

Effectiveness of school-based programs to reduce bullying: a systematic and meta-analytic review

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Published online: 16 September 2010
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Abstract This article presents a systematic review and meta-analysis of the effectiveness of anti-bullying programs in schools. Studies were included if they evaluated the effects of an anti-bullying program by comparing an intervention group who received the program with a control group who did not. Four types of research design were included: a) randomized experiments, b) intervention-control comparisons with before-and-after measures of bullying, c) other intervention-control comparisons, and d) age-cohort designs. Both published and unpublished reports were included. All volumes of 35 journals from 1983 up to the end of May 2009 were hand-searched, as were 18 electronic databases. Reports in languages other than English were also included. A total of 622 reports concerned with bullying prevention were found, and 89 of these reports (describing 53 different program evaluations) were included in our review. Of the 53 different program evaluations, 44 provided data that permitted the calculation of an effect size for bullying or victimization. The meta-analysis of these 44 evaluations showed that, overall, school-based anti-bullying programs are effective: on average, bullying decreased by 20–23% and victimization decreased by 17–20%. Program elements and intervention components that were associated with a decrease in bullying and victimization were identified, based on feedback from researchers about the coding of 40 out of 44 programs. More intensive programs were more effective, as were programs including parent meetings, firm disciplinary methods, and improved playground supervision. Work with peers was associated with an increase in

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victimization. It is concluded that the time is ripe to mount a new program of research on the effectiveness of anti-bullying programs based on these findings.

Keywords School bullying · Intervention programs · Program elements · Systematic review · Meta-analysis

Background

Given the serious short-term and long-term effects of bullying on children's physical and mental health (Ttofi and Farrington 2008), it is understandable why school bullying has increasingly become a topic of both public concern and research efforts. Many school-based intervention programs have been devised and implemented in an attempt to reduce school bullying. The first large-scale anti-bullying program was implemented nationally in Norway in 1983. A more intensive version of the national program was evaluated in Bergen by Olweus (1991). This evaluation showed a dramatic decrease of about half in victimization (being bullied) after the intervention. Since then, many other anti-bullying strategies have been implemented but less frequently evaluated.

The definition of school bullying includes several key elements: physical, verbal, or psychological attack or intimidation that is intended to cause fear, distress, or harm to the victim; an imbalance of power (psychological or physical) with a more powerful child (or children) oppressing less powerful ones; and repeated incidents between the same children over a prolonged period of time (Farrington 1993; Olweus 1993b). According to this definition, it is not bullying when two persons of the same strength (physical, psychological, or verbal) victimize each other. School bullying can occur in school or on the way to or from school.

American research is generally targeted on school violence or peer victimization rather than bullying. Bullying is different from school violence or peer victimization. For example, bullying includes being called nasty names, being rejected, ostracized, or excluded from activities, and having rumors spread about you (Baldry and Farrington 1999). Also, bullying involves an imbalance of power and repeated acts. There are a number of existing reviews of school violence programs and school-based interventions for aggressive behavior (e.g., Howard et al. 1999; Mytton et al. 2006; Wilson and Lipsey 2007). We have consulted these, but we must emphasize that our research aims to review programs that are explicitly designed to reduce bullying and that explicitly measure bullying. Bullying is a type of aggressive behavior (Andershed et al. 2001; Salmivalli and Nieminen 2002). However, it should not be equated with aggression or violence; not all aggression or violence involves bullying, and not all bullying involves aggression or violence.

The most informative single source of reports of anti-bullying programs is the book edited by Smith et al. (2004a), which contains descriptions of 13 programs implemented in 11 different countries. Baldry and Farrington (2007) reviewed 16 major evaluations in 11 different countries, of which five involved an uncontrolled methodological design. There are also some reviews containing summaries of major anti-bullying programs (e.g., Rigby, 2002; Smith et al. 2003). The most relevant existing reviews are by Smith et al. (2004), who summarized effect sizes in 14