that anti-bullying programs have had mixed results in the various countries where they have been implemented. The first implementation of such a program in Bergen has been by far the most successful one, with subsequent attempts yielding more modest

outcomes. The reasons for this are not entirely clear, but various suggestions can be made.

## THE NATIONWIDE CONTEXT

The original Bergen program was part of a nation-wide campaign, rather than a more or less isolated attempt in a particular city or region, as was the case with the other programs. This probably meant that more support and resources were available to Norwegian schools implementing the program, while relevant media coverage must have been an additional source of encouragement to participating schools. However, the lack of results from the Rogaland survey, and the lack of "Support" effects in the Flanders project, suggest that the mere presence of a nationwide campaign or of extra support "given" to schools, may not be a decisive factor. More important may be the effort schools themselves decide to invest in anti-bullying work; a relationship between the effort put into the program by each school and the outcomes obtained has been reported by various researchers (Smith & Sharp, 1994; Hanewinkel & Eichler, 1999; Olweus, 1997).

## MAINTAINING EFFECTIVENESS OF INTERVENTIONS

Do any effects last after the intervention stops? We have seen how Roland (1993) has argued that a delayed posttest might have affected the Rogaland results. Typically, the intervention programs have not included a follow-up after the main intervention has ceased. However, Eslea and Smith (1998) did report a follow-up of 4 primary schools in the UK Sheffield project, a year after the intervention had finished. Of four schools followed up in detail a year after the project had finished, two had reduced bullying further, in one there was little change, and in one it had got worse again. A relevant factor was the extent to which the policy was "kept alive" once initial project involvement had finished. What incentives are there to keep policies active? In England, legal requirements plus periodic inspections may help this process (Smith, 2000).

## SENSITIZATION EFFECTS

An integral part of both the Bergen and Sheffield programs has been a raising of awareness of pupils (and others) in the participating schools. This might typically include discussion of what constitutes bullying, the need to

tell someone if you are bullied and cannot cope, etc. Assessments of these programs have generally relied on self-report questionnaires. However, the awareness raising might tend to increase rates of response, quite independent of any “real” increase; or, a “real” decrease in victimization might be masked in this way—as commented on earlier. A range of assessment measures might be useful in trying to avoid this problem.

### **DO WE TACKLE GIRLS BULLYING EFFECTIVELY?**

Boys and girls, tend to use and experience different types of bullying—boys more physical, girls more indirect or relational. Boulton (1997) found that English school teachers recognised physical and verbal forms of bullying, but less than half of them regarded social exclusion as bullying. Eslea and Smith (1998), in their follow-up of schools in the UK Sheffield project, concluded that girls’ bullying, while less frequent than boys’, may be more difficult to tackle; in the 4 schools they surveyed, boys’ bullying had continued to fall in all four schools, but girls’ bullying only in one.

It is quite possible that the physical bullying more characteristic of boys, and verbal bullying found equally in both sexes, is well recognised and well targeted in awareness raising, intervention materials and school anti-bullying policies; but perhaps indirect and social exclusion forms of bullying are less well recognised and less well targeted. If so, we may not impact so effectively on girls bullying (Owens et al., 2000).

### **DO WE TACKLE DIFFERENT ROLES IN BULLY-VICTIM RELATIONSHIPS?**

The Salmivalli et al. (1996) roles may help us consider whether we should do more in intervention work than just think of “bullies” and “victims.” For example, Sutton, Smith and Swettenham (1999) found that some bullies, especially Ringleader Bullies, are skilled at social manipulation and “theory of mind” tasks but lack empathy. Also, Kaukiainen et al. (1999) found that social intelligence was related to aggression, especially indirect aggression. What implications do these studies have for intervention? At least, some forms of “social skills training” for bullies might be inappropriate (though empathy training would not be).

Relatedly, the role of Bystander, as well as Defender, deserves more attention in intervention programs. How can we mobilise attitudes and behaviour of noninvolved children in a more positive way—or turn Bystanders into Defenders? Peer support programmes have been developing in many

schools, which, in part, have this kind of aim (see Table II). However, these need much more evaluation than they have had so far (Cowie, 2000; Peer support networker website). One problem is that it is easier to recruit girl rather than boy pupils as peer supporters. Also, the social status of peer supporters may be an important variable in their effectiveness. However, there is some evidence that peer support schemes encourage victims of bullying to seek help more often, whether from a peer supporter or an adult (Naylor & Cowie, 1999).

## AGE DIFFERENCES

The programs so far seem to have had a stronger positive effect on primary school students compared to secondary school students. Such an effect was found in both the Sheffield and the Flanders studies where results from comparisons between the two groups are explicitly reported. A similar trend can be observed in the German data, where frequencies of reported victimization (for direct bullying) have decreased less for older children after the intervention (and have in fact *increased* for adolescents aged 17–18). Stevens *et al* (2000) suggest both developmental characteristics of older children as well as organizational features of secondary schools as possible reasons for this difference. This might suggest the need for greater tailoring of interventions to age groups, plus, perhaps, starting early before the problem becomes more intractable by secondary school (Arora, 1994b).

## DO WE START INTERVENTIONS EARLY ENOUGH?

Both Bully and Victim roles seem rather stable by middle childhood—8 to 12 years. By middle school, roles of bully and of victim are moderately stable. In the U.S.A., Egan, Monson and Perry (1998) examined the predictors of aggression and victimisation in a sample of 8 to 13 year olds. Aggressive behaviour in the autumn predicted aggressive behaviour the following spring; similarly, victimisation in the previous autumn predicted victimisation the following spring. Hodges and Perry (1999) examined the continuity of victimisation during middle childhood over a one year period and reported that initial victimisation accounted for 71% of the variance in victimisation one year later. In England, Boulton and Smith (1994) reported that both bully and victim role showed high stability in a group of eight to nine year olds.

But what about earlier? Monks, Smith and Swettenham (submitted) have found that at 4–6 years bully status has some stability (at this age, “aggressive” may be a more appropriate term rather than “bully”), but victim

status is not stable yet. Kochenderfer and Ladd (1996) also found low stability for the victim role, in US kindergartens. If this is confirmed by further studies, then it suggests that between around 5–6 years, and 8–9 years, some pupils are getting put into a victim role and perhaps labelled as such by peers, starting a vicious cycle of behaviour and reputation from which it may become progressively more difficult to escape. In that case, should we intervene earlier, and help prevent some pupils from becoming “victims”—perhaps using age-appropriate forms of assertiveness training, or peer support?

## SUMMARY

School bullying is a pervasive problem, now widely recognized as such in many countries. It affects a significant minority of school children, and can have both immediate and long-term negative effects, especially on the victims but also on the general school climate. There are several types of causes of bullying/victimisation and a range of possible school-based interventions.

The large-scale school-based interventions have been assessed in several countries, with moderate success — but apparently with more success in primary schools than secondary schools. There is still much to learn about how to design and implement effective intervention programs. Especially, we may need to consider ways of keeping interventions effective once the immediate impetus or research program is over; ways of tackling indirect as well as direct bullying; ways of dealing with different roles in bullying and mobilizing the wider peer group to give more support to victims; and ways of intervening early in school life to prevent some children becoming labeled as victims. Effective action against bullying is not going to be easy, but it is certainly a very worthwhile objective to pursue for the happiness of pupils and well-being of school communities.

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