Improving outgroup attitudes in schools: A meta-analytic review

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ARTICLE INFO

ABSTRACT

To provide information for educators, educational psychologists, school psychologists, and social psychologists, we conducted a quantitative meta-analytic test of $n = 50$ studies dating from 1995 to 2015 that evaluated the effects of in-school interventions on attitudes toward outgroup members (defined as members of different ethnic or religious backgrounds or different age groups, persons with either physical or mental disabilities, or persons with other distinctive features). Overall, the analysis revealed a mean effect size of $d + = 0.36$ with a 95% confidence interval that ranged from 0.17 to 0.55, indicating significant, moderate intervention effects, supporting the proposition that meaningful changes in outgroup attitudes can be obtained by applying anti-bias programs in schools. Results from our analysis did not provide evidence that teacher-led interventions produce positive outcomes, yet we found that interventions delivered by researchers promote positive attitudes toward outgroup members. Further, a closer examination demonstrated that one-on-one interventions are most effective at tackling intergroup attitudes. However, classroom-wide programs are more likely to be introduced into regular school activities because of their efficiency and the limited resources available for interventions.

Today's schools face the demand of integrating increasingly diverse student populations—be it due to migration, juridical demands to provide an inclusive education for students with disabilities (Individuals with Disabilities Education Act; UK Department of Education, 2016; US Department of Education & National Center for Education Statistics, 2016), or other reasons. Developmental and social psychological research has shown that children begin to reveal biases that favor their social group and prejudiced attitudes around the age of 5 years, suggesting that children often enter school with prejudiced views (see Aboud, 2003; Brown, 2010; Levy & Killen, 2008; Raabe & Beelmann, 2011). Hence, promoting positive attitudes toward outgroup members is important, particularly in childhood and adolescence (Aboud & Levy, 2000; Bigler & Liben, 2006).

Research on developmental risks of perceived prejudice on the individual level (Brown & Bigler, 2005) has indicated that prejudicial treatment poses risks for negative short- and long-term outcomes, including those involving health and well-being as well as educational inequality. Much of this evidence is specific to prejudice that individuals perceive due to their own race or ethnicity. This perception is associated with emotional distress (Benner & Graham, 2013; Huynh & Fuligni, 2010) and less positive school outcomes (Benner & Kim, 2009; Smalls, White, Chavous, & Sellers, 2007). In particular, targets of prejudice tend to perform worse when they feel they are being negatively stereotyped (Nguyen & Ryan, 2008; Sackett, Hardison, & Cullen, 2004; Steele & Aronson, 1995). Conversely, when schools are characterized by high-quality intergroup interactions, students express greater well-being and belongingness as well as more positive educational experiences, they exhibit greater academic efficacy, and they perform better

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academically (Bifulco, Buerger, & Cobb, 2012; Brand, Felner, Seitsinger, Burns, & Bolton, 2008).

School populations are often more heterogeneous than other settings and frequently provide children with their first opportunities for direct intergroup contact. However, mere opportunities for intergroup contact—even in school classes in which contact with classmates is almost inevitable—do not guarantee positive intergroup experiences that lead to favorable outgroup attitudes.

In particular, interventions executed in schools are thought to be the most universally practicable and effective way to counteract prejudice in children and adolescents (Aboud & Levy, 2000; Pfeifer, Brown, & Juvonen, 2007). Researchers have developed several interventions aimed at reducing prejudice. Classic interventions include promoting contact between members of distinctive groups (the contact hypothesis; Allport, 1954; Pettigrew, 1998), minimizing the use of categories and instead evaluating each other predominantly on individual merits (decategorization; Brewer & Miller, 1984; Miller, 2002), and encouraging members of different groups to change their perceptions of group boundaries in favor of a more inclusive one-group identity that includes members of the ingroup and the outgroup (recategorization; Gaertner & Dovidio, 2000, 2009; Gaertner, Mann, Murrell, & Dovidio, 1989; González & Brown, 2003, 2006). However, it is questionable whether interventions that may have proven effective in the sterile, quiet context of a laboratory might be effective in a more distracting context with multiple competing demands for children's attention. Classrooms are dynamic environments in which teachers and students engage in ongoing reciprocal interactions. Such occasions represent more realistic circumstances and provide a challenging atmosphere for interventions. In addition, for an intervention to be efficient and practical in the school context, teachers should be able to implement and present the program to the entire classroom. Classroom-wide interventions have the potential to help a large number of students by supporting prosocial intergroup attitudes and behavior. Given the time constraints and competing demands on teachers and students, it is challenging to identify which intervention can most efficiently improve intergroup attitudes in school settings.

The purpose of our meta-analytic review was to identify the characteristics of successful in-school intervention programs to inform teachers, school psychologists, and other educational specialists about strategies that might help to minimize prejudice in children and adolescents. Previous meta-analytic studies and systematic reviews have provided converging evidence that interventions can contribute meaningfully to reducing outgroup bias between groups. Pettigrew and Tropp's (2006) comprehensive meta-analysis provided evidence that direct intergroup contact can contribute meaningfully to reducing prejudice across a broad range of ages, target outgroups, and contexts. Lemmer and Wagner (2015) confirmed the effectiveness of direct and indirect intergroup contact programs implemented in the field. Beelmann and Heinemann (2014) meta-analyzed research on intervention programs in childhood and adolescence and provided further support for direct contact with social-cognitive training in promoting intergroup attitudes and relations. Aboud et al. (2012) provided a systematic review of studies evaluating the effects of interventions in children of 8 years and under. Interestingly, the authors found less support for direct cross-ethnic contact relative to materials and instructions regarding culture and anti-bias messages or programs as well as media contact.

In contrast to these other meta-analyses and systematic reviews, we specifically explored the effectiveness of interventions performed in schools. This led to several important research questions about in-school interventions that are designed to enhance students' intergroup attitudes. For example, can programs be successfully conducted in the school setting by existing school personnel? Can classroom-wide interventions promote positive outcomes? What variables moderate the impact of in-school programs?

1. Aims of the present meta-analysis

The objective of the present meta-analysis was to evaluate the effectiveness of intervention programs when implemented in schools and to identify moderators that might account for variation in effect sizes. Systematic reviews might or might not include a statistical technique to synthesize the data from several studies into an overall effect estimate, called meta-analysis, depending on whether the studies are similar enough so that the results of all relevant studies can be combined (Lipsey & Wilson, 2001; Petticrew & Roberts, 2006). The fundamental rationale behind meta-analysis is that it increases the precision of results as it helps to ensure generalizability, check the consistency of relationships, assess heterogeneity among the effect estimates, and search for characteristics of the studies that can explain the heterogeneity (Borenstein, Hedges, Higgins, & Rothstein, 2009; Cooper, Hedges, & Valentine, 2009; Lipsey & Wilson, 2001). Nonquantitative syntheses are not able to address these issues.

To identify moderators, we drew upon theoretical perspectives as well as the contributions of other researchers. We examined the impact of the following group and design characteristics on in-school intervention effects:

1. We hypothesized that the status of participants would predict the effectiveness of in-school interventions. Group status constitutes a central component of the social structure of a group in a social system, around which other aspects of interrelationships are organized. Group status describes an asymmetrical structure: One's group status is superior or inferior in comparison with other groups. Minority groups are classified as subordinate or low-status groups because of physical characteristics, cultural traditions, or religious beliefs that are different from the dominant group. There is evidence that members of minority and majority groups respond in distinct ways to interventions, corresponding with the groups' different experiences and status within the broader society (Beelmann & Heinemann, 2014; Tropp & Pettigrew, 2005). We predicted that the effectiveness of in-school interventions would generally be weaker among members of minority status groups than among members of majority status groups.

2. We expected that the age of participants would predict the effectiveness of in-school interventions. Research suggests that levels of cognitive development affect children's intergroup attitudes. Older children hold more sophisticated cognitive structures and are therefore better able to notice and understand individual rather than group-based qualities in people and remember more expectancy-inconsistent information (Aboud, 2008; see also Bigler & Liben, 2006). Therefore, we hypothesized that younger children would show a poorer response to interventions than adolescents.