The Olweus Bullying Prevention Program: Implementation and Evaluation over Two Decades

Dan Olweus
Susan P. Limber

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Dan Olweus, Fil.Dr., is Research Professor of Psychology at the University of Bergen, Bergen, Norway. olweus@psyhp.uib.no.

Susan P. Limber, Ph. D., is Professor at the Institute on Family and Neighborhood Life, Clemson University. slimber@clemson.edu.

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In 1983, after three adolescent boys in Norway committed suicide, most likely as a consequence of severe bullying by peers, the Norwegian Ministry of Education initiated a nation-wide campaign against bullying in schools. What has later become known as the Olweus Bullying Prevention Program (OBPP) was developed and initially evaluated within this context.

In this chapter, we will describe the conceptual basis for the program and summarize findings from the first evaluation. We then will describe in some detail the components of the program as typically used in the United States and summarize subsequent evaluations of the program, primarily in Norway and the U.S.

Goals and Basic Principles of the OBPP

The main goals of the OBPP are to reduce existing bullying problems among students at school, prevent the development of new bullying problems, and more generally, achieve better peer relations at school (Olweus, 1993a; Olweus, Limber, & Mihalic, 1999; Olweus et al., 2007). These goals are met through a restructuring of the child’s social environment at school. The restructuring is intended to reduce both opportunities and rewards for engaging in bullying behavior and to build a sense of community among students and adults within the school environment. Positive, pro-social behaviors are encouraged and rewarded (Olweus, 1993a, 2001a; Olweus et al., 2007).
The OBPP is based on four key principles: Adults at school should: (1) show warmth and positive interest and be involved in the students’ lives; (2) set firm limits to unacceptable behavior; (3) consistently use nonphysical, nonhostile negative consequences when rules are broken; and (4) function as authorities and positive role models (Olweus, 1993a, 2001a; Olweus et al., 2007). These principles are derived chiefly from research on the development and modification of the implicated problem behaviors, in particular aggressive behavior (Baumrind, 1967; Loeber & Stouthamer-Loeber, 1986; Olweus, 1973, 1978, 1979, 1980). These listed principles have been translated into a number of specific measures to be used at the school, classroom, individual, and in some contexts, the community level. These components will be described in some detail below.

Initial Evaluation of the OBPP

The OBPP was first implemented and evaluated in the First Bergen Project against Bullying, a longitudinal study that followed approximately 2,500 school children over a period of two-and-a-half years, from 1983 to 1985. Because the project was part of a nationwide campaign against bullying, it was not possible to conduct an experimental study with schools or classes randomly assigned to treatment and control conditions. Instead, an extended selection cohorts design (see below) was utilized in which same-aged students from the same schools were compared across three points in time (Olweus, 1991, 1993a. 1997, 2005). At Time 1, participants belonged to 112 classes in grades 5-8 from 28 elementary and 14 junior high schools in Bergen, Norway. The number of students participating in the 1983-84 evaluation (grades 6 through 8) was
approximately 1750 at each time point. The corresponding 1983-85 evaluation (grades 7 and 8) was based on approximately 1210 students.

Results from the evaluation revealed marked (and statistically significant) reductions in self-report of bully/victim problems (based on an early version of the Olweus Bully/Victim Questionnaire, 1986). In the 1983-84 evaluation, the relative reduction for being bullied was 62.0% (from 10.0% to 3.8%) and 33.0% for bullying other students (from 7.6% to 5.1%). Corresponding results for the 1983-85 evaluation, involving the grade 7 and 8 students, were 64.0% (from 10.0% to 3.6%) and 52.6% (from 7.6% to 3.6%) (Olweus, 1991, 1993a, 1997; Olweus & Alsaker, 1991). Similar results were obtained for two aggregated peer rating variables (class-aggregated peer estimates of “number of students being bullied in the class” and “number of students in the class bullying other students”) and teacher ratings of bully/victim problems at the classroom level. With regard to the teacher data the effects were somewhat weaker. A marked “dosage-response” relationship ($r = .51, n = 80$) was observed, such that those classes in which essential components of the program (classroom rules against bullying, use of role playing, and classroom meetings) had been implemented experienced greater reductions in bullying problems (Olweus & Alsaker, 1991). Finally, the study also documented significant reductions in self-reports of general antisocial behavior, including vandalism, theft, and truancy, and improvements in aspects of the “social climate” of the class: Improvements in students’ self-reports of satisfaction with school life, improved order and discipline, more positive social relationships, and a more positive attitude toward school work and the school in general.
Detailed analyses of the quality of the data and the possibility of alternative interpretations of the findings led to the following general conclusions: It is very difficult to explain the results obtained as a consequence of a) underreporting by the students; b) gradual changes in the students’ attitudes to bully/victim problems; c) repeated measurement; or d) concomitant changes in other factors, including general time trends (Olweus, 1991).

**Factors Affecting Program Implementation**

Research and experience indicate that implementation of the OBPP can vary substantially among teachers and schools (Kallestad & Olweus, 2003; Limber, 2006; Olweus, 2004). Systematic examinations of factors that affect implementation of prevention programs are relatively scarce but critical. As Biglan (1995) noted, “the adoption of an effective practice is itself a behavior in need of scientific research” (p. 51).

In an attempt to understand teacher- and school-level factors that affect implementation of the OBPP, Kallestad and Olweus (2003) analyzed responses of 89 teachers from 37 schools and assessed program implementation at two points in time in the First Bergen Project against Bullying. Although this multilevel study was not published until in 2003, the implications of the analyses were known and incorporated into the OBPP and its model of implementation long before publication of the paper. A detailed discussion of our findings and conclusions is beyond the scope of this chapter but can be found elsewhere (Kallestad & Olweus, 2003; Olweus, 2004a). Here only a few general points will be emphasized.

The results from this study clearly indicated that the teachers were key agents of change with regard to adoption and implementation of the OBPP. Substantial amounts of
variance in implementation could be predicted on the basis of teacher-level variables such as “perceived staff importance” (teacher efficacy), “having read (more of) the program materials”, and “affective involvement“ (empathic identification with victims of bullying). School-level variables such as “openness in communication among staff” (positive attitude to change) and the “school’s attention to bullying problems” contributed substantially to prediction. This study shed light on several factors of importance and contributed to a better understanding of the process of program implementation. The results also suggested ways in which the program itself and its implementation could be improved.

Cultural Adaptation

Although the basic principles of the OBPP and its core components have remained largely unchanged, research and extensive experience from implementing the program in the field have naturally led to some adaptations of the program to different cultural contexts. The current employment conditions of teachers in the United States, for example, are such that less time can be devoted to staff discussion group meetings (below) than in Norway. As a consequence, the Bullying Prevention Coordinating Committee has been assigned a somewhat different role and greater responsibility for implementation of the program in the United States than in Norway (Limber, 2004). The organization of the training of trainers (named instructors in Scandinavia) also differs somewhat in the two countries (Olweus et al., 2007; Olweus, 2001a, 2004a). Similarly, in line with much American tradition and recognizing the importance of community involvement in prevention efforts more generally and outside the school context, recent
implementations of the program in the United States have encouraged schools also to include community-level components.

Table 1 summarizes the components of the OBPP at each of the four levels of focus as typically used in the United States the school, the classroom, the individual, and the community. Below, we will describe components at each of these levels of OBPP. Two recently published manuals, a Teacher Guide (Olweus & Limber, 2007) and a Schoolwide Guide (Olweus et al., 2007), provide much more detail about the program and its components for interested readers.

School-Level Components

Typically, the following eight program components are implemented school-wide.

Bullying Prevention Coordinating Committee. The Bullying Prevention Coordinating Committee (BPCC) is a building-level committee that is responsible for ensuring that all components of the OBPP are implemented in a school. The BPCC is a representative team from the school and broader community, which typically is comprised of 8-15 members, including a school administrator, a teacher from each grade level, a school counselor and/or school-based mental health professional, a representative of the non-teaching staff (such as a bus driver, custodian, or cafeteria worker), one or two parents, a representative from the community (such as staff from an after-school or youth organization or key representatives from the business or faith community), and other school personnel who may bring particular expertise (such as a nurse, school resource officer, Title IX representative). Where appropriate, one or two student representatives may also serve on the committee (typically middle, junior, or high school grades). As an
alternative, a separate student advisory committee may be formed to help ensure meaningful participation by students in the planning and implementation of the program.

The responsibilities of the committee are to attend an intensive 2-day training by a certified OBPP trainer; develop a plan to implement the OBPP at their school; communicate the plan to staff, parents, and students; coordinate the program with other prevention/intervention efforts at the school; obtain ongoing feedback from staff, parents, and students about the implementation of the OBPP and make adjustments to the school plan as needed; and represent the program to the broader community (Olweus et al., 2007). The BPCC typically is chaired by an on-site OBPP coordinator, who may be a school counselor, administrator, prevention specialist, or a member of the non-teaching staff. The committee meets regularly throughout the life of the program (at least monthly for the first year of the program).

Training and consultation. In addition to the 2-day training provided to members of the BPCC, a certified Olweus trainer provides at least one year of in-person or telephone consultation to the school’s on-site coordinator to help ensure fidelity to the model and to problem-solve as needed. Members of the BPCC (often with assistance from the trainer) provide a full day of training for all school staff prior to launching the program. Supplemental trainings that provide more intensive attention to particular topics (e.g., cyber bullying, classroom meetings) also may be held, as are yearly catch-up trainings for new staff.

Administration of the Olweus Bullying Questionnaire. The Olweus Bullying Questionnaire is a validated, self-report survey that assesses students’ experiences with and attitudes about bullying (Olweus, 2007; Solberg & Olweus, 2003). The
questionnaire is administered (usually anonymously) to students in grades 3-12 prior to
the implementation of the program and at regular (typically yearly) intervals thereafter.
The questionnaire provides a detailed definition of bullying and, among other questions,
asks students to disclose the frequency with which they have experienced and
participated in bullying in the past couple of months. The current scannable
questionnaire (for use in the United States, Olweus, 2007) has 40 standard questions,
including some new questions about students’ experiences with cyber bullying. A
standard report of findings is produced for schools, which provides detailed information
(in tables, graphs, and narrative) about the findings, frequently broken down by gender
and grade. Schools use results from the survey to help raise awareness among students,
staff, and parents about the problems of bullying; make specific plans for the
implementation of the OBPP; and assess change over time (for girls and boys and across
grade levels).

*Staff discussion groups.* Discussion groups of teachers and other school staff meet
on a regular basis in order to learn about and have in-depth discussions about the OBPP
and reflect on bullying and related prevention efforts at the school. These groups
typically consist of no more that 15 personnel and are led by a member of the BPCC. It
is recommended that they meet at least once per month for the first year of the program,
and somewhat less frequently after that.

*School rules and positive and negative consequences.* Schools are asked to adopt
four specific rules about bullying.

1. We will not bully others.

2. We will try to help students who are bullied.
3. We will try to include students who are left out.

4. If we know that somebody is being bullied, we will tell an adult at school and an adult at home.

The rules cover both direct and indirect forms of bullying, including social isolation and intentional exclusion from the peer group (Olweus & Limber, 2007). They are posted throughout the school, and discussed with students and parents. Teachers and other staff are taught how to apply consistent positive and negative consequences to reinforce these rules.

Supervisory system. The BPCC in each school reviews and refines its supervisory system with the goal of reducing bullying behavior. This review includes determining “hot spots” for bullying based on results of the Olweus Bullying Questionnaire, developing strategies to increase supervision in common “hot spots,” developing means of tracking and reporting bullying, assessing the attitudes and skills of supervising adults, and evaluating the school’s physical design to reduce bullying.

School kick-off event. Each school launches its program with students with an individually-designed event that is intended to increase awareness about bullying, introduce the OBPP to students, and clarify the school’s rules and procedures relating to bullying. Schools are encouraged to hold a kick-off each subsequent year to introduce the program to new students and remind returning students about the school’s efforts to prevent bullying.

Parent involvement. Parents are viewed as important partners in preventing and intervening in bullying. They are involved in the OBPP in a number of ways, including serving on the school’s coordinating committee, attending kick-off events and/or
schoolwide parents meetings, and receiving regular information about bullying and the OBPP through brochures, newsletters, events, and online bulletin boards.

*Classroom-Level Components*

As illustrated in Table 1, there are three classroom-level components of the OBPP.

*Post and enforce school-wide rules against bullying.* Teachers discuss in detail with their students (for example, in classroom meetings, below) the schoolwide rules about bullying to make sure the students have a clear understanding of what they are and mean. These rules cover both direct and more indirect forms of bullying including social isolation and intentional exclusion from the peer group (Olweus & Limber, 2007). The rules are posted in every classroom for easy reference, and they are enforced using consistent positive and negative consequences. This common set of rules sends a signal to students, parents and others that the school has a unified and coordinated policy against bullying. These rules should be an independent part of the school’s discipline policy (Olweus & Limber, 2007).

*Classroom meetings.* An important component of the OBPP are regular (weekly) class meetings in which teachers and students discuss bullying and related issues. Purposes of the class meetings are to build class cohesion and community, discuss rules about bullying and positive and negative consequences for following or not following the rules, help students understand their roles in preventing and stopping bullying, and problem-solve strategies for addressing bullying. As part of these meetings, students engage in role-playing, which is intended to help build empathy and perspective-taking skills, generate possible solutions to bullying situations, and practice positive actions to take when confronted with bullying.
**Classroom meetings with parents.** Within the classroom setting, teachers are encouraged to hold several classroom-level meetings with parents about the OBPP. The purposes of these meetings are to help parents understand problems associated with bullying and ways that the school is addressing bullying through the OBPP, and to solicit parental input and involvement in the program (Olweus & Limber, 2007). Small, classroom-level meetings with parents also may help to build rapport with the teacher and build connections among parents of students in the class.

Finally, although not a core classroom-level component of the OBPP, schools are encouraged to integrate bullying prevention messages and strategies throughout the curriculum.

**Individual-Level Components**

As illustrated in Table 1, there are several individual-level components of the OBPP. First, staff are encouraged to increase supervision of students, particularly in known “hot spots” for bullying, and particularly of students who are known or suspected to be involved in bullying. Second, all staff are trained to intervene on-the-spot whenever they observe bullying. Specific procedures also have been developed to guide staff in how to react when a bully/victim problem has been identified or is suspected in a classroom. These procedures include serious talks with the child who is suspected of being bullied and his or her parents and after that, similar talks with the the child who is suspected of bullying, and his or her parents. A clear message is communicated that the bullying will be stopped and that the situation will be closely monitored (see Olweus & Limber, 2007, Chapter 8). In some schools, these meetings are conducted by counselors or administrators, but wherever possible, it is recommended that the meeting be led by
the children’s primary teacher or the staff member with the closest relationship with the
student(s) involved. Finally, schools are encouraged to work with parents and mental
health professionals to develop individualized plans, where appropriate, to provide
support and other help for students who have been bullied and to correct the behavior of
students who bully other students.

Community-Level Components

Recognizing that bullying does not stop at the doors of a school, committee
members are encouraged to involve one or more community members on their BPCC,
look for ways that community members can support the school’s bullying prevention
program, and collaborate to spread bullying prevention messages and strategies beyond
the school into community settings where children and youth gather.

Subsequent Outcome Studies of the OBPP

Subsequent to the initial evaluation of the OBPP in the First Bergen Project against
Bullying, six follow-up outcome evaluations of the OBPP have been conducted in
Norway. The program has also been evaluated in several diverse communities in the
United States, including rural South Carolina (Limber, Nation, Tracy, Melton, & Flerx,
2004; Melton et al., 1998), inner-city Philadelphia (Black & Jackson, 2007), suburban
Chula Vista, CA (Pagliocca, Limber, & Hashima, 2007), and Washington state (Bauer,
Lozano, & Rivara, 2007).

In addition, several school-based anti-bullying programs inspired by the OBPP
have been implemented and evaluated in various countries including Belgium (Stevens,
de Bourdeaudhuij, & Van Oost, 2000; Stevens, Van Oost, & de Bourdeaudhuij, 2004),
Canada (Pepler, Craig, Ziegler, & Charach, 1994; Pepler, Craig, O’Connell, Atlas, &
Charach, 2004), Germany (Hanewinkel, 2004), and the United Kingdom (Whitney, Rivers, Smith, & Sharp, 1994; Eslea & Smith, 1998; Smith, Sharp, Eslea, & Thompson, 2004). The results from these studies have been mixed, with both positive and negative (null) results, and it is important to emphasize that these studies cannot be seen as replications of the OBPP. The programs used in these interventions have deviated considerably, but to different degrees, from the OBPP model in terms of program content implementation model, or actual implementation.

In this context, a study in the county of Rogaland, Norway, should be mentioned. In a short book chapter, Roland (1989) has claimed that an intervention study parallel to the one in Bergen was conducted in Rogaland with primarily negative results when outcome data were collected after three years, ending in 1986. In several respects, this account is grossly misleading. In summary, it has repeatedly been shown (e.g., Olweus, 1999a, 2004a) that the studies in Bergen and Rogaland were two very different projects in terms of planning, data quality, times of measurement, and contact with the schools, and accordingly, also in terms of expected results. We find it necessary to point this out since several authors in the field still continue to erroneously present the Rogaland project as an (unsuccessful) evaluation of the OBPP.

Methodological Comments

Design issues. Before describing the individual outcome studies, some methodological comments are in order. With the exception of the New Bergen Project against Bullying (Olweus, 1999b, 2004b), the South Carolina project (Melton et al., 1998), and the Washington state study (Bauer et al., 2007), which used a traditional (non-randomized) control group design, and the Philadelphia study (Black & Jackson, 2007),
all evaluation studies have used the extended version of the selection cohorts design
(Olweus, 2005; Cook & Campbell, 1979; sometimes called age-cohort design, Judd & Kenny, 1981). In this design, the data from two presumably equivalent (grade or school) cohorts of students are compared at two (or more) time points. One cohort provides data for Time 1 (before intervention) and the other data for Time 2, typically one year later and after approximately 8 months of intervention. In order to rule out explanations of the results in terms of differences in age or maturation, possible developmental changes are controlled by comparing age-equivalent groups/cohorts at the various time points. In our studies, for example, grade 7 students at Time 2 (intervention group) are compared with same-aged grade 7 students from the same schools at Time 1 (control condition, before intervention). Similar comparisons can be made for sets of grade cohorts such as grades 4 through 7 which cohorts have been the main target groups for the OBPP.

A strength of the design is that the majority of the members in the various grade cohorts have been recruited from the same, usually relatively stable populations and have been students in the same schools for several years. Consequently, there are often good grounds for assuming that a cohort measured at Time 1 differs only in minor ways from the adjacent cohort with which it is compared at Time 2. Another advantage is that several of the cohorts serve both as a baseline (Time 1) group in one set of comparisons and as an intervention (Time 2 or Time 3) group in another. This fact will serve as partial protection against selection bias (see Olweus, 2005).

In any study designed to evaluate the possible effects of an intervention program (or other similar factor), it is mandatory that the researcher examines and ideally is able to rule out most or all alternative explanations of the results in terms of possible
confounding, “irrelevant” factors. This is true whether the study is experimental with randomization of subjects on conditions or quasi-experimental (Cook & Campbell, 1979). In addition, selection of groups/subjects in this design is typically not based on some kind of "extreme score" criterion. Thus, the problem with "regression toward the mean," which looms large in many evaluation studies, is not an issue with this methodology.

The logic of the extended selection cohorts design (a quasi-experimental design) and possible threats to the “internal validity” of this design are discussed in considerable detail elsewhere (Olweus, 2005). One particular threat to consider in this design concerns the possibility that changes in the outcome variable at Time 2 (or Time 3) are a consequence of some irrelevant factor concomitant to the intervention, implying that obtained results can be given a “history interpretation”. This threat may be difficult to completely rule out in a single study if little is known about results from studies with the same outcome variables without intervention. However, as regards the “being bullied” and “bullying other students” variables, which are regularly used in evaluations of the OBPP, there are now a number of large-scale Norwegian population studies without systematic intervention, which have shown very small or no changes for comparable cohorts in successive years (Furre, Danielsen, Stiberg-Jamt, & Skaalvik, 2006). Such findings certainly support an interpretation of positive intervention results in terms of effects of the intervention rather than of some other concomitant factor, including time trends and media attention.

Moreover, when positive results are repeatedly obtained in adequate replications, under somewhat varying conditions and in different time periods, this of course makes a history interpretation of the findings much more unlikely. In addition, the structure of the
data obtained in the New National Initiative (described below) can shed a special light on the reasonableness of a history interpretation of our findings with the OBPP. This point will be discussed in a later section of the chapter.

Statistical analyses and effect sizes. In all studies over which we have had some control, our statistical analyses have taken the hierarchical or nested structure of the data into account, with students nested within classrooms nested within schools. This is necessary to get correct (not too small) estimates of standard errors and thereby adequate tests of the significance of the intervention effects. One way of doing this is to adjust the magnitude of the standard errors (upwards) in a way that corresponds to the degree of dependence among the students (data) within the higher unit (by multiplication of the “ordinary” standard errors by the “design effect factor”; see Kish, 1987, p. 203, for example). In the more recent projects, we have used so called mixed models with the SPSS program or multilevel models with the HLM and/or Mlwin software packages. If the ordinary General Linear Model with standard t- or F-tests is used on nested data—a practice that is still quite common— the standard errors will be too small, resulting in too many significant findings. This problem has been pointed out in a number of publications over the past 10-15 years (e.g., Bryk & Raudenbush, 1992; Murray, 1998; Zucker, 1990) but many “interventionists” do not seem to be aware of this problem. As a consequence, many studies of intervention effects are incorrectly analyzed and may be considerably biased in a positive direction.

In several of our Norwegian evaluation studies, we have not provided much statistical detail with specified t- or F-tests and associated p-values. Although the standard alpha levels of .05, .01 may be considered a kind of benchmark against which
the results obtained can be compared, such comparisons become less meaningful when
the sizes of the samples involved are large or very large, which is the case with most of
our studies. Under such conditions, even very small differences or changes become
statistically significant. However, in various overview papers of our studies we have
often noted that all main conclusions about the effects of the intervention program are
based on results that are statistically significant or highly significant (e.g., Olweus, 1991,
2005).

Against this background, we have typically found it more meaningful to focus on
some form of measure of the size of the intervention effects. A common effect size
measure is Cohen’s \( d \) (J. Cohen, 1988), the standardized mean difference, which is a
useful measure for many purposes and situations. However, for universal intervention
programs, which aim to target all students in a unit such as a school, a measure like
Cohen’s \( d \) (or a point biserial correlation or some variant of \( d \)) will be misleading, giving
estimates that are too small, often much too small. The reason is that in most bullying
intervention studies, a large proportion of the students, perhaps 60-80%, are not directly
involved in the problems (i.e., have a score of zero on relevant outcome variables such as
being bullied or bullying other students) and thus cannot change to a lower score.

Normally, the effect of an intervention is measured as the difference in proportions (or
some similar measure) of “problem” students who have been exposed or not exposed to
the intervention. With universal programs, however, the inclusion of a large group of
“non-problem”/not-involved students (who cannot “improve”) in the analyses will
considerably “dilute” the effects of the program when effect is indexed by measures such
as Cohen’s \( d \).
As a consequence, to estimate effects of the intervention, we have typically used a measure of *Relative (percentage) Change* which is calculated as the difference in percentages between the Control condition (the Time 1 measure in a selection cohorts design) and the Intervention condition one year later (the Time 2 measure for students in the same grades and schools as at Time 1 in a selection cohorts design) divided by the Control condition value. To express the value as a percentage, the difference in the numerator is multiplied by 100. To illustrate, if the percentage of bullied students in grade 6 is 20% at Time 1 and there are 15% percent bullied students among the (former grade 5, “now”) grade 6 students at Time 2 (after 8 months of intervention), the Relative Change score will be: \((20-15)*100/20 = 25\%\) reduction. However, if there are more bullied students at Time 2, this increase will come out as a negative Relative Change value. The relative change measure can also be used (with a slight modification) in a standard pre-post design with a control group and an intervention group measured at two time points. It is worth noting that the relative change measure is closely related to the measure of relative risk ratio (and Odds ratio when the relative risks are low) used in many epidemiological studies (Fleiss, 1994). These measures are not perfect with universal programs, but they give a better and more meaningful impression of what change has actually been achieved. It is often also useful to report or look at the absolute percentage change. In the example above, there would be a \(20\%-15\%= 5\%\) absolute reduction figure which can be used to estimate the number of students (in the school, school district, or larger unit) who have changed status from being bullied to not being bullied.
Outcome variables, gender differences and grade focus. For ease of understanding and convenience, most of our reports have used dichotomized versions of being bullied and bullying other students (“2 or 3 times a month” or more often) as outcome variables. There is a good deal of information about the psychometric properties of these variables (Solberg & Olweus, 2003; Olweus, 2007; Kyriakides, Kaloyirou, & Lindsay, 2006) and they have been found to function well for both prevalence estimation and the measurement of change (Olweus, in press, this volume). However, as is well known, power is weakened when graded or continuous variables are dichotomized. Accordingly, when the statistical analyses have been conducted on the graded, non-dichotomized versions of these variables, the results in terms of statistical significance have typically been even stronger. The same is true when indexes of several related items such as the mean of all forms of being bullied (or bullying other students) have been used.

In addition, it should be mentioned that in a number of more detailed analyses we have usually also found changes in related variables reflecting increased intervention efforts on the part of the schools as viewed by the students. These data strongly support the interpretation that the positive results obtained are a consequence of the intervention. To illustrate, students at Time 2 (intervention) have typically reported more active intervention in bullying situations from both teachers and peers in comparison with reports from Time 1 students. Also, at Time 2 more students have responded that the homeroom/main classroom teacher had done “much” or “a good deal” to counter bullying in the classroom in the past few months. Due to space limitations, we will not focus on such results in this chapter.
In most of our evaluation studies in Norway, the registered relative changes in bully/victim problems have been relatively similar among boys and girls. Accordingly, in order not to overwhelm the reader with data, most of our results will be presented for boys and girls combined.

As mentioned, the main target groups of the OBPP have been students in grades 4 through 7 (which represent the elementary grades in Norway; modal ages 10 though 13) and most of the evaluation results in this chapter will concern students in these grades. The program has also been used with students in higher grades, although results for the typical junior high school grades (8 through 10) have been less consistent than for the lower grades. In a later section, we will also comment briefly on results for these grades.

*The nature of the student populations studied.* A brief comment on the nature of the populations of students studied in Norway is also in order. There seems to be a common view, in particular among U.S. researchers/readers, that Norwegian/Scandinavian students are more well-adjusted and less aggressive than their counterparts in American schools and by implication, presumably easier to change with an anti-bullying program such as the OBPP. Such a view may not be unreasonable if comparison is made with American schools in very disadvantaged, inner city areas. However, if comparison is made between nationally representative samples of students in the US and Norway, there is little support for such a view, with several empirical studies actually providing evidence to the contrary. For example, the international Program for International Student Assessment study from 2002 (PISA; conducted at 3-year intervals), which contains data from large, nationally representative samples of 15-year old students from 29 OECD countries including the US, contained a set of questions about noise and
disruptive behavior in the classroom. Norway received a hardly flattering top ranking (worst of all countries) while US students occupied rank number 24, close to the bottom-ranked (best) Japanese students. In the PISA study of 2000, the results were quite similar indicating that the measured characteristics are fairly stable over time (Kjærnsli, Lie, Olsen, Roe, & Turmo, 2004, 2006).

In the International Health and Behaviour of School Children study (HBSC; Craig & Harel, 2004, with data from 2001/2002), which contains the two global questions from the Olweus Bullying Questionnaire, the levels of problems were fairly similar for U.S. and Norwegian students in grades 6 and grade 8. The same was true of “having been involved in physical fighting three or more times in the previous 12 months.” This study, which is carried out every four years, uses large nationally representative samples of students from selected grades. In the last two assessments (2001/2002 and 2005/2006), more than 30 countries participated in the study. All of these data clearly suggest that the common view of vast behavioral differences between Norwegian and “ordinary” U.S. students is greatly exaggerated and needs to be reconsidered.

In addition, it should be mentioned that the schools in Oslo, the capital of Norway, have an average of about 25 percent of students with an immigrant background, a considerable proportion of which come from non-Western countries. The OBPP has been implemented in some 40 Oslo schools with equally good results as in the rest of the country (below).

Norwegian Outcome Studies with the OBPP 1997-2000

The New Bergen Project against Bullying. In this longitudinal project, Olweus (1999b, 2005) and members of the Olweus Bullying Prevention Research Group assessed
approximately 2,400 students in grades 5, 6, and 7 from 11 intervention and 11 comparison schools. To make results comparable across studies in this chapter, the data for the two sets of schools were analyzed as two selection cohorts designs for two time points.

The schools were not randomized by conditions but had approximately the same levels of bully/victim problems at the start of the study (Time 1, May, 1997). One year later, a relative reduction of 23.6% in being bullied (from 12.7% to 9.7%) was registered for the 5th-7th grade students in the intervention schools whereas comparable students in the comparison schools evidenced a small increase by 4.7% (from 10.6% to 11.1%). For bullying other students, the negative results for the comparison schools were even more marked. These schools had a relative increase of 36.6% at Time 2 (from 4.1% to 5.6%) whereas the intervention schools showed a relative reduction of 21.4% (from 5.6% to 4.4%)

If one just looks at the results for the intervention schools, the results are less marked than in the First Bergen Project against Bullying. It is not unreasonable, however, to combine the results for the two sets of schools, subtracting the percentage Relative Change (keeping the sign) for the comparison schools from that of the intervention schools. If this strategy is followed, the Relative Change becomes 28.3% for being bullied (23.6 + 4.7) and 58% for bullying other students (21.4 + 36.6).

Considering the results for this study, it should also be emphasized that the OBPP had been in place for only 6 months or less when the second measurement took place. In addition, this particular year was a very turbulent one for all Norwegian teachers with the introduction of a new National Curriculum that made heavy demands on their time and
emotional resources. This is likely to have reduced the quality of implementation of the program in this study.

The (First) Oslo Project against Bullying. This project (previously, in Olweus, 2004, called the Oslo Project against Bullying; Olweus, 2001b, 2005) used the ordinary extended selection cohorts design with two measurements, separated by a one year interval (November 1999- November 2000). For the approximately 900 students (at both time points) in grades 5 through 7, there were marked reductions in bully/victim problems: For girls and boys combined, the Relative Change (reduction) was 42.7 % (from 14.4% to 8.3%) for being bullied and 51.6% for bullying other students (from 66% to 3.1%). The results are shown in Figures 1 and 2.

Insert Figures 1 and 2 about here

The Need for Evidence-Based Intervention Programs

As bully/victim problems have gradually been placed on the official school agenda in many countries, a number of suggestions about their handling and prevention have been proposed. Some of these suggestions and approaches seem ill-conceived or maybe even counter-productive, others appear meaningful and potentially useful. A key problem, however, is that most of them have either failed to document positive results or have never been subjected to systematic research evaluation. Therefore it is difficult to know which programs or measures actually work and which do not.

The situation is well illustrated by the following facts. From the mid-1990’s, a U.S. expert committee – the so-called Blueprint Committee - has been engaged in systematically evaluating more than 600 presumably violence (or generally problem-
behavior) preventing programs. For a program to be approved by the committee, it must fulfill certain minimum-level criteria (see Elliott, 1999):

- That the program had produced positive effects on relevant target groups (students in this case) in a relatively rigorous scientific evaluation.
- That the effects had lasted for at least one year.
- That the program had produced positive results in at least one site beyond the original one.

Up to 2007, only 11 of the evaluated programs (four of which are school-based and only one focusing on bullying) have satisfied the specified criteria and have been named “Blueprint Programs”. A similar evaluation by an officially appointed, departmental committee was made in Norway in 2000. In this case, 57 programs designed to counteract and/or prevent “problem behavior” and in use in Norwegian schools were evaluated (Rapport, 2000). Only one program was recommended for further use in Norwegian schools without reservations.

The fact that the OBPP is one of the 11 Blueprint programs (Olweus et al., 1999) and, maybe in particular, was the program selected by the Norwegian departmental committee, is an important background for the recent government-funded national initiative in Norway.

A New National Initiative against bullying in Norway

In late 2000, the Department of Education and Research (UFD) and the Department of Children and Family Affairs (BFD) decided that the OBPP was to be offered on a large-scale basis to Norwegian comprehensive schools over a period of years. In the period from 2001 to 2007 the program has been implemented in
approximately 500 schools and more than 125 OBPP instructors have received thorough training in use of the program.

From an evaluation perspective, the new national initiative has provided a unique opportunity to examine the effects of the OBPP on very large samples of students and schools under ordinary, conditions (i.e., without special efforts in terms of staff input or other resources) in the context of large-scale dissemination (Flay et al., 2005).

When a new school or group of schools adopt the OBPP, they regularly start by administering the Olweus Bullying Questionnaire (Olweus, 1996, 2007) some months before introduction of the program. One year after the initial measurement, the schools conduct a new survey with the same questionnaire to find out what results have been obtained and in what ways the individual school may need to increase its efforts. Many schools make new assessments after one or two additional years.

By having data from several consecutive cohorts of schools entering the OBPP at half-year intervals, an excellent opportunity is provided to evaluate the reasonableness of a “history interpretation” of obtained intervention findings. As mentioned, such an interpretation implies that the results could be a consequence of general time trends, special media attention or some other “irrelevant” factor concomitant to the intervention rather than intervention. In particular, in September 2002, several important public actors including the Norwegian government, Children’s Ombudsman, and the Teachers’ Union officially signed a Manifesto against Bullying which gained a good deal of media attention. And at the end of 2002, both the King of Norway and the Prime Minister discussed the importance of counteracting bullying in schools in their traditional television and radio talks on New Year’s Eve. In other phases of the evaluation period,
there was only sporadic media attention to bully/victim problems in school. If such manifesto declarations and accompanying media attention had an effect on the amount of bully/victim problems in the country, this would be expected to show up in reduced levels of problems in schools entering the OBPP immediately or relatively shortly after the occurrence of these events. The extent to which empirical data support this assumption will be examined below.

In the research evaluations, we analyzed the data using the extended selection cohorts design, in which developmental or maturational effects are controlled, as described above. In addition, it is worth noting that the questionnaire data were collected by the schools themselves (following detailed written instructions about the administration procedures) and that the author of the OBPP did not participate other than sporadically in the training of instructors and had no contact whatsoever with the participating schools. Almost all of the training was undertaken by specially trained colleagues from the Olweus Group against Bullying at the Research Center for Health Promotion, University of Bergen.

*Major results from the New National Initiative project.* Key results are shown in Figures 3 and 4. The upper curves of Figure 3 portrays the baseline percentages of bullied students in grades 4 through 7 from five different cohorts of schools which conducted their introductory surveys in the period from October 2001 to October 2003. As in earlier studies, to be classified as being bullied students had to respond to the global question in the Olweus Bullying Questionnaire that they had been bullied “2 or 3 times a month” or more in the past couple of months.
So far, we have mainly focused our evaluation analyses on the first three of these cohorts for which complete follow-up data one year later were available. The percentages of students (in the same grades and schools) who reported being bullied one year later, when the schools had used the OBPP for approximately 8 months, are shown in the lower curve of Figure 3. The two data points from each cohort of schools are connected with an arrow. To illustrate, the percentage of bullied students in the first cohort of schools ($n = 8388$ students from 56 schools) was 15.2% while at follow-up one year later ($n = 8299$) this percentage had been reduced to 10.2%, a relative reduction of 33%. The relative reductions for the two consecutive cohorts of schools were almost identical, both amounting to approximately 34%, from 14.0% ($n = 4083$ students from 46 schools) to 9.2% ($n = 4089$) for the second cohort, and from 13.2% ($n = 8238$ students from 58 schools) to 8.7% ($n = 8238$) for the third cohort. Absolute reductions for these three cohorts amounted to 4.9, 4.8, and 4.5 percentage points, respectively.

In Figure 4, the variable portrayed is bullying other students (“2 or 3 times a month” or more in the past couple of months). The general pattern of results is very similar to what was reported for being bullied in Figure 3, but at a lower level. The relative reductions for this variable for the three cohorts of schools were 37% (from 5.7% to 3.6%), 48% (from 5.9% to 3.1%), and 49% (from 5.1% to 2.6%), respectively. The absolute reductions amounted to 2.1, 2.8, and 2.5 percentage points.

Figures 3 and 4 show percentages for boys and girls combined for grades 4 through 7. Similar results were obtained when the data were analyzed separately for the two genders, the four grades, and when an even stricter criterion (“about once a week” or more often) was used in classifying students as being bullied or bullying other students.
Marked improvements could thus be registered also for students who had been involved in more frequent and serious bully/victim problems. (It should be noted that having been bullied/bullied other students “2 or 3 times a month” by no means represents non-serious or trivial problems, as shown in Solberg and Olweus, 2003.) Similar positive results were also obtained with regard to the type of bullying that girls are often involved in – social isolation, rumour-spreading (relational bullying).

It is worth noting that the absolute percentage reductions in bully/victim problems in these analyses are roughly similar to those obtained in the First Bergen Project against Bullying, although the relative reductions in the latter project are somewhat larger due to lower baseline (Time 1) values. Generally, it is important to emphasize that, although the results for the three cohorts of schools were strikingly similar, these studies are quite independent and are regarded as three separate evaluations/replications of the OBPP.

Is a “history interpretation” reasonable? As mentioned, when using a selection cohorts design, a “history interpretation” of the results should be considered a possible threat to the validity of the conclusions and ideally be eliminated or made unlikely. Since the schools in our three studies came from many different parts of Norway, it is natural to look for general time trends or events with considerable media attention that might have an effect across the whole country as possible explanatory factors.

If we look at the upper curves in Figures 3 and 4 reflecting the levels of bully/victim problems in the five consecutive cohorts of schools that had not yet started with the OBPP, we can observe a slight (largely linear) decline over time. But there are no marked breaks in the curves around the time period – the latter half of 2002 and the
Beginning of 2003–when the Manifesto against Bullying was signed and the Prime Minister and the King held their official New Year’s speeches. If these media events had had a clear general effect, we would have expected the levels of bully/victim problems of the schools administering the questionnaire in October 2002 and possibly May 2003 to have been considerably lower than those of the surrounding cohorts of schools.

Further, if there were such general effects, one would expect a relatively marked difference in the relative reductions in bully/victim problems for the various cohorts of schools. In particular, such possible effects would very likely have affected the levels of bully/victim problems of the first cohort of schools at the Time 2 assessment that was made in October 2002 (lower curve). One would thus have expected that the relative percentage reduction for this cohort would have been greater than for the other two consecutive cohorts. As can be seen in the figures, this was not the case. Accordingly, the pattern of data obtained certainly does not suggest that media attention and associated events had any observable effect on the levels of bully/victim problems of consideration here. Moreover, the signing of the Manifesto and the related media attention clearly had an effect on the schools' communities' interest and willingness to apply for participation in the OBPP. The number of schools that took part in the OBPP training during the fall/spring period of 2002/2003 almost doubled (\(n = 220\)) compared to the corresponding period one year before (\(n = 119\)).

With regard to possible general time trends, the very similar results from successive, roughly comparable cohorts of schools (without intervention) indicate considerable stability over time in the average amount of bully/victim problems and do not suggest any marked time trend fluctuations in these levels. We have also found
similar levels of stability when individual schools or groups of schools have been followed over time (typically at yearly intervals) without intervention. The small decline in the upper curves over time could possibly suggest that there was a trend for schools with slightly higher levels of bully/victim problems to seek participation in the program relatively early. However, the lower curves (after intervention) showed parallel slight decreases over time, making the relative change measures roughly equivalent. It is also possible that the general media attention to bully/victim problems over several years in the Norwegian society and information about how to deal with such problems could gradually have had a small effect on Norwegian schools which showed up in this slight decrease in problems for the later cohorts. In sum, the above analyses and findings clearly contradict a “history interpretation” of the positive results obtained with the OBPP.

In this context, it may be mentioned that the respected statistician Charles Reichardt in several places speaks quite favorably about the (simple) selection cohorts design for the evaluation of intervention effects in his landmark chapter in the Cook and Campbell book on Quasi-experimentation (1979, pp. 198-199). Also, in the new and revised edition of this book, Shadish, Cook and Campbell (2004, pp.151-153) suggest certain ways of strengthening the (simple) selection cohorts design by including additional cohorts. This is clearly in line with the thinking behind use of the extended version of the selection cohorts design (above, and Olweus, 1991, 2005). It is worth emphasizing, however, that the situation in the New National Initiative Project, with a number of consecutive cohorts entering the program over a period of several years, is even more favorable from a causal-analytic point of view than the improved design suggested by Shadish and colleagues. In this form, the selection cohorts design with
extensions both with regard to grade levels and number of consecutive cohorts is no
doubt a quite strong design for effect evaluation.

*A five-year follow-up study in Oslo.* For 14 of the 24 Oslo schools from the first
cohort, we have data for five assessments, from October 2001 to October 2006. The
starting level for being bullied was 14.0%, which decreased to 9.8% the following year.
The reduced level was retained and even further slightly reduced in the following years,
reaching 8.4% in 2006. This change represents a 40% relative reduction from the starting
value.

For bullying other students, the 2001 value was 5.5%, which declined to 2.8% in
2002 and to 2.7% in 2006, a relative reduction of 50.9%. The number of students
participating in these analyses amounted to approximately 3000 per assessment point.
These results are important, since it has been shown (e.g., Beehlman, Pfingstein, & Lösel,
1994) that many program effects are short-lived and are found to be considerably reduced
when longer-term effects have been assessed (even after only two months after the end of
the program phase). The reported results show that the effects of the OBPP can be quite
long-term and suggest that intervention schools had been able to change their “culture”
and competence to counteract bullying in a more permanent way. In this context, it
should be emphasized that none of the students who took the questionnaire in 2001
participated in the 2006 assessment.

*Norwegian Evaluation Studies Involving Grade 8-10 Students*

Systematic use of the OBPP with students in grades 4 through 7 has consistently
produced positive results and this record seems to be relatively unique in an international
perspective (see Smith, Pepler, & Rigby, 2004; Ttofi, Farrington, & Baldry, 2008).
Positive results have also been obtained with students from junior high/lower secondary school grades (8 through 10), although less consistently and sometimes with weaker effects. For example, in the First Oslo Project, the OBPP was reasonably well implemented in grade 8 and at Time 2 (in grade 9) the percentage of bullied students was 6.3% compared with the 9.2% for the grade 9 cohort one year earlier (at Time1). This decrease represented a relative reduction by 32%. Also in the First Bergen Project, positive results were obtained for the junior high school cohort (grade 8), after eight and twenty months of intervention, respectively (see e.g., Olweus, 1991, 1997 where the designation grade 7 corresponds to grade 8 in the U.S. and today’s Norwegian grade system). In the context of the New National Initiative, however, results for these grades at the one-year follow-up (Time 2) have been more variable, sometimes producing positive results, at other times showing basically no difference between the Time 1 and Time 2 assessments.

However, in a recent study that following 14 schools with grades 8 and 9 over a two-year period from 2001 to 2003, the results at Time 3, after 20 months of intervention, were clearly different from those at Time 2 and Time 1. The percentage of bullied students had decreased from 7.1% at Time 1 to 5.2% at Time 3, a relative reduction of 26.8%. Similar results were obtained for bullying other students, with a relative reduction of 33.9 percent, from 6.2% at Time 1 to 4.1% at Time 3. The reductions from Time 1 to Time 2 were quite small for both variables. Although these results are based on a small number of schools (and generally, preliminary effect analyses have so far been restricted to a limited number of junior high schools), they suggest that it may take longer time to achieve consistently good results in grades 8-10 than in lower grades. Other
researchers in the field also have had the experience that it is more difficult to reduce bully/victim problems in junior high/lower secondary grades (e.g., Smith & Sharp, 1994; Smith et al., this volume; Stevens et al., 2000; Salmivalli, Kaukiainen & Voeten, 2005).

We think there are several reasons for this state of affairs. Very briefly, one reason has to do with the individual development of the students, most of them entering puberty and a period of increasing liberation from parental influence and becoming more generally oppositional to authorities, including teachers (Arnett, 1992). Probably even more important, the organization of the teaching is different at this grade level (in Norway, and most Western countries as far as we know). The teachers become more subject oriented and many of the social functions that are typically taken care of by the homeroom teacher in lower grades are not fulfilled by anyone. In this way, the program can be expected to be less well implemented in these grades, which also has been documented in preliminary analyses in the New Norwegian Project. Accordingly, it is not unreasonable to expect weaker and less consistent results.

We are now in the process of planning a new intervention project in Norway with a special focus on schools with students in grades 8-10. A major task in that project will be to try to ensure that the various program components are implemented in a more systematic way.

Outcome Studies in the United States

South Carolina. The first evaluation of the OBPP in the United States (Limber, Nation, Tracy, Melton & Flerx, 2004; Melton et al., 1998) was conducted in the mid-1990s involving data from elementary and middle schools in 6 primarily rural school districts. The districts were organized into matched pairs on geographic location and the
demographics of the students. In each pair, the schools in one district were selected to receive the OBPP (Group A), while the schools in the other districts served as a comparison group for the first year of the project (Group B). During the first year of the project, there were 11 Group A (intervention) schools and 28 Group B (comparison) schools. Schools were not randomly assigned to groups. Although the project continued during a second year, it was found that implementation of the program in this period was inadequate (Limber et al, 2004). Accordingly, we restrict analyses here to the first year of the project. This decision is also motivated by the fact that only analyses involving the first two time points provide a clear-cut intervention vs. control comparison.

Although school-level demographic data were not available to researchers, district-wide demographic data indicated that the ethnicity of students ranged from 46% to 95% African American, and from 4% to 53% White. In all but one school district, the percentage of students receiving free or reduced lunches (a measure of poverty) ranged from 60% to 91%.

Data were analyzed as a pretest-posttest design with students in grades 4, 5 and 6 at Time 1 and followed up in grades 5, 6, and 7 one year later, at Time 2 (after seven months of program implementation in Group A schools). It was not feasible to secure the identity of the individual students in the assessments which precluded adjustment of the outcome data for individual pretest values. Accordingly, the results reported are likely to be conservative due to less than maximum statistical power. At both Time 1 and Time 2, students completed an English-language version of the original Olweus Bullying Questionnaire (Olweus, 1986). They also completed a 42-question measure developed by Olweus to assess other antisocial behavior (Bendixen & Olweus, 1999). Students
indicated the frequency with which they had engaged in a variety of antisocial behaviors (e.g., such as stealing money or other things, skipping school, and starting a fight with another student) within the past 3-month period. From these questions, we developed 8 scales: theft (Cronbach’s alpha = .81), vandalism (.72), violence (.69), delinquency (.90), substance abuse (.79), school misbehavior (.81), school sanctions (.74), and group delinquency (.70). (See Melton et al. for a more detailed description of the scales.)

Results indicated that the first year of the program affected students’ engagement in bullying and other antisocial activities. There were consistent and significant (p<.01 or 001) Time (Time 1 vs. Time 2) x Group (A vs. B) interactions for several indices of bullying others (frequency of bullying other students in the last couple of months, frequency of bullying other students in the last week at school, frequency of participation in group bullying of others). At Time 1 23.6% of students in Group A schools (n =2025) indicated that they had bullied others several times or more. After 7 months of program implementation, this percentage dropped to 19.9%, a reduction of 15.7%. By comparison, at Time 1, 18.5% of students in Group B schools (n = 4,229) had bullied others several times or more often and after 7 months this percentage had risen to 20.7%, an increase of 11.9%. Thus, students in the intervention schools had an overall relative reduction in bullying others of 27.6%. However, no significant changes were observed in the frequency with which students reported being bullied.

As expected, there was an increase over time in the frequency of self-reported antisocial behavior among control (Group B) students, while for the intervention students, there was either no increase or a slower rate of increase with regard to general delinquency (p<.01) and a number of the scales concerning vandalism (p<.05), school
misbehavior ($p<.001$), and sanctions for school misbehavior ($p<.005$). The program thus seemed to slow the age-related rate of increase in students’ involvement in antisocial behavior.

It should be noted that positive effects of the OBPP on antisocial behavior were also obtained in the First Bergen Project described above (Olweus, 1991). These results are not really surprising given that one can easily see bullying as a form of antisocial behavior (Olweus, 1993).

Philadelphia, PA. Researchers have assessed the effectiveness of the OBPP in inner-city Philadelphia schools using the extended selection cohorts design. Black and Jackson (2007) examined the effectiveness of the program in six large public elementary and middle schools (enrollments of 456-1295 students) over the course of four years of implementation. Students were primarily from low-income families (67%) and were predominantly African American (82%) and Latino (10%). The evaluation measures included an observation instrument to assess Bullying Incident Density (BID), the Olweus Bully/Victim Questionnaire (administered to students in grades 3-8), and a measure of fidelity of implementation.

The observation instrument consisted of a checklist of bullying behaviors that assessed physical, verbal, and emotional bullying (including name-calling, hitting, pushing, inappropriate touching, rumors, spitting, relational exclusion, teasing, taunting, cursing, raising voice in anger, and threatening gestures). Observations of middle school students took place during lunch, while observations of elementary students took place at lunch at recess. These areas were selected because they were identified through the anonymous questionnaire as being “hot spots” for bullying at the school. Fidelity of
implementation was assessed yearly for each of 14 core components of the program (as identified by Olweus, Limber & Mihalic, 1999). Implementation of each program component was dichotomous (positive or negative). Total fidelity scores for each school were calculated as the total number of core components implemented divided by the total number of components.

At baseline, incident density was 65 incidents per 100 student hours. After four years, BID had decreased 45% to 36 incidents per 100 student hours. There was no significant correlation between overall program fidelity of implementation and changes in BID. However, the authors reported that those program components that were most strongly associated with decreased BID included the posting of school rules about bullying, consistent enforcement of positive and negative consequences, and training adult monitors to engage students in activities. Anonymous self-reports of being bullied varied by school, but ranged from a decrease of 10% to an increase of 7% from Time 1 to Time 4. Unfortunately, at Time 4, only 1598 students completed the questionnaire, compared with 3,741 at baseline. Due to the great attrition, firm conclusions about students’ self-reported victimization cannot be drawn in this study.

**Washington.** Bauer and colleagues (2007) assessed the effectiveness of the OBPP in Washington state, using a nonrandomized controlled trial with 10 public middle schools (grades 6-8, with 7 intervention and 3 control sites). White students represented the most prevalent ethnic group in intervention schools (40%), followed by Asian students (24%), African American students (12%), and Hispanic/Latino students (7%). Ethnic make-up of control schools was somewhat different, with significantly fewer white students (23%) and more African American students (28%). Researchers assessed
relational and physical measures of victimization using four specific questions from the Olweus Bullying Questionnaire and found that relational victimization decreased by 28% among white students in intervention schools, relative to their peers in control schools, and physical victimization decreased by 37%. However, there were no similar effects for students of other races/ethnicities and no overall program effects regarding rates of victimization. Students in intervention schools were significantly more likely than those in control schools to perceive other students as actively intervening in bullying incidents. Similar analyses for student perceptions of teachers’ or other adults’ readiness to intervene were not statistically significant. The authors concluded that “implementation of the OBPP…may lead to variable differences in effectiveness based on factors related to culture, race, and the influence of the family/home environment” (p. 273) and recommended that school staff “should be aware of the influence that home, culture, and society have on student behavior, and tailor preventive measures accordingly” (p. 273).

In this context, it is worth noting that implementation of the OBPP has met with success in several ethnically diverse settings in the United States (e.g., Philadelphia, rural South Carolina, and southern California). Nevertheless, the authors’ recommendations to carefully consider the unique setting of implementation and to make necessary cultural adaptations is important and is, in fact, encouraged by authors of the OBPP (Olweus et al., 2007).

Bauer and colleagues (2007) encourage continued use of the OBPP, as it “is the only bullying prevention program that is available that is comprehensive and that encompasses a whole-school approach” (p. 273). Further, they note that the program is an important vehicle for change because it helps to establish a common language about
bullying and provides schools with the necessary framework to address bullying. They comment that the implementation of the OBPP in intervention schools was “broad and encompassed a significant regularity and consistency” (p. 273) that was lacking in comparison schools.

California. Pagliocca and colleagues (2007) evaluated the effectiveness of the OBPP in three elementary schools in a suburban southern California community over a two-year period using a selection cohorts design. Outcome measures included student self-reports on the Olweus Bullying Questionnaire ($N = 1174$ at Time 1, $N = 1085$ at Time 2, and $N = 1119$ at Time 3), and anonymous reports by parents ($N = 761$ at Time 1, $N = 817$ at Time 2, and $N = 411$ at Time 3), and teachers ($N = 100$ at Time 1, $N = 72$ at Time 2, and $N = 78$ at Time 3). Overall, self-reported rates of being bullied among students decreased 21% after one year and 14% after two years. Decreases were particularly marked among 4th graders, where researchers observed a decrease of 32% after one year and 20% after two years of implementation. Researchers also observed decreases overall in students’ reports of bullying others after one year (by 8%) and after two years (17%) of implementation.

Other findings of note included increases in bullied students’ propensities to tell a teacher about their experiences (Time 1 vs. Time 3), students’ perceptions that teachers or other adults at school try to stop bullying (Time 1 vs. Time 2), teachers’ perceptions that there were clear rules about bullying (67% increase between Time 1 and Time 3), and teachers perceptions that they knew how to respond to bullying that they observed or heard about (78% increase between Time 1 and Time 3). There also were marked increases in teachers’ beliefs that bullying policies had been fairly well or extremely well
clearly communicated to students (97% increase), parents (91% increase), teaching staff (72% increase), and non-teaching staff (79% increase) between Time 1 and Time 3. Finally, parents were more likely to believe that school administrators had done very much to stop bullying (18% increase between Time 1 and Time 2) but there were no differences in parents’ perceptions of teacher activity to stop bullying.

**Summary of U.S. findings.** To date, studies have evaluated the effectiveness of the OBPP in several diverse settings and elementary and middle school populations in the United States. Some have been conducted by authors of the OBPP (Limber et al., 2004; Pagliocca et al., 2007), while others have not (Bauer et al., 2007; Black & Jackson, 2007). The picture that emerges from these studies is that the OBPP has had a noticeable impact on students as well as adults. Clear decreases have been observed in students’ self-reported bullying behavior (Limber et al., 2004;), antisocial involvement (Melton et al., 1998; Olweus et al., 1999), victimization (Bauer et al., 2007 for white students; Pagliocca et al., 2007), child victims’ propensities to report bullying to adults at school (Pagliocca et al., 2007), and students’ perceptions that students intervene to put a stop to bullying (Bauer et al., 2007). Observational measures of bullying among students (measured as Bulling Incident Density) also have shown significant decreases in relational and physical victimization (Black & Jackson, 2007) related to the implementation of the OBPP. Finally, in the one study to assess adults’ perceptions of policies and practices related to bullying, teachers perceived clear improvements in schools that implemented the OBPP.

Although these findings are clearly encouraging, it should also be noted that the results from these studies have not been uniformly positive. Moreover, it would have
been desirable to have somewhat more knowledge about and control over the fidelity of implementation of the program for some studies. Accordingly, current U.S. research (both planned and underway) involves more detailed analyses of the effectiveness of the various program components and the conditions under which the program has the largest effects.

**Conclusions and Practical Implications**

The Olweus Bullying Prevention Program is built on the conviction that bullying need not and should not be a common or “natural” experience for children and youth. Results from more than twenty years of research, primarily in Scandinavia and the United States, confirm that bullying can, in fact, be considerably reduced through systematic school-wide efforts that that reduce the opportunities and rewards for bullying and build a sense of community among students and adults. Such a restructuring of the school environment does not come without considerable commitment and effort on the part of administrators, staff, students, and parents. However, when one considers the numbers of students affected and the tremendous personal and economic costs of bullying—to involved students and their families, the broader school environment, and to society at large—these efforts are not only reasonable but quite necessary.

The numbers of students who may have avoided direct involvement in bullying (as victims or perpetrators of bullying) as a consequence of the OBPP is substantial. To illustrate, it may be useful to focus on the Norwegian findings. If we combine all six Norwegian large-scale evaluation studies presented in this chapter, there are some 25,000 students who have participated in the one-year evaluations for grades 4-7 (taken the questionnaire at two time points separated by a year). If we assume conservatively, on
the basis of our empirical results, that about four percent of the students in these grades have escaped being regularly bullied during the evaluation year, this means that a considerable number of students – approximately 1,000 - have had safer and more positive school experiences for much of the evaluation period. We can also make the reasonable assumption that positive effects have been obtained for the approximately 25,000 students in grades K-3 who attended the same schools but did not participate in the questionnaire assessment. Assuming similar effects in these grades, the number of students who escaped bullying through the intervention program increases to approximately 2,000 students in these schools.

We can further assume that a certain proportion of the intervention schools have been able to maintain reduced levels of bully/victim problems also after the introductory implementation period is over, as was found in the five-year follow-up Oslo project. In such a perspective, it becomes obvious that the effect of the intervention program in terms of numbers of students who have escaped bullying across multiple years, is quite substantial.

In suggesting an economic interpretation of these results, it is natural to point out that, with overwhelming probability, they represent very significant savings for society with respect to psychological/psychiatric treatment and health-related costs. There is ample documentation that a considerable proportion of victims of bullying suffer from depression, anxiety, poor self-esteem and suicidal thoughts (e.g., Hawker & Boulton, 2000; Solberg & Olweus, 2003). A similar pattern of negative effects was also evident in a prospective follow-up study of two groups of boys aged 24 who had or had not been regularly bullied in school in grades 7 through 10, some nine years earlier (Olweus,
A recent Norwegian thesis has further documented that among 160 young adults who sought psychiatric treatment for the first time (at an average age of 35 years), some 50 percent had been bullied during their school years, and the more they had been bullied, the greater their psychiatric symptoms (Fosse, 2006).

Although we have not (yet) assessed direct effects of the OBPP on academic achievement, it is very reasonable to assume that reductions in bullying would lead to increases in achievement, particularly for victims of bullying but also more generally, for classrooms with bully/victim problems. In the First Bergen Project, for example, the program effects included clear improvements in several “social climate” dimensions very likely related to academic achievement, as mentioned above. In a recent longitudinal study conducted in the U.S., Buhs and colleagues (2006) observed that peer rejection in kindergarten was associated with peer exclusion in grades K-5 (e.g., excluded from activities), which in turn was associated with decreased classroom participation, and ultimately lower academic achievement.

Although it has been found that former male school bullies are clearly over-represented in the crime registers as young adults (Olweus, 1993; Sourander et al., 2007), it has not (yet) been documented that the OBPP directly leads to a reduction of adult criminality. However, in both the First Bergen Project and the South Carolina project, it was shown that the program also had clear effects on concurrent antisocial behaviors such as vandalism, theft, and truancy. Accordingly, it is very reasonable to assume that at least some proportion of the students who stop bullying in school as a consequence of the OBPP will be deflected from an antisocial trajectory. Considering the very major costs imposed by individuals with conduct problems or conduct disorder (e.g., M. Cohen,
1998; Scott, Knapp, Henderson & Maughan, 2001), such a result would represent a very substantial saving to society, even if the number of “socialized” or averted bullies were quite small.

Ongoing evaluations of the OBPP in Norway, the U.S., and elsewhere around the globe are being undertaken to assess the effectiveness of the program in diverse contexts and populations, which program components are particularly critical to program success, and which teacher-, school-, and community-level variables are particularly important with regard to program implementation. Assessing the general and differential effects of the OBPP on children’s psychosocial well-being and mental health, academic achievement, and involvement with antisocial peers and the criminal justice system also will be very useful in order to estimate the potential savings that society can expect from the prevention of bully/victim problems in school and elsewhere.
References


Fosse, G.K. (2006). *Mental health of psychiatric outpatients bullied in childhood.* Doctoral thesis, Department of Neuroscience, Faculty of Medicine, Norwegian University of Science and Technology, Trondheim.


Torestad (Eds.), *Problems and methods in longitudinal research* (pp. 107-132). New York: Cambridge University Press.


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Pepler & K. Rigby (Eds.), *Bullying in Schools: How Successful can Interventions be?* (pp. 141-165). Cambridge University Press; New York.


Table 1. Components of the OBPP.

**School-Level Components**

- Establish a Bullying Prevention Coordinating Committee.
- Conduct committee and staff trainings.
- Administer the Olweus Bullying Questionnaire schoolwide.
- Hold staff discussion group meetings.
- Introduce the school rules against bullying.
- Review and refine the school’s supervisory system.
- Hold a school kick-off event to launch the program.
- Involve parents.

**Classroom-Level Components**

Post and enforce schoolwide rules against bullying.

- Hold regular class meetings.
- Hold meetings with students’ parents.

**Individual-Level Components**

- Supervise students’ activities.
- Ensure that all staff intervene on the spot when bullying occurs.
- Conduct serious talks with students involved in bullying.
- Conduct serious talks with parents of involved students
- Develop individual intervention plans for involved students.

**Community-Level Components**

- Involve community members on the Bullying Prevention Coordinating Committee
- Develop partnerships with community members to support your school’s program.
- Help to spread anti-bullying messages and principles of best practice in the community.
Percent victims 1999 and 2000

Percent students in grades 5 - 7 who have been bullied “2 or 3 times a month” or more often

- Overall reduction by 42%
  - from 14.3% to 8.3%
  - girls
    - reduction by 33%
    - from 11.3% to 7.6%
  - boys
    - reduction by 48%
    - from 17% to 8.9%

Light bars = November 1999
Dark bars = November 2000
Percent bullies 1999 and 2000

Percent students in grades 5 - 7 who have bullies other students "2 or 3 times a month" or more often

- Overall reduction by 52%
  - from 6.4% to 3.1%

- girls
  - reduction by 64%
  - from 3.6% to 1.3%

- boys
  - reduction by 45%
  - from 8.8% to 4.8%

Oct01 May02 Oct02 May03 Oct03

Base data  After 8 months with the Olweus Program
Elementary grades (4-7).

Baseline data After 8 months with the Olweus Program