Strategies for Reducing and Resolving Intergroup Conflict
CHAPTER

11

Interventions Aimed at the Reduction of Prejudice and Conflict

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Abstract
This chapter reviews real-world interventions aimed at prejudice and conflict reduction. Which work? How effective are they? How do we know? I pay specific attention to the research methods used to study the impact of prejudice and conflict reduction interventions, to determine whether the methods allow for conclusions about the interventions’ causal impact. This chapter also discusses the different theoretical bases of prejudice and conflict reduction interventions. Some theoretically driven strategies focus on individual thought and action that give rise to prejudice and conflict, whereas others focus on the environment in which individuals operate. The combined perspectives of social psychology and peace psychology suggest that interventions would do well to use both perspectives. The chapter concludes with recommendations for evaluating and learning from theoretically driven prejudice and conflict reduction interventions.

Key Words: fieldwork, experiments, causal inference, complex systems, qualitative methods, peace psychology, social psychology, cultural psychology

Introduction
The purpose of this chapter is to review real-world interventions aimed at prejudice and conflict reduction. Which work? How effective are they? How do we know? This chapter also examines to what extent academic involvement in these interventions has informed psychologists’ broader theories about prejudice and conflict in human societies. Have experiences attempting to reduce prejudice and conflict generated better understanding of the roots of prejudice? Have these experiences taught us more about the relationships among psychological constructs such as prejudiced attitudes, beliefs, social norms, and behavior? Have attempts to reduce prejudice and conflict informed broader theoretical concepts used to describe how prejudice and conflict seem to suffuse a society, concepts like “culture of violence,” or “culture of obedience”?

I first evaluate the academic and practitioner track record—do we know how to effectively reduce prejudice and conflict? I pay specific attention to the research methods used to study the effects of these interventions, and whether they allow for conclusions about the interventions’ causal impact. Next, I assess the accumulated knowledge from these interventions in terms of the theoretical understanding they have generated about prejudice and conflict. I highlight the difference between theoretical ideas focused primarily on individual thought and action, and those focused on the environment in which individuals operate.

In keeping with the composition of this volume, I consider interventions and theory from the perspectives of social psychology and peace psychology. These two fields also share many useful theoretical connections with cultural psychology.
(e.g., Markus & Hamedani, 2007) and political psychology (e.g., Sears, Huddy, & Jervis, 2003), both of which also inform this chapter’s outlook on the reduction of prejudice and conflict. Together, these different subfields of psychology help me to ask whether research on prejudice and conflict reduction is producing a body of pragmatic knowledge for use in the world, and also the extent to which research is producing individually oriented versus environmentally oriented strategies for prejudice and conflict reduction.

By individually oriented strategies, I mean theoretical predictions and intervention tactics that focus on an individual’s construal of her or his world—an individual’s beliefs, perceptions, attitudes, emotions, and finally behaviors directed at individuals or groups (e.g., Schaller, Asp, Rosell, & Heim, 1996). By environmentally oriented theories, I mean theories that account for an individual’s surrounding social network, cultural system, or political system (e.g., Kelman & Fisher, 2003). Far from being two separate levels of analysis, individuals and their environments “make each other up” (Adams & Markus, 2004; Shweder, 1990) in a reciprocal fashion. Following this theoretical perspective, it is an explicit assumption of this chapter that interventions focusing on individuals or environments alone are incomplete. Drawing on Lewin’s (1951) interactionist perspective on the person and the situation, in which the situation represents the social, cultural, and political forces in the person’s immediate environment, this chapter takes the position that the reduction of prejudice and conflict reduction must be a project in changing individual-level construal of the situation in addition to changing the situation itself (see also Clements, this volume).

Review of Prejudice and Conflict Interventions

This section reviews the large body of literature testing the effects of various interventions aimed at reducing prejudice and conflict. My purview includes interventions aimed at the reduction of negative attitudes toward a group or a representative of that group, and the reduction of related phenomena like stereotyping, intolerance, discrimination, violence, social norms prescribing negativity toward a group, and negative emotions directed at a group. To borrow terminology from peace psychology (see Christie & Louis, this volume), some of these interventions are aimed at increasing positive peace (boosting tolerance and equality) and some are aimed at reducing negative peace (reducing prejudice and destructive conflict). Due to limited space, my purview excludes interventions that invoke additional voluminous literatures on law and military practice, such as legal statutes or peacekeeping missions (for an excellent analysis of peacekeeping interventions, see Doyle & Sambanis, 2006). I also exclude interventions aimed at prejudice and violence against women, for reasons of scope and because the roots of this kind of prejudice are often theorized to be different from other types of group-based prejudice (Eagly & Mlednic, 1994; Sidanius & Pratto, 1999; see also Ball, Paluck, & Fletcher, in press).

Peace psychology research typically has given rise to theories and interventions that focus on the environmental roots and remedies of prejudice and conflict (Christie, 2006), including cultural, political, and economic systems. By contrast, social psychological analysis has leaned toward an analysis of the individual and their construal of the social environment, including cognitive and affective processes and the individual’s dyadic interactions with family, community members, and strangers.

Using these oversimplified categories of social (individual) versus peace (environmental) perspectives, one can classify existing prejudice and conflict reduction interventions as more firmly rooted in the tradition of social versus peace psychology. With notable exceptions (e.g., Cook, 1971), the majority of interventions coming from the social psychology tradition are brief laboratory analogues of real-world situations—manipulations that endure for a fraction of the 30-minute or hour-long duration of the typical laboratory experiment. For example, psychologists focusing on individuals’ representations of groups attempt to change these representations from “us and them” to a more inclusive “we” by giving members of two laboratory groups a 15-minute common task, or by changing their physical differentiation during the laboratory experiment using matching shirts or mixed seating arrangements (for a review see Crisp & Hewstone, 2007; cf., Saguy, Tausch, Dovidio, & Pratto, 2009).

Individual and interpersonal interventions in the social psychology tradition include stereotype (re)training (e.g., Kawakami, Dovidio, Moll, Herrsen, & Russin, 2000; Levy, 1999), empathy training (e.g., Batson & Ahmad, 2009), reading (e.g., Wham, Barnhart, & Cook, 1996), interpersonal contact with a member of another group (e.g., Cook, 1971), accountability for decision making (Bodenhausen, Kramer, & Susser, 1994), and affirmation and self-worth interventions (Eisenstadt, Leippe, Rivers, & Stambush, 2003; Fein & Spencer 1997).
To illustrate, a paradigmatic stereotype retraining intervention brings individual participants into a lab setting (Kawakami et al., 2000). There, participants are first tested for the strength of their stereotypical associations with reference to two groups, such as elderly people and skinheads. The strength of stereotypes are assessed using the speed of responses to a computerized stroop task (MacLeod, 1991), in which participants are subliminally primed with words referring to the stereotyped group before they are asked to judge the colors of words that do or do not refer to stereotypes of that group. The relative speed with which participants name the color of words relating stereotypes of the primed group is taken as an indication of the strength of their stereotyping of that group. Next, participants are given a stereotype negation training aimed at one of those two groups for approximately 45 minutes. The task requires participants to respond to photos of the group members presented on the computer, pressing a “yes” key when the pictures are paired with nonstereotypic trait words, and “no” when the photos are paired with stereotypic trait words. The success of the retraining has been gauged by showing that when participants retake the stroop test following this exercise, their responses reveal less stereotypical responding on the stroop test for the group featured in the stereotype retraining task, but not for the group that was not featured in the stereotype retraining.

Stereotype retraining focuses on highly cognitive aspects of prejudice and conflict; social psychologists have also developed rigorous paradigms for addressing prejudice rooted in “hotter” processes like emotion and motivation. For example, affirmation interventions are based on the insight that individuals are motivated to maintain a positive view of themselves, and that threats to their self-worth can motivate compensatory negative evaluations of other people or groups in order to redeem their self-evaluations. To demonstrate the buffering effect of self-affirmation against motivated negative outgroup evaluations, participants in one intervention (Fein & Spencer, 1997) were threatened with negative feedback on an intelligence task, and were next given the opportunity to affirm a personally important value or an unimportant value by writing a description of the value. After this writing exercise, participants were asked to review a job application, written by either a member of a negatively stereotyped outgroup (a “Jewish American Princess” named Julie Goldberg) or by a woman who did not belong to a negatively stereotyped outgroup in that context (“Maria D’Agostino,” an Italian American). In a subsequent questionnaire, participants who had written about a personally unimportant value were more likely to view the Jewish candidate’s qualifications and personality negatively relative to the Italian candidate. However, the “affirmation” participants who wrote about a personally important value were significantly more likely to award the job to the Jewish candidate.

In contrast to social psychology intervention studies, many peace psychology interventions are located in the actual environments of interest, and unfold over a much longer time period, from 1 day to 1 year (see, e.g., Salomon, 2006). Examples include corporate and other workplace diversity trainings (e.g., Kalev, Dobbin, & Kelly, 2006), cooperative learning (e.g., Johnson & Johnson 1989), information from experts or peers (e.g., Sechrist & Stangor, 2001), peace and moral or values education (e.g., Salomon, 2006), intergroup contact (e.g., Green & Wong, 2009), dialogue groups (e.g., Nagda, Yeakley, Gurin, & Sorensen, this volume), and media interventions (e.g., Paluck, 2010).

To illustrate, cooperative learning interventions have been launched and studied within elementary and middle schools in the United States and globally (Johnson & Johnson 1989). Although there are many different variants, interventions are based on the fundamental prediction of social interdependence theory (Deutsch, 1949) that members of groups who depend on one another to achieve their individual goals will cooperate with and feel more positively toward one another. In cooperative learning interventions, then, students are arranged into learning groups over the course of a lesson, a semester, or a year, and the teacher gives each student only one piece of the information needed to complete each assignment. Cooperative learning is among the most- and best-studied prejudice reduction techniques; meta-analyses of the dozens of studies accumulated demonstrate that peer relationships and helping is increased within multiethnic, multiracial groups, and groups composed of students with varying intellectual and physical abilities (Johnson & Johnson, 1989).

Intergroup contact is another widely used intervention in which the logic is to bring together groups to interact in a manner that is equal status, marked by a common goal, and sanctioned by authority (Pettigrew & Tropp, 2006, 2011). One study of an intergroup contact intervention followed Outward Bound wilderness courses camping groups (Green & Wong, 2009). Some groups were randomly assigned
to be completely composed of non-Hispanic white adolescents, while others were randomly assigned to be composed of non-Hispanic whites and African Americans. After a 2- or 3-week experience in the wilderness, in which campers were required to camp together on equal terms, the white students randomly assigned to the multiracial groups expressed significantly more tolerance in a purportedly unrelated telephone survey, compared to white campers assigned to the homogenous groups.

Many prejudice and conflict reduction interventions are not neatly categorized into either an individual or an environmental approach. Interventions like peace education and intergroup dialogue target individual-level phenomena as well as group and environmental phenomena (see Nagda et al., this volume; Salomon, 2006). This combination of the two general approaches should be viewed positively, since there exist strong arguments for each type of approach. The social psychological rationale emphasizes it is an individual's construal of the environment—not just the environment—that can matter most for her behavior (Wilson, 2006). Take, for example, an intervention meant to improve racial relations in a neighborhood. The intervention could change the physical environment, such as the layout of a neighborhood, but this change will not necessarily affect the way people construe their identity or the identity of other groups, which guides neighbors’ behavior toward one another. A peace (or cultural, or political) psychological argument might counter that if you managed to change an individual’s construal of neighborhood group identities, the structural conditions of segregation and relative poverty could eventually erode the effects of affirmation (for another discussion of the tensions between psychological and environmental change, see Paluck & Green, 2009a, p. 638).

The perspective adopted by this chapter is that successful interventions must attend to individuals within environments. Thus, in the previous example, an intervention would do well to target both the structural environment of a neighborhood in addition to the community members’ construal of the environment. Designers of some interventions may expect that when individuals change they will decide to change their environment, and vice versa. With reference to the previous example, they may believe that community members who change their construal of group identity and relations in their neighborhood would then form a neighborhood beautification or social committee, to improve the structural conditions that shape neighbors’ interactions. This is a valid hypothesis about sequential change that is ready for empirical testing. Unfortunately, as I note in more detail below, very few studies follow the effects of interventions across time so as to capture such sequential or downstream effects.

Across all of the intervention studies reviewed, I ask what we have learned about their causal impact. By causal impact I mean a causal pathway from the intervention to a reduced level of prejudice or conflict (or, if intended, an increase in intergroup tolerance or equity). My concern with causality leads me to place special emphasis on studies that use random assignment to evaluate programs, but the review’s database encompasses many studies that use nonexperimental methods. In my concern with the pragmatic knowledge generated by all of this scholarly and practitioner activity, I follow Gabriela Salomon, a peace psychologist who focused on the causal impact of peace education (e.g., Salomon, 2006), and I add to literature reviews previously assembled by Oskamp (2000), and Stephan and Stephan (2001).

The database of studies I use consists of over 1,000 published and unpublished reports, which I assembled and analyzed with Donald P. Green (Paluck & Green, 2009b), and later published online as an ongoing archive of prejudice and conflict reduction studies (found at www.betsyleypaluck.com). Paluck and Green (2009b) found that, as a whole, 60% of the literature on the impact of prejudice and conflict interventions consists of observational field studies, 29% of the studies are experimental laboratory studies, and only 11% of the studies use experimental methods in the field.

Laboratory Studies

The laboratory environment, paired with the experimental method, leads to tight, internally valid conclusions about the causal impact of the intervention. The laboratory experiments in our database test a wide range of prejudice reduction theories, such as self-affirmation and cognitive training manipulations, with a high degree of creativity and precision. However, the question is open as to whether laboratory interventions yield reliable and durable strategies for prejudice reduction in the world. On an empirical basis, this question is largely unaddressed—fewer than a handful of laboratory-derived manipulations relevant to prejudice reduction have been exported for field trials.

Without concrete evidence, there are plentiful reasons to suspect that laboratory findings might not
generate pragmatic knowledge to change prejudice and conflict in the real world. Laboratory interventions typically use subtle, quick fixes for prejudice and conflict: manipulations like wearing similar t-shirts and reading differing sets of instructions intended to prime different mindsets. While these kinds of manipulations usefully demonstrate the minimal conditions necessary to observe change, all things considered equal, the prejudice and conflict reduction laboratory’s exclusive focus on these types of individually targeted techniques means that it is not testing analogues of the full range of interventions available in the real world. Moreover, the abstraction of these manipulations from their real-world manifestations (such as simulating peer influence by presenting a fictional opinion poll; see Stangor, Sechrist, & Jost, 2001) eliminates important institutional factors and social processes in which real-world factors are embedded (such as hearing peer or community reactions to opinion poll information), and changes the meaning of these manipulations to research participants.

To add to this list, the laboratory traditionally does not canvas a representative sample of people, prejudices, and expressions of prejudice that are targeted in the world, favoring American racial prejudice, college sophomores, and low-stakes behaviors such as nonverbal behaviors or implicit attitudes. And while laboratory experiments on prejudice and conflict reduction focus to a large extent on testing individual-level theories, they further focus on one or two aspects of individual prejudice at a time (such as attitudes and beliefs, or implicit and explicit attitudes), foregoing an examination of how various aspects of cognitive, affective, and behavioral prejudice are functionally interdependent (Paluck, 2009).

**Observational Field Studies**

Observational field studies have the advantage of studying prejudice and conflict reduction interventions as they are targeted to the populations for whom they were designed. These studies yield a wealth of information about how the interventions are implemented, how participants respond to various aspects of the intervention, and the like. Researchers conducting observational studies frequently interview people who participate in or who notice the presence of the intervention in their communities, for example, Dutch medical students were interviewed about their experiences in a program that matched them with patients of different ethnicities (vanWieringen, Schulpen, & Kuyvenhoven, 2001), and Canadian citizens were interviewed regarding whether they noticed and how much they liked the “We All Belong” television and newspaper campaign (Environics Research Group Limited, 2001).

Observational studies of prejudice and conflict reduction interventions also use purely qualitative participant observation, in which researchers sit in on the intervention activities and observe participants’ reactions, and sometimes attempt to observe participants’ behavior in situations outside of the intervention. An example of this kind of qualitative observational study is a study of the Facing History and Ourselves classroom intervention (Fine, 1991/1992). In the course, students learn about intolerance, discrimination, and intergroup violence through historical examples such as the Holocaust. Fine (1991/1992) sat in on the course for a number of weeks as it was taught at one elementary school, and also interviewed the students about the course outside of the classroom. Her evaluation is based on themes that arose from students’ comments and actions, and from her own personal reactions to the events, as exemplified by the following: “[The teacher] asks each student to devise a skit about these ideas [of discrimination] . . . [one] skit goes well, but I feel uneasy. I am struck by Sylvio’s need to distance himself from playing a Haitian role, and wonder whether this direct attention to the problem ameliorates or exacerbates the pain of discrimination” (p. 48). She goes on to describe the students’ own reactions to these skits in the interview, and concludes more generally in her article that the classroom’s Haitian-born students, as opposed to white and US-born students, are more politicized.

She also concludes that learning about these issues through the lens of history carries great promise for addressing contemporary conflicts like those in that classroom’s community. This type of study highlights the descriptively rich information that is gained from qualitative observation, regarding the meanings that students attach to their participation, and the ways and extent to which they reflect on the activities outside of the formal bounds of the intervention.

Other observational studies recruit comparison groups so as to evaluate the worth of an intervention for those who participated against those who did not. For instance, one study reported that volunteer participants in a company’s Valuing Diversity seminar were more culturally tolerant and positive about corporate diversity than were employees who chose not to attend the seminar (Ellis &
Sonnenfield 1994). Random assignment of participants into intervention and comparison groups, which is used in laboratory experiments, ensures that the intervention participants have the same expected background traits and levels of exposure to outside influences as participants in the comparison group. Outcomes in a randomized experiment are thus explained by a quantifiable combination of the intervention and random chance. By contrast, in nonexperimental research the outcomes can be explained by a combination of the intervention, random chance, and unmeasured preexisting differences between comparison groups. This is what makes observational research relatively less informative than randomized experiments with respect to the question of whether the intervention had its intended effect. Questions regarding what the participants thought of the intervention, who was most likely to participate, and the like, are arguably secondary to the question of whether it worked, and the answers to those questions can help researchers to understand why or why the intervention may not have worked.

Some observational studies go to admirable lengths to build comparison groups for their intervention participants that approximate the experimental ideal of comparability and causal inference. One of the most notable studies of this kind evaluated a social justice educational program focused on dialogue and hands-on experience, investigators administered a pretest to all University of Michigan freshmen, some of whom had already signed up for the program (Gurin, Peng, Lopez, & Nagda, 1999). Using this pretest, investigators selected a control group that was similar to program volunteers in gender, race/ethnicity, precollege and college residence, perspective taking, and complex thinking. After 4 years and 4 posttests, results demonstrated that white students in the program were, among other things, more disposed to see commonality in interests and values with various groups of color than were white control students (see also Nagda et al., this volume).

Unfortunately, the majority and even sum total of all studies on sensitivity training, diversity training, multicultural education, and conflict resolution meetings are studied with observational methods that do not strive to build equitable comparison groups and other research features that can argue strongly for causal inference (see Shadish, Cook, & Campbell, 2002). Moreover, the majority of all interventions located in the settings ultimately targeted by prejudice and conflict reduction intervention—workplaces, hospitals, conflict zones, neighborhoods—are studied with these observational methods, which means that for the majority of interventions social scientists cannot say for sure whether the interventions “work.” This seriously inhibits the accumulation of principles for best practices in the reduction of prejudice and conflict.

**Field Experimental Studies**

The strength of field experimentation rests in its ability to assess whether an intervention’s effects emerge and endure among the cacophony of real-world influences, including larger political and economic changes and proximal social pressures and distractions. Of the 108 field experiments on prejudice and conflict reduction in our database, we found that 37 (34%) deal with cooperative learning interventions. Overall, 84% of all field experiments targeted students or school personnel. Eighty percent of all field experiments were based in North America, 53% were aimed at prejudice against African Americans, 56% were carried out over the course of 1 day or less, 17% experiments measured actual behavior, and 50% of samples contained fewer than 100 participants.

Thus, it seems the antiprejudice and conflict education literature has built a respectable base of research literature examining causal real-world effects. The rest of the intervention literature, addressing all other aspects of prejudice and conflict outside of the North American elementary school classroom, lacks randomized controlled evaluations, or balances on a few small evaluations with questionable sample sizes and scarce behavioral evidence.

**Conclusion 1: What We Know About Reducing Prejudice and Conflict**

The relatively small body of knowledge about prejudice and conflict reduction that scholars and practitioners have collected from real-world interventions is focused on the classroom, and is otherwise unevenly distributed over this wide-ranging field of study. Many important interventions have never been studied with randomized controlled methods. Paluck and Green (2009b) find very little evidence to support well-known interventions like diversity training; multicultural, antibias, and moral education; sensitivity training; and certain types of conflict resolution interventions. To use a medical analogy, it is as though the field has vetted a few pediatric procedures, while giving the rest of the population drugs that have never been tested.
Paluck and Green (2009b) report that some field and laboratory evidence has been amassed for the following interventions and their supporting theories: cooperative learning (and social interdependence theory; e.g., Roseth, Johnson, & Johnson, 2008), media and entertainment interventions (and extended contact, narrative persuasion, social norm, and social cognitive theories; e.g., Cameron, Rutland, Brown, & Douch, 2006), peer influence and discussion or dialogue programs (and social norm, small group, and social impact theory, e.g., Paluck, 2010), intergroup contact (and the contact hypothesis, e.g., Green & Wong, 2009), value consistency and self-worth interventions (and cognitive dissonance, self-affirmation, and self-perception theory; e.g., Rokeach, 1971), and cross-cultural and intercultural training (and acculturation theory and the Bhawuk/Landis model; Bhawuk, Landis, & Lo, 2006). However, to say “evidence has been amassed” does not mean that there exists reliable, durable, observable evidence of the effects of these interventions in the world. To move toward this goal of establishing pragmatic effects and developing the supporting theory, the prejudice and conflict reduction literature needs more field experimental designs paired with behavioral and longitudinal measurement.

The case of diversity training is instructive. Diversity training has been a fixture of the American workplace for over three decades; in 2005, 66% of US employers used diversity training, despite the fact that it is not required by federal equal opportunity law (Compensation and Benefits for Law Offices, 2006). Aimed at reducing prejudice and discrimination and increasing tolerance and inclusion in the workplace, diversity training is positioned to influence hundreds of thousands of people and workplaces in a positive way.

“Diversity training” is a term that encompasses many different types of trainings—from discussion groups centered on the topic of differences and similarities, to awareness raising regarding the effects of stereotypes, to information sessions regarding the legal constraints of discrimination in the workplace (for a review, see Paluck, 2006). By and large, scholars and practitioners have passed up the opportunity to improve the theory and practice of diversity training. The lack of evidence supporting diversity training has left it open to polemical attacks and lawsuits (e.g., Feder, 1994; Stender v. Lucky Stores, 1992). Lawsuits in particular have highlighted that many diversity trainings use practices that a psychologist might not recommend, but without an evidence-based model of best practices, recommendations are more a matter of personal preference in theoretical models (or personal philosophy) than of social science.

There has not been a single field experimental trial of a diversity training program, for example, one that randomly assigned half of the offices at a company to a training, or randomly “rolled out” its training so that halfway through the year they could compare treatment to control offices. Larger companies could also randomly assign trainings to half of their total number of office locations, and compare those offices with the “untreated” offices 1 year later on outcomes like hiring and promotion of minorities and women or productivity as conditioned on the diversity of the staff.

An ambitious review recently correlated different types of workplace diversity initiatives with women’s and minorities’ placement and advancement in hundreds of workplaces across time (Kalev, Dobbin, & Kelly, 2006). Using data from 708 workplaces, Kalev et al. (2006) reveal that programs targeting managerial stereotyping through diversity training and diversity evaluations are not followed by increases in diversity at the workplace. To the contrary, diversity training is followed by a 7% decline in the odds of attaining higher status in the workplace for black women, and an 8% decline in the odds for black men across time, compared to workplaces that did not use diversity training.

In light of these findings, the prejudice and conflict reduction literature clearly needs field experimental evaluations for purposes of finding optimal practices and improving theoretical insight. The case of diversity training illustrates that in addition, field experiments should be considered an ethical imperative, on the level of rigorous testing of medical interventions, to ensure that interventions do not create a backlash or otherwise harmful effect.

To be sure, calling for randomized field experiments of prejudice and conflict interventions is not incidental. Randomly assigning prejudice and conflict reduction interventions presents more layers of complexity compared to randomly assigning pills in randomized controlled trials of new medications. In addition, no one field experiment will ever provide a definitive answer about a theory or a program’s efficacy; social scientists will need to execute studies multiple times in the same and in different settings, with identical interventions and with interventions that differ systematically. And yet, I argue that continued implementation of field experiments is the socially and intellectually responsible way to seek
out reliable principles for reducing prejudice and conflict in the real world. Field experiments contribute to the slow accumulation of "stubborn facts that inspire theoretical innovation" (Green, 2005). Finding ways to implement field experiments is a pragmatic but intellectually challenging and rewarding task, and can be supported by lab experimentation and observational work, which I explain more below.

**Conclusion 2: Theoretical Development in Prejudice and Conflict Reduction Has Proceeded With Little Cross-Fertilization of Individual and Environmental Perspectives**

Using field experiments to inspire theoretical innovation that is tested in laboratories and cycled back into field interventions is a particularly Lewinian cycle of research and practice (e.g., Lewin, 1951). Such a cycle promotes the cross-fertilization of perspectives on individuals and on the environments they inhabit. Unfortunately, in the realm of prejudice and conflict reduction, theoretical development is not typically driven by a cycle of laboratory-to-field-and-back research; for this and for other subdisciplinary reasons, such cross-fertilization has been rare.

It seems reasonable to describe the majority of the prejudice and conflict reduction literature as segregated in two ways: one, in which theories segregate individuals from environments (and vice versa), and two, in which theories segregate various phenomena like prejudiced attitudes, beliefs, norms, and behavior. As a result, theories do not focus on how individuals and their environments reciprocally reinforce prejudice or tolerance, and they do not describe the functional interdependence of individual and group attitudes, beliefs, norms, and behavior (Paluck, 2009).

Other scholars have similarly proposed that theories of prejudice and conflict reduction are isolated from awareness or theorization of the macro-processes that support prejudice and conflict (Adams, Biernat, Branscombe, Crandall, & Wrightsman, 2008; Christie & Louis, this volume). Speaking to the social psychological audience, Adams et al. (2008) suggest a shift in the "focus of interventions away from the task of changing individual hearts and minds to changing the sociocultural worlds in which those hearts and minds are immersed" (p. 236). Paluck and Green’s (2000b) review of the intervention literature shows that most scholarly inquiry into prejudice and conflict reduction is inspired by theories grounded in individual “hearts and minds.”

There are several notable exceptions, for example the work of Herbert Kelman (Kelman, 2008), and Lee Ross and colleagues (Bland, Powell, & Ross, 2006). Their research offers theories and interventions in conflict resolution that recognize the complex systems of intrapersonal, interpersonal, intergroup, and intrasocietal and intersocietal processes of prejudice and conflict. For example, Kelman (2008) builds his interactive problem-solving approach to third-party conflict resolution using laboratory studies of the micro-processes of persuasion and attitude change with insights from theories and experiences of the wider macro-processes of diplomacy, scholarly involvement in international politics, and conflict resolution institutions (see also d’Estreé, this volume).

Several other interventions in Paluck and Green’s (2009b) review simultaneously attend to intrapersonal and intrasocietal phenomena, for example educational interventions such as reading interventions aimed at changing children’s perceived connection to immigrant children (Cameron et al., 2006), and peace education programs aimed at changing adolescents’ narratives about an intractable conflict (Lustig, 2002; Salomon, 2006), both engage students with macro issues of conflict through an understanding of how narratives engage, persuade, and disarm cognitive and emotional biases (e.g., Green, Strange, & Brock, 2002). These approaches also demonstrate the power of imagined or vicarious intergroup contact for prejudice reduction (see Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). In addition, several interventions described in this volume integrate theoretical perspectives on the individual with theories on more complex systems and their interaction with individual and interpersonal processes (see Bar-Tal & Hammack, this volume; Kelman, this volume; and Nagda et al., this volume).

Adams et al. (2008) offer excellent examples of how theorizing about broader sociocultural and political processes would change the types of interventions that are designed and studied. For example, Adams et al. (2008) note that many social cognitive theories of prejudice and conflict seek the benefits of self-control (e.g., Monteith & Mark, 2005) or of self-worth affirmations (Fein & Spencer, 1997) for reducing expressions of automatic prejudice. Instead of exerting control over environmentally sustained racism through individual attempts to control automatic cognition, Adams et al. (2008) suggest that
Theorizing about changing cultures of prejudice and conflict is not at present an area of great activity in the prejudice and conflict reduction literature; as a theoretical goal that explicitly takes into account the interaction of individuals and environments, it seems quite promising.

In sum, theories of prejudice and conflict reduction would benefit from more cross-fertilization between individually and environmentally focused approaches. Peace psychology and cultural and political psychology, through their greater focus on sociocultural and political processes, can help to round out the social psychology literature’s focus on individuals. Shifting back and forth methodologically between the laboratory and the field (à la Lewin, Kelman, and others) will also help to cross-fertilize these perspectives. Thus, the suggestion is both to study individuals in complex systems by moving experiments on prejudice and conflict reduction to the field (as proposed in the previous section), and to theorize the interactions between individual and interpersonal processes on the one hand and group, political, and cultural processes on the other. Theories that focus on this interaction will inevitably lead to different types of interventions and hopefully a broader understanding of prejudice and conflict reduction.

General Conclusion
For pragmatic, intellectual, and ethical reasons detailed in this chapter, it is vital to study prejudice and conflict reduction interventions with rigorous methods that illuminate their causal impact, particularly their longitudinal and behavioral outcomes. The methods I recommend here are fieldwork and experimentation, with measurement that prioritizes behavior and long-term indicators. In the concluding section on future directions, I also explore the importance of using both qualitative and quantitative measures. To achieve lasting change, the theories motivating these interventions should be mindful of both individual and environment, integrating perspectives on cognition, emotion, and interpersonal relations with group, cultural, and political dynamics. Individuals and environments “make each other up”; it is unwise to ignore either level of analysis.

Future Directions
This final section seeks to convert my general conclusions into concrete recommendations for scholars and practitioners, hopefully as they collaborate with one another. First, I recommend practical ideas for field experiments. Second, I explore the...
marriage of qualitative methods and field experimentation. Third, I discuss the study of the environments into which researchers and practitioners introduce an intervention—the fabled “conditions on the ground” to which program implementers and evaluators refer. Finally, I offer suggestions for expanding the theoretical literature on understanding prejudice and conflict reduction through the interaction of individuals within environments.

The first primary suggestion of this chapter is to pursue more field experimental studies of prejudice and conflict reduction interventions in the world. A revived movement of field experimentation, paralleling the one sparked by Donald Campbell in the study of social reforms (Campbell, 1969), would address the field’s current lack of understanding of causal effects and of theoretical and contextual validity. Studies in such a movement would be directly linked with the problems, contexts, and people for whom theory recommends intervention. Scholars could reach out to practitioners working in relevant contexts or with modalities of interest (such as mass media, peer influence, education, or dialogue). When scholars do not reach out because they imagine that practitioners will refuse such collaborations, they underestimate the extent to which practitioners often need intervention evaluations for continued funding and for recognition of their programs. Moreover, most practitioners are interested in finding out what works, not simply in defending the validity of their intervention. Scholars should work to make the collaboration successful by providing much more than a “thumbs up, thumbs down” assessment. Rather, they should seek to measure and describe which aspects of the intervention seem to have a positive impact and which need refinement. Funding for scholar-practitioner collaborations can come through grants that emphasize the benefits of pragmatic learning to funders (an outcome for which funding agencies are increasingly searching), and through pro bono work on the part of scholars. While this vision of scholar-practitioner collaboration will not always work, it is more than possible—it is part of the history of social psychology in the world, and indeed part of my personal research experience.

Because my exhortation to use field experimentation is directed at a diverse group of psychologists, among whom a significant proportion use qualitative methods (Vollhardt & Bilali, 2008), a caveat is in order. Field experimentation does not exclude qualitative work. Field experimentation is one of the strongest methods for inferring causal relationships in real-world settings; it is not inherently quantitative. This is not a surprise to the many scholars of prejudice and conflict who used mixed methods, but this assertion is nonetheless worth exploring in some depth. Collecting numerical, categorical, and ordinal data simplifies comparisons between experimental groups, but researchers could just as well collect and compare qualitative data from interviews, participant observation, and archives. Qualitative data can strengthen, modify, or altogether change the interpretation of quantitative data and describe important contemporaneous conditions of change.

A more ambitious proposal in this vein is to conduct ethnographic case studies for all of the units of observation in a field experiment in what Sherman and Strang (2004) term “experimental ethnography”:

Experimental ethnography is a tool for answering questions about why programmatic attempts to solve human problems produce what effects, on average, in the context of the strong internal validity of large-sample, randomized, controlled field experiments. This strategy can achieve experiments that create both a strong “black box” test of cause and effect and a rich distillation of how those effects happened inside that black box, person by person, case by case, and story by story. (p. 205)

Writing from the perspective of program evaluators, Sherman and Strang discuss a recent randomly implemented policy for restorative justice in England and Australia. The policy invited victims, perpetrators, and all those affected by the crime to meet and discuss how the perpetrator should repay his or her debt to society, a form of community reconciliation that is directly relevant to the topic of this chapter. When police officers offered this program to untried perpetrators and their victims, they told each party that if both parties accepted, they would have a 50% chance of having the meeting because the program was in an experimental trial. Qualitative data on the victim’s reaction to the crime, in Sherman and Strang’s example, suggested the hypothesis that the magnitude of potential benefit of restorative justice on the victim’s mental health was directly proportionate to the magnitude of the harm the victim suffered from the crime. The qualitative evidence both “discovered” this hypothesis and offered a way to test it through continuous comparisons between treatment and control groups. This example also illustrates the ability of qualitative data to discover interactions, or systematically different responses to the experimental intervention.
Psychologists can also, following Campbell, seek out investigations of the intergroup effects of major societal and political interventions. Experiments on the national or international level are often possible when there is a source of “natural” and arbitrary variation in a social, political, or cultural event. These kinds of so-called natural experiments are executed quite frequently in political science and economics.

For example, a recent outstanding set of natural experiments looked at the impact of political affirmative action on citizens’ attitudes toward groups who are favored by the legislation. Chattopadhyay, Duflo, and colleagues (Chattopadhyay & Duflo 2004; Beaman, Chattopadhyay, Duflo, Pande, & Topalova, 2009) tested the effect of reserving political positions for women on the gender and political attitudes and behavior of citizens in India. The investigators capitalized on a policy experiment in which the Indian government randomly reserved the position of village council leader for women candidates in one third of all village councils in West Bengal. The investigators collected data on implicit and explicit attitudes toward women and toward women leaders, evaluations of excerpts of speeches from men and women leaders, and records of actual leadership from men and women in villages that did and did not reserve the leadership position for a woman.

The authors uncovered hugely consequential results. In some cases, women leaders increase women’s political participation. Women leaders also increased the likelihood of women’s subsequent election into leadership positions. However, only after long-term exposure did citizens’ explicit approval of women’s leadership rise. At the same time, implicit stereotypes (measured with the Implicit Attitude Test, see www.projectimplicit.net) associating women with leadership as well as with domestic tasks shifted over time, such that leadership became more implicitly associated with women. Implicit stereotypes and explicit approval did not shift in the short run, and an explicit distaste for women as leaders and implicit attitudes toward one’s own gender as “good” never shifted over the two-year course of study.

**Studying Conditions on the Ground**

An important theme running through this *Handbook* is that “conditions on the ground” matter for prejudice and conflict interventions and theories. Accordingly, they also matter a great deal for the study of interventions based on those theories. Different local political, social, or cultural conditions from one neighborhood to the next might alter the outcome of an intervention; the intervention may also be implemented differently, with more or less fidelity or quality, depending on these conditions (which can include everything from sympathetic leadership of a town or school, to outbreaks of violence in the intervention location).

Experimenter should always account for local conditions and variations in these conditions when analyzing the outcomes of the intervention, rather than focusing on the overall average treatment effect. Variations in impact may indicate that some environments are more conducive to positive change or even to a backlash. I found such variations with respect to community-government relations in a study we conducted in Rwanda (Paluck & Green, 2009a). Specifically, I found the consistently strong effects of a radio program on citizens’ willingness to dissent with the authoritarian government were moderated by extreme kinds of community-government relations. Communities that were explicitly targeted by the government as objects of suspicion and possible violence were not responsive to the intervention encouraging them to dissent; neither, on the other hand, were communities that were favored by the government, because they were already dissenting freely. This kind of an example highlights the importance of gathering information about the background characteristics of the sites of an intervention prior to, during, and in the immediate aftermath of the intervention.

Another source of variation across sites can arise from differential implementation of the prejudice or conflict reduction intervention. As a hypothetical example, imagine that at some sites the implementers of a community reconciliation discussion program are only able to hold three discussion groups, as opposed to the recommended number of 12, and at other sites they are only able to involve adults and not the standard grouping of adults and children. Correlating these types of variation with different outcomes may give implementers and researchers a clue as to which aspects of the intervention are critical to producing the desired effects. However, such analyses would be purely correlational; they should be interpreted with great caution and marked as a factor to be followed up in subsequent research. It is possible that different community characteristics drove different types of implementation. For example, it may be that the impact increases with the number of discussion groups conducted because communities that are more inclined toward
reconciliation are more willing to hold discussions. The best way to identify which kind of variation is driving the variation in program impact is to conduct follow up studies that take characteristics of different communities that seem to be important, and randomly assign the intervention (and even different versions of the intervention) to communities in each stratum of the important characteristic.

Recommendations

This section on future directions ends with recommendations for producing and testing more theoretical integrations of individual and environmental psychological perspectives on prejudice and conflict reduction. The psychology of prejudice and conflict reduction requires more work that examines how intrapersonal and interpersonal factors fit together with larger structural forces, such as social networks of people and institutional rules or customs. For example, it is important to consider not just how dyads influence one another, or interventions influence each individual within the program, but how networks of people are changed by interventions and how they reinforce the message with one another.

The methods best suited to testing ideas about changing individuals and environments will capture the reciprocal processes and the spread of ideas and behavioral patterns described by those ideas. One promising route is to use network analysis, a method long popular with sociologists and epidemiologists, which maps out entire networks of individuals within particular environments (e.g., communities, workplaces, or schools). Social network analysis (see for example Wasserman & Faust, 1994) paired with randomized field interventions would allow psychologists to watch the effects of an intervention spread to the members of a setting in an essentially epidemiological fashion. Scholars could compare the private attitudes and perceptions of each individual in the network with actual base rates and patterns of behavior in the network population. Possible questions include whether there are conservative lags in which people believe themselves to be ahead of their time, or if there is a period of pluralistic ignorance that is broken by certain types of interventions (e.g., see Prentice, in press).

Another method is to incorporate more qualitative explorations of the environment itself. Although all psychologists care about situational and environmental factors, rarely do they go out to explore and document them. Prejudice and conflict suffuses situations and environments in ways that much traditional scholarship overlooks—these phenomena are present in proverbs, music, institutional design, public documents, and so forth. Qualitative work can assess the outcomes of interventions, but it can also assess the environment that scholars wish to eventually transform.

Most fundamentally, the recommendation of this chapter is to seek to increase the number of studies that demonstrate a causal impact of theoretically driven interventions on prejudice and conflict, in real-world settings. Many creative and rigorously designed interventions exist, and their designers and implementers would do well to pair with a methodologist who can design a study that would convince a skeptic of its impact. For those investigators who are still at the stage of designing an intervention, this chapter recommends addressing not just individual attitudes, beliefs, and perceptions, but the environment in which the individuals operate. In short, all intervention designers would do well to balance their consideration of individual social psychological constructs with peace psychology constructs: individuals, their construal of the environment, and the environment itself.

References


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Interventions aimed at the reduction of prejudice and conflict


