



PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/63194>

Please be advised that this information was generated on 2022-08-25 and may be subject to change.

Group Processes & Intergroup Relations

<http://gpi.sagepub.com/>

Intergroup Contact: The Past, Present, and the Future

John F. Dovidio, Samuel L. Gaertner and Kerry Kawakami

Group Processes Intergroup Relations 2003 6: 5

DOI: 10.1177/1368430203006001009

The online version of this article can be found at:

<http://gpi.sagepub.com/content/6/1/5>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Group Processes & Intergroup Relations* can be found at:

Email Alerts: <http://gpi.sagepub.com/cgi/alerts>

Subscriptions: <http://gpi.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://gpi.sagepub.com/content/6/1/5.refs.html>

>> [Version of Record](#) - Jan 1, 2003

[What is This?](#)

Intergroup Contact: The Past, Present, and the Future

John F. Dovidio
Colgate University

Samuel L. Gaertner
University of Delaware

Kerry Kawakami
York University

The Contact Hypothesis has long been considered one of psychology's most effective strategies for improving intergroup relations. In this article, we review the history of the development of the Contact Hypothesis, and then we examine recent developments in this area. Specifically, we consider the conditions that are required for successful contact to occur (e.g. cooperation), investigate basic psychological processes that may mediate the consequent reductions in bias (e.g. decreased intergroup anxiety, increased common group representations), and explore factors that can facilitate the generalization of the benefits of intergroup contact in terms of more positive attitudes toward the outgroup as a whole (e.g. increased group salience). We conclude by outlining the contents of the contributions to this Special Issue on Intergroup Contact, highlighting common themes, and identifying findings that suggest directions for future research.

keywords Contact Hypothesis, intergroup contact, intergroup relations, prejudice, stereotypes

INTERGROUP contact has long been considered to be one of psychology's most effective strategies for improving intergroup relations. For the past fifty years the 'Contact Hypothesis' (Allport, 1954, 1958; Amir, 1969; Cook, 1985; Pettigrew, 1998; Pettigrew & Tropp, 2000; Watson, 1947; Williams, 1947) has represented a promising and popular strategy for reducing intergroup bias and conflict. This hypothesis proposes that simple contact between groups is not automatically sufficient to improve intergroup relations. Rather, for contact between

groups to reduce bias successfully, certain prerequisite features must be present.

In this introductory article, we first review the history of the development of the Contact

Author's note

Address correspondence to John F. Dovidio, Provost and Dean of the Faculty, Colgate University, Hamilton, NY 13346, USA [email: jdovidio@mail.colgate.edu]

Hypothesis, and then we examine the conditions that are required for successful contact to occur, explore basic psychological processes that may underlie the consequent reductions in bias, and consider factors that can inhibit or facilitate the generalization of the benefits of intergroup contact in terms of more positive attitudes toward the outgroup as a whole. We conclude by outlining the contents of the contributions to this Special Issue on Intergroup Contact, highlighting common themes, and identifying findings that suggest directions for future research.

History of the Contact Hypothesis

Although Allport (1954, 1958) is commonly credited with introducing the Contact Hypothesis in his classic book, *The Nature of Prejudice*, the idea that intergroup contact could reduce bias was already in the literature by the mid-1930s. Zelig and Hendrickson (1933) explored the relationship between several individual difference factors, including self-reported degree of acquaintance, and attitudes toward 39 different racial groups. The authors noted that the 'most significant factor related to social tolerance was the degree to which children claimed acquaintanceship with the various races', but they added that the 'relationship was high for all races except the Negro' (p. 26). Horowitz (1936) compared the racial attitudes of White children in segregated and integrated schools, but similarly found no differences in their racial attitudes.

By the mid-1940s, however, more attention was being devoted to the nature and context of interracial contact. F. Tredwell Smith's (1943) book, *An Experiment in Modifying Attitudes Toward the Negro*, described a program in which White Columbia University students had a series of positive weekend interracial social and intellectual contacts with Black leaders in Harlem. Students who experienced this form of interracial contact demonstrated significant improvements in their attitudes toward 'Negroes', changes that were not obtained among students in a control group who did not experience interracial contact.

Other works pointing to similar conclusions, often drawing on systematic studies and analyses of the experiences of American soldiers, were published soon after World War II. The battlefield offered a natural laboratory. Although segregation of Black and White units was the formal policy of the US Army during the war, combat conditions often necessitated racial integration among combat troops. One significant consequence was that White soldiers who had integrated combat experiences had more positive racial attitudes than did those who did not have this contact (Singer, 1948; Stouffer, 1949). In addition, in the Merchant Marines, the more voyages White seamen took with Black seamen, under conditions of mutual interdependence, the more positive their interracial attitudes became (Brophy, 1946).

These observations were being drawn into general principles soon after. Lett (1945) observed, in a paper presented at a conference jointly sponsored by the University of Chicago and the American Council on Race Relations, 'To achieve any kind of mutual understanding and regard, people must share experiences which permit the interplay of character and personality. They must share a common objective' (p. 35). Bramfield (1946), in his work on race relations in public schools concluded that 'where people of various cultures and races freely and genuinely associate, there tensions and difficulties, prejudices and confusions, dissolve; where they do not associate, where they are isolated from one another, there prejudice and conflict grow like a disease' (p. 245; see also Long, 1949).

A formal theory of contact soon began to emerge from work in several different disciplines (Pettigrew, in press). Watson (1947), in the field of education, observed in his monograph, *Action for Unity*: 'Spreading knowledge is useful, but it too seldom stirs the heart. Programs which arouse feelings are several degrees better than those that rely wholly on cold fact and logic. Still better are projects . . . designed to help people in face-to-face contacts with persons of a different race, religion, or background' (p. 54). He identified equal status contact, exposure to group members who disconfirm negative

stereotypes, and 'working together on common problems' (p. 58) as key elements for contact to reduce intergroup biases successfully.

Williams (1947), a prominent sociologist, outlined a number of propositions and testable hypotheses about techniques for improving intergroup relations in his influential book, *The Reduction of Intergroup Tensions*. Williams observed, 'In World War II recognition of the need for national unity in a warring world and the threat of "divide and conquer" techniques called forth a strong emphasis upon common American values and destinies' (p. 2). One proposition (#78) identified the potential benefits of appropriately structured intergroup contact: 'Lessened hostility will result from arranging intergroup collaboration, on the basis of personal association of individuals as functional equals, on a common task jointly accepted as worth while' (p. 69).

Williams (1947) recommended specific research on this topic. He stated, 'One feasible project, worthy of extensive repetition, is a comparative study of intergroup relations in segregated and mixed areas of the same community' (p. 91). Deutsch and Collins (1950, 1951), taking advantage of an opportunity to examine the effects of the assignment of apartments regardless of race in a housing project relative to more segregated housing based on personal preference at another housing project, performed such a study. Deutsch and Collins found that White residents in the integrated housing project had more frequent and positive interracial contact than those in segregated units, and they subsequently displayed more positive racial attitudes and showed less racial stereotyping.

In 1954, Sherif and his colleagues conducted a field study on intergroup conflict in an area adjacent to Robbers Cave State Park in Oklahoma (USA) that further emphasized the importance of the *context* in which intergroup contact occurs (see Sherif, Harvey, White, Hood, & Sherif, 1961). In this study, twenty-two 11-year-old boys who attended a summer camp were randomly assigned to two groups (subsequently known as the Eagles and Rattlers). Over a period of weeks the boys first interacted in separate groups unaware of the other's existence; then

engaged in a series of competitive activities that generated overt intergroup conflict; next had opportunities for intergroup contact under neutral, noncompetitive conditions; and finally participated in a series of cooperative activities designed to ameliorate conflict and bias. Sherif et al. found that mere intergroup contact was not sufficient to improve relations between the groups; neutral contact often exacerbated bias. Only after the investigators altered the functional relations between the groups by introducing a series of superordinate goals—ones that could not be achieved without the full cooperation of both groups and which were successfully achieved—did the relations between the two groups become more harmonious.

Within this theoretical and empirical context, Allport (1954, 1958) formulated his highly influential version of the Contact Hypothesis. He hypothesized:

To be maximally effective, contact and acquaintance programs should lead to a sense of equality in social status, should occur in ordinary purposeful pursuits, avoid artificiality, and if possible enjoy the sanction of the community in which they occur. The deeper and more genuine the association, the greater its effect. While it may help somewhat to place members of different ethnic groups side by side on a job, the gain is greater if these members regard themselves as part of a *team*. (Allport, 1958, p. 454, original italics)

Allport's version included four prerequisite features for contact to be successful at reducing intergroup conflict and achieving intergroup harmony. These four features are (1) equal status within the contact situation; (2) intergroup cooperation; (3) common goals; and (4) support of authorities, law, or custom (see Pettigrew, 1998).

Since Allport's (1954, 1958) formulation, the Contact Hypothesis has received extensive empirical attention in the intervening years. In fact, interest seems to be escalating. Of the 203 abstracts produced in a search of the term 'Contact Hypothesis' in PsychInfo, 89 of these were published between 2000 and 2002. Although intergroup contact without the prerequisite conditions identified by Allport, for example in the beginning stages of the

implementation of school desegregation plans (Schofield & Eurich-Fulcer, 2001), may not reduce intergroup biases effectively, there is impressive evidence across a range of minority groups, including homosexuals (Herek & Capitanio, 1996) and people with psychiatric disorders (Kolodziej & Johnson, 1996) as well as racial and ethnic minorities, of the importance of appropriate intergroup contact for reducing bias. Pettigrew and Tropp (2000) reported the results of a meta-analytic review of tests of the Contact Hypothesis, based on 203 studies involving over 90,000 participants. Across these studies, intergroup contact reflecting the parameters identified in the Contact Hypothesis was significantly related to decreased intergroup biases. These effects occur for both majority and minority participants.

Besides exploring the effectiveness of intergroup contact for reducing bias, research has focused conceptually on three general areas for extending Allport's formulation of the Contact Hypothesis: (1) testing and elaborating on the four prerequisite conditions that Allport (1954, 1958) identified as critical for contact to successfully improve intergroup relations; (2) exploring the processes and mediating mechanisms by which different features of the contact situation reduce bias; and (3) investigating the factors that moderate—that is, facilitate or inhibit—the generalization of positive intergroup contact for reducing prejudice and stereotyping associated with the group as a whole.

Prerequisite conditions of contact

Work investigating the prerequisite conditions identified by Allport (1954, 1958) has been generally supportive of his formulation. With respect to equal status, contact is more effective for reducing bias when groups enter the contact situation with equal status (Brewer & Kramer, 1985) and then have equal status within the contact situation (Moody, 2001). There is particularly strong support for the role of cooperative interdependence (Blanchard, Weigel, & Cook, 1975), and this principle forms the basis for interventions such as the jigsaw

classroom (Aronson & Patnoe, 1997) and cooperative learning (Johnson & Johnson, 2000; Slavin, 1985). Common goals are also a valuable factor (Chu & Griffey, 1985), but this factor may be less important than Allport (1954, 1958) originally suggested when it is isolated from cooperative interaction (Gaertner et al., 1999). Finally, empirical evidence also demonstrates that intergroup contact is more successful when it occurs in the context of supportive norms (Landis, Hope, & Day, 1984).

Importantly, two additional factors have emerged as critical conditions for successful intergroup contact. One is the opportunity for personal acquaintance between the members, especially when personalization occurs with those whose characteristics do not support stereotypic expectations (Amir, 1976; Brewer & Miller, 1984). Miller (2002) summarizes:

A number of interrelated, bi-directional processes and effects are induced by personalization. By promoting familiarity, it better permits the processing of individuating information of persons irrespective of their social category. . . . The trust implicit in personalized communication reduces anxiety and discomfort. . . . Simultaneously, these processes provide an opportunity to disconfirm negative stereotypes of disliked outgroups, and thereby break down the monolithic perception of the outgroup as a homogeneous unit. (p. 397)

The other additional factor is the development of intergroup friendships (Pettigrew, 1998). Pettigrew (1997), who examined the responses of over 3800 majority group members in probability samples from France, Great Britain, the Netherlands, and West Germany, found that people with outgroup friends had significantly lower levels of bias toward the group and that the development of intergroup friendships played a critical role in the way that contact reduced bias (see also Herek & Capitanio, 1996).

We summarize the features of the intergroup contact situation that are critical for reducing bias in Figure 1. As the prerequisite conditions for effective intergroup contact became established and expanded, attention shifted, however, from *what* conditions were important to *why* they were important. The focus, thus, turned to

identifying the underlying psychological processes, the mediating mechanisms, by which appropriate intergroup contact translates into more positive attitudes and relations.

Mediating mechanisms

As more and more facilitating conditions were identified over and above the main prerequisite conditions across the years, the recipe for successful intergroup contact began to represent a list of loosely connected, diverse conditions rather than a unifying conceptual framework that explained how these prerequisite features achieve their effects (Stephan & Stephan, 1985). Several potential mediators have been proposed, however, that subsume these factors into a handful of meaningful mechanisms (see Figure 1). These involve the functional relations between the groups, behavioral responses, affective reactions to members of other groups, and cognitive responses to both outgroup and ingroup members.

Functional relations

The classic functional relations perspective by Sherif et al. (1961) views cooperative interdependence as a direct mediator of attitudinal and behavioral changes. That is, positive interdependence (cooperation) produces more favorable attitudes toward outgroup members, whereas negative interdependence (competition) generates more unfavorable attitudes. Building on this theme, Realistic Group Conflict Theory (Campbell, 1965; see also Bobo, 1988), the Instrumental Model of Group Conflict (Esses, Dovidio, Jackson, & Armstrong, 2001), and Social Dominance Theory (Sidanius & Pratto, 1999) have also emphasized the importance of how people view the competitive or cooperative nature of intergroup relations as a critical mediator of intergroup relations.

According to Sherif et al. (1961), when groups are competitively interdependent, actions that yield positive outcomes for one group produce negative consequences for the other. Thus, in the attempt to obtain favorable outcomes for themselves, the actions of the members of each

group are also realistically perceived to be calculated to frustrate the goals of the other group. Therefore, a win-lose, zero-sum competitive relation between groups can initiate mutually negative feelings and stereotypes toward the members of the other group. In contrast, a cooperatively interdependent relation between members of different groups can reduce bias (Worchel, 1986).

Recently, however, researchers have further considered the processes that may be involved in translating functional relations into attitudes (see Brewer & Miller, 1984; Miller & Davidson-Podgorny, 1987; Worchel, 1979, 1986). For example, cooperation can have positive, reinforcing outcomes. The rewarding properties of achieving success may then become associated with members of other groups (Lott & Lott, 1965), thereby increasing attraction (Gaertner et al., 1999). These findings further suggest the operation of fundamental behavioral, affective, and cognitive factors in reducing intergroup biases through social contact.

Behavioral factors

Pettigrew (1998) observed, 'Optimal intergroup contact acts as a benign form of behavior modification' (p. 71). Establishing positive intergroup interaction within the contact situation can facilitate the development of new norms of intergroup acceptance that can generalize to new situations and to attitudes toward the outgroup as a whole. In addition, positive behavioral interactions may induce greater intergroup acceptance as a result of dissonance reduction serving to justify this type of interaction with the other group (Miller & Brewer, 1986). When intergroup contact is favorable, psychological processes that restore cognitive balance or reduce dissonance produce more favorable attitudes toward members of the other group and toward the group as a whole to be consistent with the positive nature of the interaction.

Affective factors

Pettigrew (1998) further observed, 'Emotion is critical in intergroup contact' (p. 71; see also Mackie & Smith, 2002). Pettigrew and Tropp

(2000) concluded from their meta-analysis that affective factors play a critical role, potentially as mediators, of the effect of contact for reducing bias. Intergroup contact may thus operate by reducing negative affective reactions toward outgroup members and the group as a whole, or by increasing positive affective ties.

In terms of negative emotions, anxiety typically characterizes interactions between groups (Stephan & Stephan, 1985). This anxiety can prime negative reactions to other group members, strengthening stereotyping (Wilder, 1993), interfering with effective communication (Hyers & Swim, 1998), and leading to intergroup distrust (Dovidio, Gaertner, Kawakami, & Hodson, 2002). Reducing intergroup anxiety has been demonstrated as a critical step in improving intergroup relations (Islam & Hewstone, 1993; Stephan & Stephan, 1985).

With respect to positive emotions, intergroup contact can reduce bias by enhancing empathy toward members of the other group. For example, a study by Batson et al. (1997) demonstrated the effect of empathy on attitudes toward stigmatized groups. Participants who were instructed to focus on the feelings of the person (a high empathy condition) rather than on the facts of the person's problem (low empathy) while listening to an interview with a member of a stigmatized group subsequently exhibited more positive attitudes to the other person's group (people suffering from AIDS, or homeless people). Finlay and Stephan (2000) reported similar improvements in Whites' attitudes toward Blacks after participants read a set of short essays ostensibly written by Black college students describing their personal experiences with discrimination (e.g. being falsely accused of wrong-doing, being denied check-writing privileges).

Empathy can reduce bias in at least two ways. First empathy can lead people to feel more positively about others. Batson et al. (1997) found that asking participants to imagine how the other person was feeling, compared to attending primarily to the information presented, increased liking for a specific member of another group, which generalized to more positive attitudes toward the group as a whole.

Second, empathy influences people's motivations to behave in a more supportive way toward others, independent of how much they like them. Batson (1991) has shown that empathy can stimulate a particular emotional experience, empathic concern (e.g. compassion, sympathy) that produces an altruistic motivation to improve the welfare of another person. To the extent that prejudice is commonly seen as threatening the welfare of the other person, one manifestation of this altruistic response may be increasing one's motivation to respond without prejudice to that person's group.

Cognitive factors

Two classes of cognitive factors have been identified (1) learning new information, and (2) social representations.

Learning new information Based on the assumption that ignorance promotes prejudice (Stephan & Stephan, 1984), Pettigrew (1998) proposed that 'learning about others' is a critical step in how intergroup contact improves intergroup relations. Increasing what people know about others can reduce bias in at least three ways. First, with more information about others, people may be more likely to see others in individuated and personalized ways. By having the opportunity to build new, non-stereotypic associations with groups members (Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000), contact can undermine stereotyping. Second, greater knowledge of others may reduce uncertainty about how to interact with others, which can reduce the likelihood of avoidance of members of other groups and reduces discomfort in interactions that do occur (Crosby, Bromley, & Saxe, 1980; Gaertner & Dovidio, 1986). Third, enhanced intercultural understanding, in terms of better historical background or increased cultural sensitivity, might reduce bias by increasing recognition of injustice. As Stephan and Finlay (1999) explained, 'learning about suffering and discrimination while empathizing with the victims may lead people to . . . come to believe that the victims do not deserve the mistreatment. . . . If the victims do not deserve this unjust treatment,

it may no longer be tenable to hold such negative attitudes toward them' (p. 735). An emphasis on learning new information is a critical component of multicultural education programs for improving intergroup relations (Stephan & Stephan, 2001).

Social representations Evidence for the role of social representations comes from work on social categorization and social identity. Social Identity Theory (Tajfel & Turner, 1979) and, more recently, Self-Categorization Theory (Turner, Hogg, Oakes, Reicher & Wetherell, 1987) address the fundamental role of individual and collective identities in the development of intergroup bias. Social categorization, in which people are identified as ingroup or outgroup members, has a profound impact on affective, cognitive, and behavioral responses toward others. Emotionally, people spontaneously experience more positive affect toward other members of the ingroup than toward members of the outgroup (Otten & Moskowitz, 2000), particularly toward those ingroup members who are most prototypical of their group (Hogg & Hains, 1996). Cognitively, people retain information in a more detailed fashion for ingroup members than for outgroup members (Park & Rothbart, 1982), have better memory for information about ways in which ingroup members are similar to and outgroup members are dissimilar to the self (Wilder, 1981), and remember less positive information about outgroup members (Howard & Rothbart, 1980). And behaviorally, people are more helpful toward ingroup than toward outgroup members (Dovidio et al., 1997), and they work harder for groups identified as ingroups (Worchel, Rothgerber, Day, Hart, & Butemeyer, 1998).

Because of its role in creating and sustaining bias, social categorization processes can also have important implications for ways to reduce bias. In particular, from the social categorization perspective, the issue to be addressed is how intergroup contact can be structured so as to alter cognitive representations in ways that eliminate one or more of the basic features of the negative intergroup schema. Based on the

premises of social identity theory, three alternative models for contact effects have been developed and tested in experimental and field settings, namely decategorization, recategorization, and mutual intergroup differentiation. Each of these strategies targets the social categorization process as the place to begin to understand and to combat intergroup biases.

Decategorization encourages members to de-emphasize the original group boundaries and to conceive of themselves as separate individuals rather than as members of different groups (Wilder, 1986). One influential version of this approach involves going beyond simply producing individual representations of others to creating personalized impressions (Brewer & Miller, 1984; Miller, 2002). The *personalization* perspective on the contact situation proposes that intergroup interactions should be structured to reduce the salience of category distinctions and promote opportunities to get to know outgroup members as individual persons thereby disarming the forces of categorization. In the personalization process, members focus on information about an outgroup member that is relevant to the individual person rather than the member of the group. A number of studies provide evidence supporting this perspective on contact effects (Bettencourt, Brewer, Croak, & Miller, 1992; Marcus-Newhall, Miller, Holtz, & Brewer, 1993).

The *recategorization* approach is represented by the Common Ingroup Identity Model (Gaertner & Dovidio, 2000; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). According to this model, intergroup bias and conflict can be reduced by factors that transform participants' representations of memberships from two groups to one, more inclusive group. With common ingroup identity, the cognitive and motivational processes that initially produced ingroup favoritism are redirected to benefit the common ingroup, including former outgroup members.

Among the antecedent factors proposed by the Common Ingroup Identity Model are the features of contact situations that are necessary for intergroup contact to be successful (e.g. interdependence between groups, equal status,

equalitarian norms; Allport, 1954, 1958). From this perspective, intergroup cooperative interaction, for example, enhances positive evaluations of outgroup members, at least in part, because cooperation transforms members' representations of the memberships from 'us' versus 'them' to a more inclusive 'we' (see Gaertner & Dovidio, 2000). Moreover, consistent with the insight of Allport (1954, 1958) on the importance of the perception that members of different groups 'regard themselves as part of a *team*' (Allport, 1958, p. 454), Gaertner and Dovidio (2000) propose that developing a common ingroup identity does not necessarily require groups to forsake their original identities entirely, and that the benefits of a common ingroup identity can be achieved while people maintain a 'dual identity' with their superordinate group and subgroup identities simultaneously salient.

Nevertheless, it may sometimes be difficult to sustain a common group identity beyond the initial contact situation (Hewstone, 1996), and intergroup contact can often produce threats to the 'positive distinctiveness' of their original groups that can exacerbate rather than reduce bias (Tajfel & Turner, 1979). The Mutual Intergroup Differentiation Model (Hewstone & Brown, 1986) thus represents a different approach that addresses these issues. In order to promote positive intergroup experience, Hewstone and Brown recommend that the contact situation be structured such that members of the respective groups have distinct but complementary roles to contribute toward common goals. In this way, both groups can maintain positive distinctiveness within a cooperative framework. Thus, the Mutual Intergroup Differentiation Model does not seek to change the basic category structure of the intergroup contact situation, but rather it attempts to change the context of contact to one of positive interdependence (see Brown & Wade, 1987; Deschamps & Brown, 1983; Dovidio, Gaertner, & Validzic, 1998).

Rather than viewing these social representation frameworks as competing positions, these models may be perceived to be complementary approaches that have varying degrees of effectiveness in different situations or operate

sequentially to sustain the positive effect of intergroup contact (Gaertner & Dovidio, 2000; Hewstone, 1996; Pettigrew, 1998). For instance, different representations may have different appeals and effectiveness for different groups and for different types of individuals within these groups. Majority group members commonly prefer a common ingroup representation (assimilation), whereas minority group members prefer an integrative orientation reflective of mutual intergroup differentiation (van Oudenhoven, Prins, & Buunk, 1998). These preferences also relate to mediation. Dovidio, Gaertner, and Kafati (2000) found that the benefits of intergroup contact were most strongly mediated by a common group identity for White students in the United States, whereas a dual identity (a 'different groups on the same-team' representation) was the most important mediating factor for racial and ethnic minority students. These differences were more pronounced for students who identified more strongly with their group. Moreover, with respect to individual differences, appeals that emphasize the common group membership of nonimmigrants and immigrants have been shown to improve attitudes toward immigrants and to increase support for immigration among people in Canada and the United States, and particularly among those high in Social Dominance Orientation for whom group hierarchy is important (Esses et al., 2001).

As Pettigrew (1998) and Hewstone (1996) hypothesize, different representations may develop sequentially with contact to reduce intergroup bias. For example, recategorization in terms of a common ingroup identity facilitates helping and self-disclosure toward those formerly perceived primarily as outgroup members (see Dovidio et al., 1997; Nier, Gaertner, Dovidio, Banker, Ward & Rust, 2001), which in turn may stimulate reciprocal responses from others. These new intimate and self-disclosing interactions can create more personalized perceptions, which then sustain the positive impact of contact on group relations. Pettigrew (1998) also suggests that initial decategorization effects may facilitate the subsequent development of a common ingroup identity in

the process of intergroup contact. Thus, recategorization, decategorization, and personalization can potentially operate complementarily and sequentially to improve intergroup relations in lasting and meaningful ways.

Generalization

The third general emphasis of research on the Contact Hypothesis has involved factors that can moderate—that is, facilitate or inhibit—the generalizability of the benefits of intergroup contact to attitudes to the group as a whole. A focus of this issue has involved the role of *category salience* during the contact situation.

Salient categories

Several researchers in this area posit that it is critical to maintain the salience of group representations during the contact situation for generalization to occur. Hewstone and Brown (1986), in particular, argue that generalization of positive contact experiences is more likely when the contact situation is defined as an *intergroup* situation rather than an *interpersonal* interaction. Generalization in this case is direct; group membership serves as the associative link between individuals in the contact situation and the outgroup as a whole. Similarly, Gaertner and Dovidio (2000) proposed a 'trade-off hypothesis' in which initial group contact may produce less positive attitudes toward outgroup members present when original group boundaries are salient than when only a common ingroup identity is salient but, because of the salient associative link, generalization will be more successful under dual identity conditions.

Consistent with these views on the importance of category salience, a number of studies have demonstrated that cooperative contact with a member of an outgroup leads to more favorable generalized attitudes toward the group as a whole when category membership is made salient during contact (e.g. Brown, Vivian & Hewstone, 1999). In addition, the benefits of group contact, particularly in terms of reducing stereotyping, are more pronounced when positive contact is with outgroup members perceived to be typical (rather than atypical) of

their group (Desforges et al., 1991; Rothbart & John, 1985).

Personalization

Alternatively, Brewer and Miller (1984; see also Miller, 2002) have shown that the development of personalized representations through intergroup contact also produces more favorable generalized attitudes, as well as more positive attitudes toward outgroup members present in the contact situation. Miller, Brewer, and Edwards (1985), for instance, demonstrated that a cooperative task that required personalized interaction with members of the outgroup resulted not only in more positive attitudes toward outgroup members in the cooperative setting but also toward other outgroup members shown on a videotape, compared to cooperative contact that was task-focused rather than person-focused.

Further evidence of the value of personalized interactions for reducing intergroup bias comes from data on the effects of intergroup friendships (Hamberger & Hewstone, 1997; Pettigrew, 1997). Other research reveals two valuable extensions of the personalized contact effect. One is evidence that personal friendships with members of one outgroup may lead to tolerance toward outgroups in general and reduced nationalistic pride, a process that Pettigrew (1997) refers to as 'deprovincialization'. Thus, decategorization based on developing cross-group friendships that decrease the relative attractiveness of a person's ingroup provides increased appreciation of the relative attractiveness of other outgroups more generally.

A second extension is represented by evidence that contact effects may operate indirectly or vicariously. Although interpersonal friendship across group lines leads to reduced prejudice, even knowledge that an ingroup member has befriended an outgroup member has the potential to reduce bias while the salience of group identities remains high for the observer (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997).

Although the personalization approach, which implicates decategorization, and category salience perspectives appear antithetical, Miller

(2002) suggests points of compatibility. Although Miller agrees that if contact with an outgroup member occurs in the absence of recognition of category membership, no generalization will occur, he notes that:

in most of the contact situations that are of interest to those concerned with intergroup relations, cues providing information about the category identity of interacting persons are constantly present. . . . Thus, although we never explicitly emphasized the logical necessity of salient category cues for the generalization of positive contact, we did not disagree with Hewstone and Brown's emphasis on it. Instead, we fully concur with them. (pp. 399–400)

Therefore, there appears to be a general consensus that maintaining the salience of category membership is important for generalization to occur. The question that remains involves the relative effectiveness of having positive functional group relations (Hewstone & Brown,

1986), maintaining a superordinate group identity (Gaertner & Dovidio, 2000), or establishing personalized relations while simultaneously having category membership be at least moderately salient. The answer to this question is that these additional considerations are all important but that the relative effectiveness of each strategy is moderated by situational factors, temporal issues, and individual differences.

The current issue

Our review of current issues in intergroup contact is schematically summarized in Figure 1. On the left-hand side of our formulation are the original four prerequisite conditions described by Allport (1954, 1958), along with the two more recently identified elements, intimate interaction (Amir, 1976) and friendships (Pettigrew,

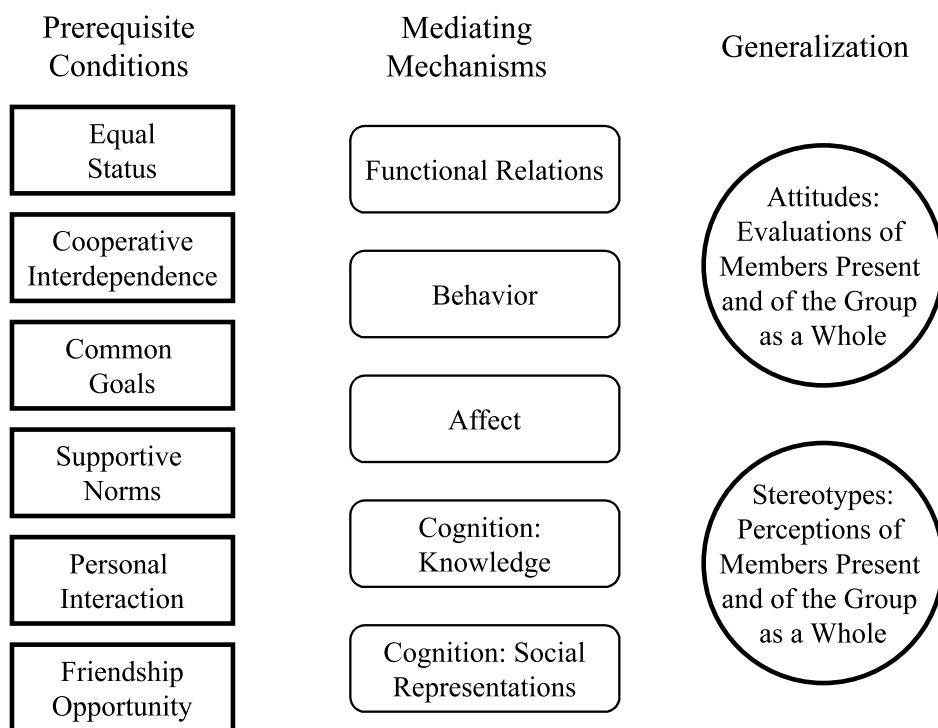


Figure 1. Processes in intergroup contact.

1997). The center column depicts key potential mediating mechanisms by which intergroup contact can translate into more positive intergroup relations and attitudes. The last column represents the process of generalization from more positive attitudes toward outgroup members present in the contact situation to attitudes toward the group as a whole. Also, this last column acknowledges that interaction with outgroup members can also undermine outgroup stereotypes by changing perceptions of outgroup homogeneity.

Issue content

The six papers that follow in this special issue map onto various aspects of this framework. In the first paper, 'Ethnic Prejudice in East and West Germany: The Explanatory Power of Intergroup Contact', Wagner, van Dick, Pettigrew, and Christ demonstrate the potency of the relationship between intergroup contact and reduced levels of bias. Using three surveys of the attitudes and experiences of East and West Germans, these authors examined the hypothesis that differences in prejudice toward outgroups expressed by East and West Germans can be accounted for by differences in intergroup contact. This paper, employing structural equations modeling, further investigates the hypothesized *causal* relationship between intergroup friendship, in particular, and bias, and it demonstrates how general social psychological theory can be applied to explain a relevant social problem.

The second paper, 'Intergroup Contact and Prejudice Toward Immigrants in Italy: The Mediation Role of Anxiety and the Moderational Role of Group Salience', is by Voci and Hewstone. This paper presents two studies that explore how intergroup contact with immigrants in Italy can influence outgroup evaluations and perceptions of outgroup homogeneity. This research further examined the potential mediating role of intergroup anxiety and the moderating role of the salience of group memberships during contact for generalized attitudes. Voci and Hewstone's results demonstrated that the combination of positive contact with individuals from the outgroup (which

reduces anxiety) *and* the salience of group memberships during contact led to more positive orientations toward the outgroup in general.

Eller and Abrams, in the third paper titled, '“Gringos” in Mexico: Cross-Sectional and Longitudinal Effects of Language School-promoted Contact on Intergroup Bias', used both cross-sectional and longitudinal methodologies to investigate the role of contact in reducing bias. Specifically, Eller and Abrams examined how contact as friends and more superficial contact at school related to intergroup attitudes among American students studying in Mexico. This research considered a number of the mediating variables identified in Figure 1, including affective ties, behavioral responses, learning about the outgroup, and social representations. The work offers new insights for integrating alternative perspectives on how contact reduces bias (Gaertner & Dovidio, 2000; Pettigrew, 1998).

In the fourth paper, 'The Effects of Ingroup and Outgroup Friendships on Ethnic Attitudes in College: A Longitudinal Study', Levin, Van Laar, and Sidanius used longitudinal data which tracked American students' responses across four years of college to examine the potential iterative interrelationships among key aspects of the model presented in Figure 1. In particular, they investigated how initial levels of intergroup attitudes and anxiety influenced college students' willingness to engage in intergroup interaction and specifically their willingness to develop intergroup friendships. The development of more intergroup friendships, in turn, predicted lower levels of intergroup anxiety and bias at the end of students' college careers. This study sheds important light on the nature of the possible causal sequences that can occur from intergroup contact.

In the fifth paper, 'Intergroup Contact: Effects on Group Evaluations and Perceived Variability', Wolsko, Park, Judd, and Bachelor investigated how intergroup contact with typical and atypical members of an outgroup can differentially impact separate components of group perceptions, specifically overall group evaluations and perceptions of group variability. They

found that intergroup contact that is cooperative and pleasant generally produces more positive target group evaluations, regardless of the typicality of the outgroup member involved in the interaction. In contrast, perceptions of group variability as a function of contact were critically moderated by perceived typicality. Specifically, they found that changes in perceptions of group variability as a function of contact occurred only when the contact was with someone who disconfirmed the group stereotype but who was nevertheless regarded as typical of the group.

The final paper by Nagda and Zúñiga, 'Fostering Meaningful Racial Engagement Through Intergroup Dialogues', complements the other contributions by studying the effects of a seven-week college-level intervention program (Intergroup Dialogues) that was designed to encourage increased social awareness, effective communication, and relationship building among the ethnically diverse groups of students who participated. The Intergroup Dialogues approach assumes that favorable conditions of intergroup contact, including equal status, opportunity for acquaintance, and interdependency, are necessary, but not sufficient to promote the intended consequences of these intergroup interactions. Specifically, they found that positive changes in students' social awareness, perspective taking, and relationship building were moderated by students' positive engagement with the process of learning advocated by the Intergroup Dialogues approach.

Taken together, these papers address some common themes, such as an interest in the psychological processes that mediate the relation between intergroup contact and intergroup attitudes, and a number of convergent findings. However, they also yield a few findings that are apparently inconsistent, which can help to stimulate future research.

Findings and themes

The findings from this set of papers reflect four fundamental issues: (1) the role of intergroup anxiety, (2) the importance of intergroup friendships, (3) the potential mediating influence of group representations, and (4) the

distinct impact of contact on prejudice and stereotypes.

The two studies that consider the role of intergroup anxiety, by Voci and Hewstone and by Levin et al., show strong agreement about the dysfunctional effects of intergroup anxiety on intergroup attitudes and the formation of outgroup friendships. Voci and Hewstone's paper indicates that frequent, high quality intergroup contact relates negatively to intergroup anxiety, while high levels of intergroup anxiety predict negative outgroup attitudes, including more subtle forms of prejudice. Relatedly, the longitudinal study by Levin et al. reveals that higher levels of intergroup anxiety during the first year of college predict the lower incidences of cross-group friendships two and three years later.

There is also strong agreement across articles about the importance of the relationships among contact, cross-group friendships, and intergroup attitudes. In general, the opportunity for contact that promotes intergroup friendships seems to lead to more positive intergroup attitudes. Nevertheless, there is some discrepancy regarding whether the direction of causality between contact, cross-group friendship, and intergroup attitudes is primarily unidirectional, from contact to friendship to positive attitudes, or equivalently bi-directional. The cross-sectional analyses by Wagner et al. and by Eller and Abrams support Pettigrew's (1997) finding regarding the path from friendship to positive attitudes. In addition, Wagner et al.'s analyses reveal that the strength of this path from friendship to attitudes is stronger than the opposite path from favorable outgroup attitudes to increased receptivity to forming outgroup friendships.

In contrast, longitudinal analyses by Eller and Abrams over a two-week period do not support the friendship-to-attitude path obtained in their cross-sectional analysis. Also, the longitudinal study by Levin et al. reveals that over a four-year period the pathway between friendship and attitudes pathway is bi-directional, and of equivalent strength in both directions. These papers thus converge on the importance of outgroup friendships for developing more favorable outgroup attitudes and point to the value of

examining changes in the dynamics of intergroup contact over time (i.e. longitudinally) as well as at a given point in time (i.e. cross-sectionally).

With respect to the mediating role of cognitive representations of the groups, the work of Eller and Abrams and by Levin et al. demonstrate the beneficial effects of strengthening one-group representations while weakening separate-group representations of the groups (see Gaertner & Dovidio, 2000). Specifically, Eller and Abrams, in their cross-sectional analysis, found that more intergroup contact in social settings predicted weaker separate group representations, which in turn predicted lower levels of prejudice. Stronger superordinate, one-group representations predicted lower levels of intergroup anxiety and more favorable outgroup evaluations. These paths were not significant in their longitudinal analyses, however. Nevertheless, Levin et al.'s longitudinal analysis does reveal that a common ingroup identity (i.e. a one-group representation) leads, over time, to the increased formation of outgroup friendships.

Two papers, those by Wolsko et al. and by Voci and Hewstone, demonstrate how intergroup contact not only reduces prejudice (group evaluations) but also undermines group stereotypes (perceived group variability). What remains unclear, however, are the conditions required to moderate the effect of contact on the weakening of stereotypes. Among the Italian participants, Voci and Hewstone found that frequent levels of high quality intergroup contact was directly related to perceptions of greater outgroup variability. This effect was not moderated by awareness of group membership during contact. In contrast, Wolsko et al. found in their laboratory study that only contact with outgroup members who disconfirm their group stereotype but are nevertheless regarded as typical of their group, increased perceptions of outgroup variability.

In conclusion, although there is now substantial evidence that intergroup contact is effective at reducing intergroup biases (Pettigrew & Tropp, 2000), substantial questions remain about what features of the contact situation are necessary to reduce bias successfully, what

aspects of contact (i.e. quantity and/or quality) are most important, and what processes mediate and moderate the effects of contact on attitudes and stereotypes. The articles in this Special Issue of *Group Processes and Intergroup Relations* separately and together represent important steps toward answering these questions.

Acknowledgement

Preparation of this article was supported by NIMH Grant MH 48721 to the first two authors.

References

- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Allport, G. W. (1958). *The nature of prejudice* (abridged). Garden City, NY: Doubleday.
- Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin*, 71, 319-342.
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and race relations. In P. A. Katz (Ed.), *Towards the elimination of racism* (pp. 245-280). New York: Pergamon.
- Aronson, E., & Patnoe, S. (1997). *The jigsaw classroom*. New York: Longman.
- Batson, C. D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: Erlbaum.
- Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L. et al. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, 72, 105-118.
- Bettencourt, B. A., Brewer, M. B., Croak, M. R., & Miller, N. (1992). Cooperation and the reduction of intergroup bias: The roles of reward structure and social orientation. *Journal of Experimental Social Psychology*, 28, 301-319.
- Blanchard, F. A., Weigel, R. H., & Cook, S. W. (1975). The effects of relative competence of group members upon interpersonal attraction in cooperating interracial groups. *Journal of Personality and Social Psychology*, 32, 519-530.
- Bobo, L. (1988). Group conflict, prejudice, and the paradox of contemporary racial attitudes. In P. A. Katz & D. A. Taylor (Eds.), *Eliminating racism: Profiles in controversy* (pp. 85-114). New York: Plenum.
- Bramfield, T. (1946). *Minority problems in the public schools*. New York: Harper & Brothers.

- Brewer, M. B., & Kramer, R. M. (1985). The psychology of intergroup attitudes and behavior. *Annual Review of Psychology*, 36, 219–243.
- Brewer, M. B., & Miller, N. (1984). Beyond the contact hypothesis: Theoretical perspectives on desegregation. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: The psychology of desegregation* (pp. 281–302). Orlando FL: Academic Press.
- Brophy, I. N. (1946). The luxury of anti-Negro prejudice. *Public Opinion Quarterly*, 9, 456–466.
- Brown, R. J., Vivian, J., & Hewstone, M. (1999). Changing attitudes through intergroup contact: The effects of group membership salience. *European Journal of Social Psychology*, 29, 741–764.
- Brown, R. J., & Wade, G. (1987). Superordinate goals and intergroup behavior: The effect of role ambiguity and status on intergroup attitudes and task performance. *European Journal of Social Psychology*, 17, 131–142.
- Campbell, D. T. (1965). Ethnocentric and other altruistic motives. In D. Levine (Ed.), *Nebraska symposium on motivation* (Vol. 13, pp. 283–311). Lincoln: University of Nebraska Press.
- Chu, D., & Griffey, D. (1985). The contact theory of integration: The case of sport. *Sociology of Sport Journal*, 2, 323–333.
- Cook, S. W. (1985). Experimenting on social issues: The case of school desegregation. *American Psychologist*, 40, 452–460.
- Crosby, F., Bromley, S., & Saxe, L. (1980). Recent unobtrusive studies of black and white discrimination and prejudice: A literature review. *Psychological Bulletin*, 87, 546–563.
- Deschamps, J. C., & Brown, R. (1983). Superordinate goals and intergroup conflict. *British Journal of Social Psychology*, 22, 189–195.
- Desforges, D. M., Lord, C. G., Ramsey, S. L., Mason, J. A., Van Leeuwen, M. D., West, S. C. et al. (1991). Effects of structured cooperative contact on changing negative attitudes toward stigmatized social groups. *Journal of Personality and Social Psychology*, 60, 531–544.
- Deutsch, M., & Collins, M. E. (1950). Interracial housing. III. Influence of integrated, segregated occupancy on racial attitudes measured. *Journal of Housing*, 7, 127–129.
- Deutsch, M., & Collins, M. E. (1951). *Interracial housing: A psychological evaluation of a social experiment*. Minneapolis, MN: University of Minnesota Press.
- Dovidio, J. F., Gaertner, S. L., & Kafati, G. (2000). Group identity and intergroup relations: The Common In-Group Identity Model. In S. R. Thye, E. J. Lawler, M. W. Macy, & H. A. Walker (Eds.), *Advances in group processes* (Vol. 17, pp. 1–34). Stamford, CT: JAI Press.
- Dovidio, J. F., Gaertner, S. L., Kawakami, K., & Hodson, G. (2002). Why can't we just get along? Interpersonal biases and interracial distrust. *Cultural Diversity & Ethnic Minority Psychology*, 8, 88–102.
- Dovidio, J. F., Gaertner, S. L., & Validzic, A. (1998). Intergroup bias: Status, differentiation, and a common in-group identity. *Journal of Personality and Social Psychology*, 75, 109–120.
- Dovidio, J. F., Gaertner, S. L., Validzic, A., Matoka, K., Johnson, B., & Frazier, S. (1997). Extending the benefits of re-categorization: Evaluations, self-disclosure and helping. *Journal of Experimental Social Psychology*, 33, 401–420.
- Esses, V. M., Dovidio, J. F., Jackson, L. M., & Armstrong, T. M. (2001). The immigration dilemma: The role of perceived group competition, ethnic prejudice, and national identity. *Journal of Social Issues*, 57, 389–412.
- Finlay, K., & Stephan, W. G. (2000). Reducing prejudice: The effects of empathy on intergroup attitudes. *Journal of Applied Social Psychology*, 30, 1720–1737.
- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61–89). Orlando, FL: Academic Press.
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The Common Ingroup Identity Model*. Philadelphia, PA: Psychology Press.
- Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 4, pp. 1–26). New York: Wiley.
- Gaertner, S. L., Dovidio, J. F., Rust, M. C., Nier, J., Banker, B., Ward, C. M. et al. (1999). Reducing intergroup bias: Elements of intergroup cooperation. *Journal of Personality and Social Psychology*, 76, 388–402.
- Hamberger, J., & Hewstone, M. (1997). Inter-ethnic contact as a predictor of blatant and subtle prejudice: Tests of a model in four West European nations. *British Journal of Social Psychology*, 36, 173–190.
- Herek, G. M., & Capitanio, J. P. (1996). 'Some of my best friends': Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412–424.
- Hewstone, M. (1996). Contact and categorization:

- Social psychological interventions to change intergroup relations. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 323–368). New York: Guilford.
- Hewstone, M., & Brown, R. J. (1986). Contact is not enough: An intergroup perspective on the 'Contact Hypothesis'. In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1–44). Oxford: Basil Blackwell.
- Hogg, M. A., & Hains, S. C. (1996). Intergroup relations and group solidarity: Effects of group identification and social beliefs on depersonalized interaction. *Journal of Personality and Social Psychology*, 70, 295–309.
- Horowitz, E. L. (1936). The development of attitude toward the Negro. *Archives of Psychology* (Columbia University), No. 194, 47.
- Howard, J. M., & Rothbart, M. (1980). Social categorization for in-group and out-group behavior. *Journal of Personality and Social Psychology*, 38, 301–310.
- Hyers, L. L., & Swim, J. K. (1998). A comparison of experiences of dominant and minority group members during an intergroup encounter. *Group Processes and Intergroup Relations*, 1, 143–163.
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived outgroup variability and outgroup attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19, 700–710.
- Johnson, D. W., & Johnson, R. T. (2000). The three Cs of reducing prejudice and discrimination. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 239–268). Hillsdale, NJ: Erlbaum.
- Kawakami, K., Dovidio, J. F., Moll, J., Hermsen, S., & Russin, A. (2000). Just say no (to stereotyping): Effects of training in trait negation on stereotype activation. *Journal of Personality and Social Psychology*, 78, 871–888.
- Kolodziej, M. E., & Johnson, B. T. (1996). Interpersonal contact and acceptance of persons with psychiatric disorders: A research synthesis. *Journal of Consulting and Clinical Psychology*, 64, 1387–1396.
- Landis, D., Hope, R. O., & Day, H. R. (1984). Training for desegregation in the military. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: The psychology of desegregation* (pp. 257–278). Orlando, FL: Academic Press.
- Lett, H. A. (1945). Techniques for achieving interracial cooperation. *Proceedings of the Institute on Race Relations and Community Organization*. Chicago, IL: University of Chicago and American Council on Race Relations.
- Long, H. H. (1949). Race restrictive covenants and social control. *Sociology & Social Research*, 33, 355–361.
- Lott, A. J., & Lott, B. E. (1965). Group cohesiveness as interpersonal attraction: A review of relationships with antecedent and consequent variables. *Psychological Bulletin*, 64, 259–309.
- Mackie, D. M., & Smith, E. R. (Eds.) (2002). *From prejudice to intergroup emotions: Differentiated reactions to social groups*. New York: Psychology Press.
- Marcus-Newhall, A., Miller, N., Holtz, R., & Brewer, M. B. (1993). Cross-cutting category membership with role assignment: A means of reducing intergroup bias. *British Journal of Social Psychology*, 32, 125–146.
- Miller, N. (2002). Personalization and the promise of Contact Theory. *Journal of Social Issues*, 58, 387–410.
- Miller, N., & Brewer, M. B. (1986). Categorization effects on ingroup and outgroup perception. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 209–230). Orlando, FL: Academic Press.
- Miller, N., Brewer, M. B., & Edwards, K. (1985). Cooperative interaction in desegregated settings: A laboratory analog. *Journal of Social Issues*, 41(3), 63–75.
- Miller, N., & Davidson-Podgorny, G. (1987). Theoretical models of intergroup relations and the use of cooperative teams as an intervention for desegregated settings. In C. Hendrick (Ed.), *Review of personality and social psychology: Vol. 9. Group processes and intergroup relations* (pp. 41–67). Beverly Hills, CA: Sage.
- Moody, J. (2001). Race, school integration, and friendship segregation in America. *American Journal of Sociology*, 107, 679–716.
- Nier, J. A., Gaertner, S. L., Dovidio, J. F., Banker, B. S., Ward, C. M., and Rust, M. C. (2001). Changing interracial evaluations and behavior: The effects of a common group identity. *Group Processes and Intergroup Relations*, 4, 299–316.
- Otten, S., & Moskowitz, G. B. (2000). Evidence for implicit evaluative in-group bias: Affect-based spontaneous trait inference in a minimal group paradigm. *Journal of Experimental Social Psychology*, 36, 77–89.
- Park, B., & Rothbart, M. (1982). Perception of out-group homogeneity and levels of social categorization: Memory for the subordinate attributes of in-group and out-group members. *Journal of Personality and Social Psychology*, 42, 1051–1068.

- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173–185.
- Pettigrew, T. F. (1998). Intergroup Contact Theory. *Annual Review of Psychology*, 49, 65–85.
- Pettigrew, T. F. (in press). Intergroup contact: Theory, research and new perspectives. In J. A. Banks & C. A. Banks (Eds.), *Handbook of research on multicultural education*. New York: Jossey-Bass.
- Pettigrew, T. F., & Tropp, L. R. (2000). Does intergroup contact reduce prejudice? Recent meta-analytic findings. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 93–114). Hillsdale, NJ: Erlbaum.
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues*, 41(3), 81–104.
- Schofield, J. W., & Eurich-Fulcer, R. (2001). When and how school desegregation improves intergroup relations. In R. Brown & S. L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 475–494). Malden, MA: Blackwell.
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation. The Robbers Cave experiment*. Norman, OK: University of Oklahoma Book Exchange.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York: Cambridge University Press.
- Singer, H. A. (1948). The veteran and race relations. *Journal of Educational Sociology*, 21, 397–408.
- Slavin, R. E. (1985) Cooperative learning: Applying contact theory to desegregated schools. *Journal of Social Issues*, 41(3), 45–62.
- Smith, F. T. (1943). *An experiment in modifying attitudes toward the Negro*. New York: Teachers College, Columbia University.
- Stephan, W. G., & Finlay, K. (1999). The role of empathy in improving intergroup relations. *Journal of Social Issues*, 55, 729–743.
- Stephan, W. G., & Stephan, C. W. (1984). The role of ignorance in intergroup relations. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: The psychology of desegregation* (pp. 229–257). Orlando, FL: Academic Press.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41(3), 157–175.
- Stephan, W. G., & Stephan, C. W. (2001). *Improving intergroup relations*. Thousand Oaks, CA: Sage.
- Stouffer, S. A. (1949). *The American soldier*. Princeton, NJ: Princeton University Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–48). Monterey, CA: Brooks/Cole.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, U.K.: Basil Blackwell.
- van Oudenhoven, J. P., Prins, K. S., & Buunk, B. (1998). Attitudes of minority and majority members towards adaptation of immigrants. *European Journal of Social Psychology*, 28, 995–1013.
- Watson, G. (1947). *Action for unity*. New York: Harper.
- Wilder, D. A. (1981). Perceiving persons as a group: Categorization and intergroup relations. In D. L. Hamilton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 213–257). Hillsdale, NJ: Erlbaum.
- Wilder, D. A. (1986). Social categorization: Implications for creation and reduction of intergroup bias. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 291–355). Orlando, FL: Academic Press.
- Wilder, D. A. (1993). Freezing intergroup evaluations: Anxiety fosters resistance to counterstereotypic information. In M. A. Hogg & D. Abrams (Eds.), *Group motivation: Social psychological perspectives* (pp. 68–86). New York: Harvester-Wheatsheaf.
- Williams, R. M., Jr. (1947). *The reduction of intergroup tensions*. New York: Social Science Research Council.
- Worchel, S. (1979). Cooperation and the reduction of intergroup conflict: Some determining factors. In W. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 262–273). Monterey, CA: Brooks/Cole.
- Worchel, S. (1986). The role of cooperation in reducing intergroup conflict. In S. Worchel & W. Austin (Eds.), *The psychology of intergroup relations* (pp. 288–304). Chicago, IL: Nelson-Hall.
- Worchel, S., Rothgerber, H., Day, E. A., Hart, D., & Butemeyer, J. (1998). Social identity and individual productivity with groups. *British Journal of Social Psychology*, 37, 389–413.
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73, 73–90.
- Zeligs, R., & Hendrickson, G. (1933). Racial attitudes of 200 sixth grade children. *Sociology & Social Research*, 18, 26–36.

Paper received 1 August 2002; revised version accepted 5 September 2002.

Biographical notes

JOHN F. DOVIDIO is Charles A. Dana Professor of Psychology at Colgate University. His research interests are in prejudice, stereotyping, and intergroup relations; in altruism and helping; and in nonverbal communication.

SAMUEL L. GAERTNER is Professor of Psychology at

the University of Delaware. His research interests are in intergroup relations.

KERRY KAWAKAMI is an Assistant Professor at York University. Her research interests are primarily related to social cognition and specifically focus on automatic and controlled processes related to stereotyping and prejudice.