

The Role of Attitudes in Intergroup Relations

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Abstract

The study of intergroup attitudes, particularly in terms of prejudice, has a long history within social psychology. However, the way intergroup attitudes have been conceptualized and measured has evolved in significant ways. Moreover, beyond documenting the role of attitudes on intergroup relations, there is a much deeper understanding of factors that moderate this relationship. In this chapter, we review research on the origins of prejudicial intergroup attitudes in a range of basic psychological processes, individual differences, social relations, and socio-structural factors. We then examine common distinctions between subtle or indirect expressions of intergroup attitudes and their blatant expression, as well as between explicit and implicit prejudice, and we explain how these distinctions have stimulated methodological development in the measurement of intergroup attitudes. We also consider ongoing and emerging debates on the role of intergroup attitudes in predicting discriminatory behavior. Following that, drawing on our review of basic processes that shape intergroup attitudes (e.g., personal experience, social categorization, and social influence), we focus on efforts to improve intergroup attitudes and intergroup relations. We conclude by highlighting new avenues for future work in the study of intergroup attitudes and its role in the dynamics and outcomes of intergroup relations.

Introduction

The study of attitudes and intergroup relations has a long and rich tradition in social psychology. Much of this work, including some of the earliest research in the field of intergroup relations, has focused on the role of attitudes toward members of socially devalued groups in the ways the groups and their members were treated. In this chapter, we review historical and contemporary developments in the study of attitudes and intergroup relations, and their theoretical and practical impact. We adopt the definition of an attitude that provides a common thread within the current *Handbook*: An attitude is an evaluation of an object, individual, group, idea, or other entity ranging from extremely negative to extremely positive (see Albarracín, Sunderrajan, Lohmann, Chan, & Jiang, Volume 1), and it may be revealed by assessing affective, cognitive, and behavioral or conative responses (Eagly & Chaiken, 1993). In the study of intergroup relations, the attitude of interest has typically taken a particular form – prejudice.

Broadly considered, prejudice is an attitude that represents generalized feelings toward and evaluation of a group or its members, and can result in discriminatory behavior (and behavioral intentions). Prejudice is related to, but conceptually distinct from another type of social bias – stereotyping. Stereotypes involve associations and attributions of specific characteristics to a group. They are cognitive schemas, often rooted in culturally held beliefs that are used by social perceivers to process information about others. Stereotypes not only reflect beliefs about the traits characterizing typical group members but also contain information about other qualities, such as expected social roles and characteristics of the group (e.g., within-group homogeneity). Although stereotypes can contain evaluative content and are often congruent with prejudice, they

need not be evaluative, can include different type of content (e.g., conceptual associations with a target group), and may rely on different neural pathways than does prejudice (see Amodio & Devine, 2006).

Conceptualizations of prejudice have evolved over time. In his seminal volume, *The Nature of Prejudice*, Allport (1954) defined prejudice as “an antipathy based on faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group as a whole, or toward an individual because he [sic] is a member of that group” (p. 9). Although many researchers have continued to adhere to the characterization of prejudice as a negative attitude (i.e., an antipathy), the definition of prejudice has been expanded to encompass new developments in the field. For example, research on implicit bias has revealed that evaluations of groups and their members can be automatically activated, suggesting that prejudicial attitudes need not involve intention, endorsement, or conscious awareness (but see Gawronski & Brannon, Volume 1). In addition, research suggests that discrimination often stems from ingroup favoritism, which involves preferential positivity toward one’s own group, rather than outgroup derogation, which reflects antipathy or hostility toward other groups (Greenwald & Pettigrew, 2014).

In the present chapter, we therefore adopt a more expansive definition of prejudice, compared to the traditional view rooted in Allport’s (1954) definition. As articulated by Dovidio, Hewstone, Glick, and Esses (2010), we define prejudice as “an individual-level attitude (whether subjectively positive or negative) toward groups and their members that creates or maintains hierarchical status relations between groups” (p. 7). Consistent with this definition, Eagly and Diekmann (2005) noted that prejudice can involve both positive and negative responses that can vary in response to group members’

observed conformity or nonconformity to social roles. They showed that people who deviate from their group's traditional role arouse negative reactions, whereas those who exhibit behaviors that reinforce the status quo elicit positive responses. Related perspectives on ambivalent sexism (see Diekmann & Glick, this volume) suggest that prejudice toward women can have a "hostile" component, which punishes women who deviate from a traditional subordinate role, as well as a "benevolent" component that celebrates women's supportive, but subordinate, position. Thus, prejudice need not always reflect negative attitudes toward a target group, but can also comprise positivity toward an outgroup that may nevertheless relate to discriminatory behavior (e.g., patronizing responses toward women).

In this chapter, we next trace the origins of prejudicial intergroup attitudes to a range of basic psychological processes, individual differences, social relations, and socio-structural factors. We then examine common distinctions between subtle or indirect expressions of intergroup attitudes and their blatant expression, as well as between explicit and implicit prejudice, and discuss how these distinctions have stimulated methodological development in the measurement of intergroup attitudes. We also consider ongoing and emerging debates on the role of intergroup attitudes in predicting discriminatory behavior. Following that, drawing on our review of basic processes that shape intergroup attitudes (e.g., personal experience, social categorization), we focus on efforts to improve intergroup attitudes and intergroup relations. In the final section, we highlight new avenues for future work in the study of intergroup attitudes.

Origins of Intergroup Attitudes

Three dominant perspectives in social psychology have examined the origins of prejudice in intergroup attitudes by focusing on the role of different factors at different levels of analysis: (a) individual differences in personality and ideology; (b) dynamics of group categorization and social identity; and (c) social experience, social influence, and functional relations between groups.

Individual Differences

Early work on the role of individual differences in prejudice was heavily inspired by the psychodynamic perspectives of Sigmund Freud, which conceptualized prejudice as an abnormal orientation stemming from displaced hostility and aggression. However, over the past several decades, there has been a shift away from the psychodynamic bases of prejudice to a view of prejudice as an attitude that both reflects and satisfies a range of motivations that stem from individual differences in typical, everyday social functioning (see Hodson & Dhont, 2015). Below, we review this evolution in the field's perspective, beginning with research on authoritarianism and other personality dimensions that predict intergroup attitudes.

Personality. The atrocities of World War II and the Holocaust prompted an early focus on personality traits that might account for generalized forms of bias toward marginalized and minority outgroups.

The authoritarian personality. One of the most influential approaches historically involved authoritarianism. In their classic volume, *The Authoritarian Personality*, Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) identified a unique pattern of family experiences and personality profile that made people susceptible to extreme prejudice. These individuals, "high authoritarians," tended to submit to authority, adhere

to conventional traditions and values, and think in rigid, all-or-nothing ways. Adorno et al. introduced various questionnaire techniques designed to measure individual orientations toward authority. One such measure, which came to be widely known as the F-scale because it was related to susceptibility to fascism, proved to be particularly valuable for predicting intergroup prejudice: People who scored higher on the scale (e.g., “Obedience and respect for authority are the most important virtues children should learn”) displayed more negative attitudes toward a broad range of marginalized groups, including Blacks, homosexuals, and elderly people. Support for the F-scale as the primary tool to measure prejudice began to wane by the mid-1960s, in large part because of criticisms about the scale’s psychometric properties. However, other researchers have identified a number of specific personality traits that bear resemblance to characteristics described in *The Authoritarian Personality*, and accordingly predict prejudice across diverse outgroups. For instance, people with greater need for structure, need for closure, preference for consistency, and intolerance of ambiguity display higher levels of prejudice generally, and more resistance to changing their biased attitudes (see Hodson & Dhont, 2015, for a review; see also Briñol & Petty, Volume 1).

Contemporary research on individual differences underlying prejudice has continued to document evidence of “generalized prejudice” – a tendency for people who show bias against one outgroup to also show bias against other outgroups. For instance, using a nationally representative sample, Zick et al. (2008) demonstrated that racism, sexism, heterosexism, anti-Semitism, and xenophobia were significantly intercorrelated, whereas Bergh, Akrami, Sidanius, and Sibley (2016) found that prejudices toward ethnic minorities, people with disabilities, and older adults showed strong positive associations.

Individual differences in “generalized prejudice” have been demonstrated in a wide range of cross-cultural contexts (see Bergh & Akrami, 2017), and continue to stimulate interest in the role of personality factors in the development of prejudice.

The Big Five and Honesty/Humility. One such approach has examined relationships between prejudice and the “Big Five” personality dimensions (Costa & McCrae, 1985): Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness to Experience. Of these personality dimensions, Agreeableness and Openness to Experience are most strongly related to prejudice: In their meta-analysis on personality factors and prejudice, Sibley and Duckitt (2008) found that people who were higher in Agreeableness ($r = -.22$) and Openness to Experience ($r = -.30$) tended to be generally lower in prejudice against other groups. This conclusion has since been corroborated by a range of empirical studies (e.g., Bergh et al., 2016). Moreover, Ashton and Lee (2007; see also Ashton, Lee, & de Vries, 2014) have proposed an expansion of the Big Five model to include a sixth dimension, Honesty/Humility, which is also negatively associated with people’s tendency to exhibit prejudice toward a broad range of stigmatized groups (Bergh et al., 2016).

Ideology. Whereas a variety of individual difference measures have been developed to assess prejudice in ways that link intergroup attitudes to personality traits, much research has instead focused on systems of ideas and ideals that determine how people view relations between groups. We review four such approaches: right-wing authoritarianism, social dominance orientation, religiosity, and political ideology.

Right-wing authoritarianism. One of the most prominent individual difference measures used in the study of prejudice today, the Right-Wing Authoritarianism Scale

(RWA; Altemeyer, 1996), was derived from the classic work on authoritarianism. Although originally conceived of as a basic personality dimension, RWA is currently conceptualized as an ideological dimension that is related to social and cultural conservatism (Duckitt & Sibley, 2017). The RWA Scale measures people's dispositional tendency to trust and defer to authority along three core dimensions: (a) authoritarian submission, an inclination to submit to those of greater authority or status; (b) authoritarian aggression, a general hostility toward deviants and members of other groups; and (c) conventionalism, a strong commitment to the traditional norms and values of one's group.

RWA has been shown to predict prejudicial attitudes toward a range of different social groups (Altemeyer, 1996), including ethnic minorities, women, disabled people, and sexual minorities. In their meta-analysis, Sibley and Duckitt (2008) found a positive relationship between RWA and prejudice ($r = .49$), such that people higher in RWA display greater levels of prejudice. Moreover, longitudinal studies suggest that RWA may have a causal relationship with prejudice (e.g., Asbrock, Sibley, & Duckitt, 2010; Kteily, Sidanius, & Levin, 2011).

Social dominance orientation. Another important line of research on ideology and prejudice relates to social dominance orientation. Social dominance theory (Sidanius, Cotterill, Sheehy-Skeffington, Kteily, & Cavarch, 2017; Sidanius & Pratto, 1999) emerged to explain how and why people within most societies organize themselves hierarchically according to age and sex, as well as with regard to a variety of culture-specific groups (e.g., ethnicity, race, religion). Social dominance theory proposes that the development of group-based hierarchies is motivated by ideologies that reinforce social

and structural inequality, and views racism, sexism, and other forms of discrimination as special cases of a general tendency for people to form, maintain, and enhance group-based hierarchies. Consistent with this notion, the strong intercorrelations that have been observed between measures of prejudice toward different groups primarily reflect a propensity to devalue low-status, marginalized groups, rather than members of other groups in general (Bergh et al., 2016).

From the perspective of social dominance theory, the tendency to legitimize inequality is partly determined by the extent to which people desire group-based dominance, reflected by a stable individual difference: social dominance orientation (SDO; Sidanius & Pratto, 1999). Ho et al. (2015) further differentiated between SDO-Dominance, which represents a preference for systems of group-based dominance permitting the oppression of low status groups; and SDO-Egalitarianism, which relates to a preference for systems of group-based inequality that stabilize inequalities through social ideologies and policies. Individual differences in SDO are positively related to prejudice: Sibley and Duckitt's (2008) meta-analysis revealed a robust positive relationship ($r = .55$), such that people higher in SDO tend to be more sexist, racist, prejudiced toward immigrants, lesbians, gay men, feminists, and physically disabled people (see Sidanius et al., 2017). Of the two sub-dimensions Ho et al. (2015) identified, SDO-Dominance correlates more strongly with prejudice than does SDO-Egalitarianism.

Although both SDO and RWA are robust predictors of prejudice, they are only moderately correlated with each other. One reason for their relatively weak relationship is that they reflect different worldviews: People higher in SDO are more likely to see the world as a "competitive jungle" in which the tough-minded prevail, whereas those higher

in RWA tend to see the world as a “dangerous place” that needs to be managed through strict order (Duckitt & Sibley, 2017). SDO primarily reflects beliefs about how groups should relate to one another and perceptions of group hierarchies, whereas RWA reflects submission to those higher in authority, with an emphasis on conformity and punishing deviants. As a consequence, although both scales predict prejudice toward a range of groups, each has unique predictive utility: SDO is a stronger predictor of prejudice toward low-status groups and attitudes toward economic issues, whereas RWA more strongly predicts prejudice toward unconventional groups and attitudes toward social issues.

Religiosity. Another individual difference measure generally related to prejudice is religiosity (see Ng & Gervais, 2017, for a review). For example, a meta-analysis by Whitley (2009) revealed that self-reported religiosity predicted more negative attitudes toward gay men and lesbians, across religious affiliations. However, religiosity is a complex construct with multiple dimensions, and effects vary depending on the target group. For instance, Brandt and van Tongeren (2015) found that people with both high and low levels of religious belief showed evidence of prejudice toward dissimilar others (i.e., toward those low and high in religious belief, respectively), resulting in prejudice stratified along religious lines. Responses may further differ as a function of *intrinsic* religiosity, in which religion is viewed as an end in itself, and *extrinsic* religiosity, in which religion is viewed as a means to external rewards. In general, people higher in intrinsic religiosity, who are more personally invested in religious values, report lower levels of prejudice toward other groups. By contrast, perhaps because it reflects a commitment to conventional social standards and commitment to a particular group,

people higher in extrinsic religiosity tend to express more prejudice toward a range of other groups (see Ng & Gervais, 2017).

Political orientation. Political orientation has typically been conceptualized as ranging from liberal to conservative. People who are more politically liberal tend to be more open to change, endorse systems that promote collective welfare, and feel more optimistic about human nature. By contrast, characteristics of political conservatism such as the desire to uphold tradition, and a more pessimistic view of human nature, overlap with traits identified with RWA and SDO (see Stern & Ondish, this volume). Compared to liberals, people who are more politically conservative report less positive evaluations of a wide range of social groups, including racial minorities, homosexuals, and immigrants (Jost, Federico, & Napier, 2009). Findings like these have been interpreted as evidence for an ideological “prejudice gap”, whereby the motivational forces underlying conservatism produce a greater propensity for prejudice (see Jost, Glaser, Kruglanski, & Sulloway, 2003).

However, the assertion that political conservatives are necessarily more prone than political liberals to exhibit biased attitudes toward other groups has been challenged in recent studies. Chambers, Schlenker, and Collisson (2013), for instance, found that although more politically conservative people reported more negative attitudes toward Blacks and homosexuals, one of the reasons they were biased against these groups was because they perceive these groups as politically liberal and as violating conservative moral values. By contrast, more politically liberal people reported more negative attitudes toward business people and Christian fundamentalists, again in large part because they viewed these as groups in conflict with liberal values. Thus, both liberals and

conservatives were biased toward groups perceived to be on the opposite end of the political spectrum, a finding that has been replicated in other studies (e.g., Brandt, Reyna, Chambers, Crawford, & Wetherell, 2014). A better ideological predictor of people's general propensity to exhibit intergroup prejudice, relative to ideological orientation, may be ideological extremism. Individuals at either extreme end on the political spectrum have been found to hold more negative intergroup attitudes toward a range of social groups, including artists, soldiers, and religious people, compared to politically more moderate individuals (van Prooijen, Krouwel, Boiten, & Eendebak, 2015).

Social Categorization and Identity

Beyond individual differences, one of the most productive theoretical traditions to studying the origins of intergroup attitudes is represented by the social-identity perspective (Tajfel & Turner, 1979; for reviews, see Hogg, Abrams, & Brewer, 2017). The fundamental tenet of this perspective is that in many social situations, people think of themselves and others primarily in terms of group memberships – a “social identity.” Research in this tradition, including major extensions, such as self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), has focused on the cognitive and self-conceptual definition of social groups as well as the basic motivational forces that work together in the formation and maintenance of intergroup attitudes. By highlighting the ways in which attitudes are rooted in the social context and the groups to which people belong, the social-identity perspective has expanded beyond traditional conceptualizations of attitudes as primarily intra-psychic cognitive constructs. Below, we summarize several psychological mechanisms that contribute to the influence of salient group memberships on prejudicial attitudes.

Social categorization. Perceiving people in terms of the groups to which they belong (e.g., a nation) or the types of people they represent (e.g., leaders) provides a relatively effortless way of inferring others' characteristics by relying on prior knowledge of the group (Fiske & Taylor, 2013). Upon categorization, actual differences between members of the same category are minimized in people's perception (Tajfel, 1969); even preverbal infants anticipate members of the same social groups to act alike (Powell & Spelke, 2013). Not only are members of the same category seen as more similar than they actually are, but perceived differences to members of other categories also tend to become exaggerated and over-generalized. Thus, categorization facilitates distorted perceptions of social difference and group distinctiveness.

The social categorization process, however, is not limited to the assignment of individuals to categories. A fundamental feature of social categorization is the distinction between categories that contain the self (ingroups) and categories that do not contain the self (outgroups). The insertion of the self into the social categorization process increases the emotional significance of group differences and amplifies perceptual distortion and biases (see Dovidio & Gaertner, 2010). The ingroup-outgroup categorization has profound consequences for how people think and feel about themselves, how they relate to others and members of different groups, and how they interpret their social environment – even at a basic neurological level (Molenberghs, 2013). It produces a subtle yet systematic tendency to respond more favorably toward those perceived to belong to the ingroup (“we”) than to different groups (“they”), and consequently provides the psychological basis for intergroup prejudice, stereotypes, and discrimination.

The categorization of the social world into ingroups and outgroups activates basic motivational processes that ultimately lead to bias and intergroup competition. As initially explained by social identity theory (Tajfel & Turner, 1979; see also Hogg et al., 2017), people's desire for positive self-regard may be satisfied by their own accomplishments, as well as by membership in prestigious social groups. This need for positive distinctiveness motivates social comparisons that favorably differentiate the ingroup from the outgroup, and consequently the self from others. As a result, group memberships, even when these are trivial, initiate a variety of motivational biases that can systematically shape intergroup relations.

Overall, people have more favorable orientations toward ingroup than outgroup members (Tajfel & Turner, 1979; see Dovidio & Gaertner, 2010). Even when people do not develop negative attitudes toward an outgroup, they still show a systematic preference for ingroup members (i.e., an ingroup favoritism vs. an outgroup derogation effect; Brewer, 2017; Greenwald & Pettigrew, 2014). When the target is a member of the ingroup, rather than the outgroup, people behave more generously in reward allocations (Buttelman & Böhm, 2014) and are more likely to cooperate and offer help (Balliet, Wu, & de Dreu, 2014). In addition to this evaluative preference, social categorization initiates a range of cognitive biases that help to perpetuate prejudice and attitudinal biases, even when people are presented with countervailing evidence (see Dovidio & Gaertner, 2010).

Identity strength and identity fusion. Although social identification is a construct encompassing multiple components (e.g., Leach et al., 2008), research indicates that more strongly identified group members generally exhibit more biased intergroup attitudes and are more likely to engage in competitive intergroup behaviors. For example,

social identification directly predicts ingroup favoritism in attitude favorability and resource allocation (Ellemers, Kortekaas, & Ouwerkerk, 1999), and experimental studies show that manipulations of identity strength can increase intergroup bias (Branscombe & Wann 1994). One critical reason why social identification amplifies ingroup favoritism is that high identifiers have an elevated need to positively differentiate their ingroup category from outgroup categories (Jetten, Spears, & Postmes, 2004).

In contrast to social identification, identity fusion (see Swann & Buhrmester, 2015) describes a more extreme, visceral sense of oneness with an ingroup, whereby aspects of the personal self and a social self become psychologically “fused.” The profound feeling of connection with fellow ingroup members that can give rise to identity fusion may result from sharing intense bonding experiences, and can produce extreme group-serving behaviors, such as sacrificing their life for the ingroup.

Attitudes as the basis for categorization. In addition to being shaped by social categorization, people’s attitudes themselves can form the basis for social categorization. Perceived attitude dissimilarity may partly account for group-based conflict, for example in the context of ethnic and race relations (Bizumic, Kenny, Iyer, Tanuwira, & Huxley, 2017). Furthermore, research on the formation of social identity suggests that shared attitudes are often used by individuals to deduce a common group identity (Postmes, Spears, Lee, & Novak, 2005). This process has been further explored in research on opinion-based group identities (e.g., McGarty, Bliuc, Thomas, & Bongiorno, 2009), in which individuals come to perceive themselves as members of the same social category solely by virtue of a relevant and distinctive shared attitude (see Turner et al., 1987). Opinion-based group identities typically emerge in the context of salient attitude-based

intergroup comparisons (e.g., being pro vs. anti the Iraq War), and produce behaviors in line with the opinion-based group membership, even when these are personally costly.

In summary, the social identity perspective has provided a highly generative framework for over 40 years of research on the origins of intergroup attitudes. Together, social categorization processes and the basic need for positive differentiation produce a range of perceptual, cognitive, and evaluative biases that profoundly shape prejudice and discrimination, and intergroup attitudes in general. In the next section, we review theoretical developments and evidence for the impact of social influence – both within and between groups – on intergroup attitudes.

Social and Functional Influences

Intergroup attitudes are substantially shaped by personal experiences with members of other groups, beliefs about what others think about those groups, and perceptions of the functional relations between one's ingroup and other groups.

Social experience. A substantial literature documents the role of a particular type of social experience, intergroup contact, as a predictor of intergroup attitudes. Intergroup contact refers to interactions between members of different social groups. Whereas negative experiences with outgroup members can result in more negative intergroup attitudes (Hayward, Tropp, Hornsey, & Barlow, 2017), positive contact experiences, and cross-group friendships in particular, predict the development of more favorable attitudes toward outgroups (see Dovidio, Love, Schellhaas, & Hewstone, 2017). Moreover, such experiences shape not only attitudes toward the specific outgroup involved in contact situations, but more positive intergroup attitudes can generalize to other, unrelated outgroups (Tausch et al., 2010). As such, a history of positive social experience with

members of diverse outgroups can result in less prejudice against other groups overall. Because of the robustness of this effect, contact between members of different groups (as we discuss later in the section on “Improving Intergroup Attitudes and Relations”) represents a powerful intervention for improving intergroup attitudes.

In addition to one's personal contact experiences, research has also tied prejudice to indirect and aggregate-level effects of contact: Merely knowing people who have positive interactions with members of the other group can result in more positive intergroup attitudes (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997), as does living in an environment where contact between different groups is frequent. Christ et al. (2014) showed that people in socio-geographic contexts in which interactions between different groups were more commonplace exhibited lower levels of prejudice, compared to those who live in contexts where contact was relatively rare – irrespective of people's own contact experiences. One important mechanism through which contact at the aggregate level affects intergroup attitudes is by changing perceptions of social norms, which can exert a strong social influence on people's personal prejudice.

Social influence. Beyond personal experience, social influence processes profoundly impact intergroup attitudes and behavior. Traditionally, researchers have distinguished between *informational* social influence, which is based on the desire to have a better understanding of one's environment, and *normative* social influence, which is based on the desire to conform to the orientations of others, primarily to be accepted by them (Deutsch & Gerard, 1955).

Both informational and normative influence operate jointly in the development of intergroup attitudes. Socialization, which involves the development of an understanding

of one's social and physical world and incorporates informational and normative processes – both within the family as well as among peers – can systematically influence attitudes toward members of other groups. For example, a recent meta-analysis documented a moderate positive correlation ($r = .29$) between individuals' intergroup attitudes and those of their parents (Degner & Dalege, 2013). Awareness of norms plays a pivotal role in the relationship between parents' and their children's intergroup attitudes. Developmentally, older children are generally more aware of adults' egalitarian norms than are younger children, and thus may be less likely than young children to display blatant intergroup bias (de França & Monteiro, 2013).

In addition to parental influence on prejudice, there is a consistent literature demonstrating that people conform to the intergroup attitudes of peers. Even when there is little or no normative pressure to comply with the attitudes of others, knowledge of their (real or presumed) beliefs can have considerable informational value and therefore shape the content of outgroup attitudes. This informational social influence may be particularly strong when people have or desire for a personal connection with others: People, often without being aware, tend to shift their attitudes to be in alignment with others with whom they are motivated to affiliate (Sinclair, Lowery, Hardin, & Colangelo, 2005), which results in reduced activation of negative implicit racial attitudes when the other person is person believed to be nonprejudiced (Huntsinger, Sinclair, Kenrick, & Ray, 2016). In addition to satisfying the need for belonging, such “social tuning” of attitudes can also serve the desire for knowledge and understanding of the world (Lun, Sinclair, Whitchurch, & Glenn, 2007). As a result, this subtle social influence process can

lead to the automatic adoption of more negative or more positive attitudes toward members of another group (Sinclair et al., 2005).

Even when attitudes are not fully internalized through informational social influence, normative influence processes can affect the expression of intergroup attitudes (see Crandall & Stangor, 2005). For example, perceptions of social norms predict children's attitudes toward racial and national outgroups (Rutland, Cameron, Milne, & McGeorge, 2005), and after overhearing racist jokes, White adults become more tolerant of discrimination against members of racial minority groups (Ford & Ferguson, 2004). As intergroup norms propagate through people's social networks, so does corresponding intergroup behavior. In a field experiment in US high schools, Paluck (2011) trained student leaders to confront expressions of prejudice. In the critical condition, the student leaders' self-reported egalitarian attitudes spread to close friends within 5 months post-training, while their anti-prejudice behavior (signing a gay rights petition) spread even further to both friends and acquaintances, including to individuals outside of the school network. These findings suggest that conformity to nonprejudiced behavior may precede the internalization of egalitarian attitudes among more peripherally connected individuals.

Functional relations between groups. Intergroup relations, as well as interpersonal relations, play a major role in the development of prejudice. In sociology as well as psychology, theories based on functional relations often point to competition as a fundamental cause of intergroup prejudice and conflict. Realistic group conflict theory (e.g., Campbell, 1965), for example, posits that perceived competition for cherished resources produces efforts to reduce the access of other groups to the resources.

Sherif, Harvey, White, Hood, and Sherif (1961) illustrated this process in their classic Robbers Cave research. In this field study, twenty-two 12-year-old boys attending summer camp were randomly assigned to one of two groups, who subsequently named themselves “Eagles” and “Rattlers.” The introduction of a series of competitive activities between the groups (such as a tug-of-war and athletic contests) generated negative attitudes, derogatory stereotypes, and overt conflict. Subsequent interactions between the groups under neutral, noncompetitive conditions did not allay these intergroup biases. Only after the investigators altered the instrumental relations between the groups, by introducing a series of superordinate goals that could not be achieved without the full cooperation of both groups, did attitudes improve and relations between the two groups become more harmonious.

Functional relations do not have to involve explicit competition with members of other groups to generate biases in people’s attitudes. How people *perceive* functional relations between groups to be may shape attitudes accordingly. In the absence of any direct evidence or personal knowledge, people typically presume that members of other groups are competitive and hold negative attitudes toward one’s group. Wildschut and Insko (2007) have further demonstrated a fundamental “individual-group discontinuity effect,” in which groups are greedier and less trustworthy than individuals, which forms a basis for the development of distinctively negative intergroup attitudes.

Negative intergroup attitudes and actual competition often reinforce each other to escalate intergroup biases. Greater prejudice leads to more perceived and actual competition between groups, which exacerbates threat; in turn, greater threat predicts more negative intergroup attitudes (Riek, Mania, & Gaertner, 2006). Moreover, group

threat and personal prejudice can contribute independently to discrimination against other groups (see Bobo, 1999, for a review). Together, these results point to the importance of considering functional group relations, alongside social experience and social influence, as well as individual differences and social categorization, for a comprehensive understanding of psychological forces shaping intergroup bias.

Expressions of Intergroup Attitudes

Egalitarianism is a core value in many contemporary societies. Because prejudice is antithetical to egalitarianism, increases in the importance of egalitarian values in a society predict lower average levels of prejudice (Kluegel & Smith, 1986). Although some of this effect may occur through social influence and the internalization of less biased outgroup attitudes, some of the apparent reduction in self-reported prejudice occurs through strategic management in the way people *express* the intergroup attitudes that they hold.

Norms and the Expression of Prejudice

As we explained in the earlier section on social influence, norms are an important determinant of the intergroup attitudes that people express. According to the justification-suppression model (Crandall & Eshleman, 2003), people's "genuine" prejudices are typically not directly expressed, but are instead restrained and suppressed by prevailing values, beliefs, and norms. Egalitarian norms thus tend to reduce the open expression of individuals' prejudices, such that measuring the expression of prejudice may underestimate the true level of prejudice harbored toward particular groups – especially in societies where egalitarian norms are more prominent. Importantly, norms against prejudice differ across target groups. In the United States (US), for instance, norms

against prejudice are particularly strong for groups defined by race (Blacks) or ethnicity (Latinos), but relatively weak for groups for which membership is perceived to be by personal choice (e.g., atheists, overweight people). The strength of norms against being prejudiced toward a particular group correlates with the degree of prejudice expressed toward that group in self-report measures of attitudes (Crandall, Eshleman, & O'Brien, 2002).

However, in societies where egalitarian norms are less prominent than in the US, blatant expressions of prejudice remain relatively commonplace (e.g., Bilewicz, 2012). Likewise, when social norms shift in ways that permit the expression of prejudice, the “genuine prejudice” that people harbor is more likely to be openly expressed. Such a shift of social norms can happen when justifications are provided that make negative attitudes toward a group seem warranted (e.g., by characterizing a group as immoral or less human) but also by giving precedence to values or principles other than egalitarianism (e.g., freedom of speech; White & Crandall, 2017). In the US, for example, Donald Trump’s rise in popularity during the 2016 Presidential Elections, and the concomitant changes in perceived normativity of prejudice, increased people’s willingness to publicly express xenophobic attitudes, even though it did not increase xenophobic attitudes themselves (Bursztyn, Egorov, & Fiorin, 2017). Understanding the role of changing norms about the acceptability of prejudice in society has important implications for the ways prejudice has been measured over time (see also Krosnick, Judd, & Wittenbrink, Volume 1).

Measurement of Prejudice

Traditionally, measures of intergroup attitudes were quite direct and explicit.

However, as norms for expressing racial prejudice evolved in the US – a dominant focus of research on intergroup attitudes – alternative, more indirect measures have been developed to assess people’s “genuine” attitudes.

Direct measures of prejudice. One of the most enduring measures of intergroup attitudes has been Bogardus’s (1925) social distance scale, which assesses people’s willingness to engage with members of other groups in activities of varying degrees of intimacy (e.g., work with members of another group, have members of another group as neighbors, marry a member of another group). Another common measure that is used in both survey and experimental research is the feeling thermometer (see Alwin, 1997). Although it is typically used as a single-item instrument to assess how people feel about a target from 0 (very coolly) to 100 (very warmly), researcher often adapt the response range (e.g., 1-7) and anchors (e.g., very negative to very positive). Both measures continue to be commonly used, as they allow for direct comparisons in attitudes across groups and readily permit for cross-cultural comparisons in attitudes toward the same groups.

Several conceptually more narrow measures have been used to assess attitudes toward specific outgroups. For example, researchers interested in Whites’ prejudice toward Blacks in the US developed multidimensional measures capturing different elements of racial prejudice, such as support for racial segregation, opposition to intimacy between races, and endorsement of policies that limit the opportunities for Blacks (e.g., Woodmansee & Cook, 1967). Brigham’s (1993) Attitudes Toward Blacks Scale has been one of the most frequently employed measures of this direct, “old-fashioned” prejudice. Brigham (1993) also created a parallel Attitudes Toward Whites Scale to assess Blacks’

racial attitudes, but the Johnson-Lecci Scale (Johnson & Lecci, 2003) is currently more widely used to assess Blacks' anti-White attitudes and their perceptions of racism. In addition, recent measures have been developed to assess other forms of prejudice in the US context, such as attitudes toward Asians (Ho & Jackson, 2001) or toward Muslims (Lee, Gibbons, Thompson, & Timani, 2009).

The changing social norms and values shaped by the 1960s US Civil Rights Movement, however, posed unique challenges to the study of prejudice. Although overtly negative racial attitudes, as expressed on self-report scales, substantially declined, privately held beliefs and people's behavior continued to reflect negative racial attitudes and beliefs (see Dovidio, Gaertner, & Pearson, 2017). One effect of these new egalitarian norms was that people appeared to more deliberately manage how others perceived their racial attitudes. These changes to the expression and self-control of racial attitudes, along with methodological advances in capturing subtle and unintended manifestations of bias, spawned a new stage of research on the measurement of prejudice.

Indirect measures of prejudice. Beginning in the 1980s, empirical findings on bias, particularly in terms of racism (see Dovidio, Gaertner, & Pearson, 2017) increasingly revealed that while blatant expressions of bias were declining, more subtle forms were emerging. These changes in the nature and expression of racial bias stimulated the development of measures for contemporary, more subtle forms of prejudice. Likewise, research on sexism distinguished and developed scales to measure blatant ("hostile") and subtle ("benevolent") forms of sexism (see Diekmann & Glick, this volume). With respect to race, two related approaches to measuring racial attitudes – symbolic racism and modern racism – developed in response to the failure of traditional

self-report measures to predict attitudes toward racially-targeted policies and Black political candidates. These theoretical perspectives gave rise to new scales, versions of which continue to be widely used in the study of racial prejudice.

Symbolic racism. Symbolic racism theory (Sears & Henry, 2005) not only concerned the development of a more valid measure of prejudice but also a measure that represented the changing nature of racial attitudes in the US. Sears, Henry, and Kosterman (2000) observed, “Few Whites now support the core notions of old-fashioned racism ... Our own view is that the acceptance of formal equality is genuine but that racial animus has not gone away; it has just changed its principal manifestations” (p. 77). Symbolic racism involves four basic beliefs, assessed via self-report, that reflect the confluence of politically conservative, individualistic values, and early-acquired negative racial affect: The belief that anti-Black discrimination is “a thing of the past”, that Blacks’ failure to progress is attributable to their unwillingness to work hard enough, that Blacks make excessive demands, and that Blacks have gotten more than they deserve.

Symbolic racism predicts people’s political attitudes and behavior better than a range of other measures, including old-fashioned racism, realistic threats, nonracial ideologies, and political affiliation (see Sears & Henry, 2005). Specifically, symbolic racism uniquely predicts White Americans’ attitudes toward a range of racially-relevant policies, including affirmative action, as well as less explicitly race-targeted policies that disproportionately affect Blacks, including those relating to crime and welfare. Symbolic racism also predicts opposition to Black political candidates, as well as support for ethnocentric White candidates, such as former Ku-Klux-Klan leader David Duke (Tesler & Sears, 2010).

Modern racism. Although modern racism theory was derived from symbolic racism theory, the two perspectives diverge on the hypothesized origins of bias (see Dovidio, Gaertner, & Pearson, 2017). Whereas symbolic racism proposes that Whites' negative attitudes are primarily rooted in concerns that Blacks threaten Whites' values by violating principles of individualism, modern racism hypothesizes that various forms of negative affect toward Blacks (e.g., fear, disgust), acquired through early socialization and modeling, persist into adulthood. Both theories assume, however, that these feelings are expressed indirectly and symbolically, in terms of more abstract social and political issues (e.g., opposition to school integration, ostensibly to support neighborhood schools).

Modern racism is assessed using the Modern Racism Scale, a self-report measure similar to that used to assess symbolic racism. The scale was originally designed to be an indirect measure of racism that is less susceptible to social desirability concerns (McConahay, 1986). Like symbolic racism, modern racism predicts voting against political candidates who are Black or sympathetic toward Blacks, and voting on policies designed to assist Blacks such as affirmative action and school integration programs. It predicts these political attitudes better than do measures of political conservatism, identification as a Democrat or Republican, education, and personal interests in the outcomes of a vote (Henry, 2009). Beyond the original intergroup context, the Modern Racism Scale has also been adapted to study attitudes toward other groups, such as Asians in Canada (Son Hing, Chung-Yan, Hamilton, & Zanna, 2008).

Critiques of indirect measures of prejudice. The modern and symbolic racism approaches have been challenged on similar conceptual grounds. Because the scales are

not pure measures of stereotypes or prejudice against Blacks, critics have argued that both modern racism and symbolic racism scales tap non-racial principles underlying conservatism (e.g., opposition to excessive government intervention) rather than racial attitudes per se. Indeed, there is evidence that a subset of high modern racism scorers may be principled conservatives rather than racists (Son Hing et al., 2008).

More recent critiques of the Modern Racism Scale have contended that it should no longer be classified as an indirect measure but, rather, as a blatant measure of racism. Indeed, responses on the Modern Racism Scale appear to be more susceptible to social desirability influences and self-presentational concerns than in the past (Calanchini & Sherman, 2013). As McConahay (1986) noted nearly 30 years ago, “some of the current items [may] become more reactive while the ambivalence lingers” (p. 123). Nevertheless, items from the Modern Racism Scale still uniquely predict responses to *political issues* (e.g., evaluations of Obama versus McCain during the 2008 US Presidential Election), independently of measures of blatant prejudice toward Blacks (see Dovidio, Gaertner, & Pearson, 2017). By contrast, a recent study by Axt (2017) suggests that with regard to predicting *evaluative tendencies* toward racial outgroups, directly assessing outgroup attitudes may be a better measure than modern racism, symbolic racism, and a range of other explicit yet indirect attitude measures.

Implicit and explicit attitudes. One of the hypothesized effects of changing social norms was that because prejudice was inconsistent with a positive self-image, particularly among people who perceived themselves as socially liberal or progressive, many people who consciously endorsed the value of egalitarianism and truly believed that they were nonprejudiced might still harbor, unconsciously, negative feelings and

beliefs toward Blacks and members of other marginalized groups (see Dovidio, Gaertner, & Pearson, 2017). These unconscious negative feelings and beliefs were posited to be rooted in general processes of social categorization and ingroup-outgroup biases, media portrayals and cultural representations of groups, as well as the residual effects of socialization. The evidence that people may have unconscious feelings and beliefs that could systematically influence their intergroup behavior without conscious awareness stimulated the development of implicit measures of intergroup attitudes.

In contrast to the traditional conceptualization of prejudice as an explicit orientation – an attitude that people know they hold and is subject to deliberate control – implicit prejudice was assumed to involve automaticity, a lack of awareness, and unintentional forms of expression. As summarized by Krosnick et al. (Volume 1), whereas self-report methods are often used to assess explicit attitudes, implicit attitudes are typically gauged with response latency procedures and memory tasks (see also Gawronski & Brannon, Volume 1), physiological measures (e.g., heart rate and galvanic skin response), and indirect self-report measures (e.g., biases in behavioral attributions). For example, one of the most widely used implicit measures, the Implicit Association Test (IAT; see Greenwald, Poehlman, Uhlmann, & Banaji, 2009), relies on the basic assumption that people are faster and more accurate when categorizing groups of stimuli similar in valence than when the groups of stimuli are dissimilar in valence.

Initially, research on implicit attitudes focused on developing and refining measurement techniques, distinguishing implicit from explicit measures, and clarifying the origins and meaning of implicit measures of attitudes. Consistent with the distinction between implicit and explicit prejudice, scores on the IAT are only modestly associated

with self-report measures of intergroup attitudes (see Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005, for a meta-analysis). Current research on implicit attitudes has further considered if, when, and how implicit attitudes, as well as explicit attitudes, predict intergroup behavior.

The Relationship between Prejudice and Discrimination

Ajzen, Fishbein, Lohmann, and Albarracín (Volume 1) provide a thorough review of the literature on the relationship between attitudes and behavior in general. The meta-analyses summarized in their chapter estimate the attitude-behavior relationship to be of moderate strength, ranging between $r = .36$ (Kraus, 1995) and $r = .51$ (Glasman & Albarracín, 2005). However, Ajzen et al. caution that the magnitude of this relationship varies across different substantive domains. Below, we briefly summarize the results of meta-analyses that specifically examined the relationship between intergroup attitudes (typically operationalized as prejudice) and behavior (typically in the form of discrimination).

Explicit attitudes and behavior. Meta-analytic assessments of the relationship between explicit intergroup attitudes and behavior have incorporated different operationalization of attitudes, considered different types of behaviors (e.g., resource allocations), and used various inclusion criteria. However, they converge on the conclusion that intergroup attitudes predict outgroup-directed behavior, although at a magnitude lower than the general attitude-behavior relationship summarized by Ajzen et al. (Volume 1). For example, in one of the earliest meta-analyses on that topic, including 35 effect sizes from 23 separate studies, Dovidio, Brigham, Johnson, and Gaertner (1996) found that negative intergroup attitudes were significantly associated with discriminatory

behavior ($r = .32$), regardless of whether the target of discrimination was the outgroup as a whole or an individual member of the outgroup. A decade later, Talaska, Fiske, and Chaiken (2008), using a larger database of 101 effect sizes from 57 studies, revealed a similar but slightly weaker relationship between negative intergroup attitudes and discrimination ($r = .26$).

In a more recent meta-analytic review, synthesizing 184 effect sizes from 122 separate studies, Greenwald et al. (2009) found that explicit attitudes predicted behavior at a level comparable to the general relationship between attitudes and behavior ($r = .36$). However, the effect size varied considerably and was weaker in various important intergroup domains, including Whites' attitudes and behavior toward Blacks ($r = .12$), and attitudes and behavior in the domain of gender/sexual orientation ($r = .22$). Moreover, upon re-analyzing Greenwald et al.'s database, coding attitudes and behavior with different criteria, Oswald, Mitchell, Blanton, Jaccard, and Tetlock (2013) determined the average relationship between explicit attitudes of majority-group members and their behavior toward minority-group members to be even weaker ($r = .18$).

Implicit attitudes and behavior. One potential reason why the relationship between explicit intergroup attitudes and behavior tends to be weaker than in other areas of attitudes research (see Ajzen et al., Volume 1) is that expressions of outgroup attitudes are susceptible to social influence, such as pressures to appear in a socially desirable way. In this section, we review the evidence examining the relationship between implicit intergroup attitudes, which are thought to be less susceptible to such social influences, and behavior.

In their meta-analysis, Greenwald et al. (2009) reported moderate relationships between the most common measure of implicit attitudes, the Implicit Association Test (IAT), and intergroup behavior. With respect to orientations of Whites toward Blacks, the implicit attitude-behavior relationship was twice as strong ($r = .24$) as the explicit attitude-behavior relationship reported in the same meta-analysis ($r = .12$). Greater implicit bias also moderately predicted more negative behavior in the domains of gender/sexual orientation ($r = .18$) and other domains of intergroup relations ($r = .20$). However, similar to the effects of explicit attitudes, Oswald et al.'s (2013) reanalysis of the data yielded weaker effect-size estimates for the implicit attitude-behavior relationship, both for racial outgroups ($r = .13$) and ethnic outgroups ($r = .12$) (see also Carlsson & Agerström, 2016).

A more recent meta-analysis by Forscher, Lai, et al. (2017) examined the evidence for a causal relationship between experimentally induced changes in implicit intergroup attitudes (assessed with a broad range of measures, such as the IAT and sequential priming procedures) and subsequent behavior. The review found that even though implicit attitudes were malleable, reducing implicit bias did not necessarily lead to reductions in explicit bias or discriminatory behavior (as indicated by non-significant mediation). Although this evidence was not consistent with a causal interpretation of the implicit attitude-behavior relationship, Forscher, Lai, et al. report a modest correlation between implicit bias and behavior ($r = .10$), similar to that estimated by other meta-analyses on this topic.

Taken together, across the variety of approaches and perspectives represented, the attitude-behavior relationships for both explicit and implicit forms of prejudice and

discriminatory behavior appear to be modest and positive. However, there is considerable heterogeneity in these relationships, with effects varying across different forms of intergroup behavior and ranging from strong, positive to weak or even negligible effects. Moreover, the overall effect sizes for both explicit and implicit prejudice are consistently estimated to be lower than the general attitude-behavior relationship typically obtained in social psychological research (see Ajzen et al., Volume 1).

Implicit versus explicit attitudes and behavior. Notably, different theoretical perspectives suggest that a key factor in the relative predictive strength of implicit and explicit measures is the type of behavior being examined and the context in which the behavior occurs (Dovidio, Kawakami, Smoak, & Dovidio, 2009). For example, whereas implicit measures may better predict spontaneous behaviors, explicit measures may better predict deliberative behaviors, including those in situations in which social desirability factors are salient (Fazio & Olson, 2003). Consistent with this argument, the meta-analysis by Greenwald et al. (2009) suggests that even though both implicit and explicit measures of intergroup attitudes predicted behavior toward the attitude object, the predictive validity of explicit measures for socially sensitive issues such as race was considerably weaker ($r = .12$) than that of implicit attitudes ($r = .24$).

Wilson, Lindsey, and Schooler (2000) further proposed that “when dual attitudes exist, the implicit attitude is activated automatically, whereas the explicit one requires more capacity and motivation to retrieve from memory” (p. 104; see also Gawronski & Brannon, Volume 1). As such, explicit intergroup attitudes shape deliberative outgroup-directed responses in which the costs and benefits of various courses of action are weighed. For instance, explicit anti-immigrant prejudice has recently been shown to

predict deliberate action against immigrants among White British and Italian participants (Shepherd, Fasoli, Pereira, & Branscombe, 2017). By contrast, implicit intergroup attitudes are a better predictor of nonverbal behavior in intergroup interactions. To illustrate, more implicitly prejudiced Whites blink more when interacting with Blacks than with Whites (reflecting anxiety), and they look less at them, have more speech hesitations and errors, and generally appear less friendly nonverbally (McConnell & Leibold, 2001). Consistent with this interpretation, Penner, Manning, Albrecht, van Ryn, and Dovidio (this volume) review evidence showing that, in medical contexts, doctors with more negative implicit racial attitudes dominate interactions with Black patients more and are perceived by Black patients as less friendly and less patient-centered in their interactions. Doctors' explicit racial attitudes do not show these effects.

Effects of intergroup attitudes at an aggregated level. Social psychology has typically examined intergroup relations through the lens of individuals and their intrapsychic processes, including prejudice and stereotypes. As the previous sections reveal, when measured at the individual level, the relationship between explicit and implicit prejudice and discrimination is systematic and statistically significant, but generally only modest in magnitude. However, the cumulative effects of individuals' prejudices can considerably limit opportunities for members of traditionally disadvantaged groups, and even small individual biases, when aggregated, can produce substantial social inequities over time (Greenwald, Banaji, & Nosek, 2015; Martell, Lane, & Emrich, 1996). Moreover, even when members of disadvantaged groups experience only occasional expressions of prejudice, the joint effects of such incidents over time can increase chronic levels of stress and vigilance that erode psychological and physical health (see Richman,

Pascoe, & Lattanner, 2018).

In contrast to social psychology's traditional focus on individual-level processes, contextual factors, such as geography and social setting, are critical when examining the effects of prejudice in aggregate. In the US, for example, there are systematic differences in racial prejudice by geographic area, and region-level prejudice (i.e., individual prejudice aggregated by region) profoundly shapes the social environment determining the experiences and well-being of minority groups. In a recent study, for instance, Leitner, Hehman, Ayduk, and Mendoza-Denton (2016a) integrated explicit and implicit measures of White Americans' prejudice ($n > 1$ million) with health-related measures from the US Center for Disease Control, including access to health care and circulatory disease risk. Aggregating these data by county, Leitner et al. found that in counties in which Whites expressed less favorable explicit attitudes toward Blacks, Blacks had lower access to affordable health care and greater mortality from circulatory disease, compared to Whites. These effects persisted when controlling for relevant individual-level variables (e.g., sex, age) and county-level variables (e.g., income, segregation, and other US Census data).

A range of other negative intergroup outcomes are predicted by contextual (e.g., geographical) differences in explicit and implicit racial attitudes. In counties in which Whites, on average, harbored greater implicit bias toward Blacks, police were more likely to use lethal force against Blacks suspected of criminal activity (Hehman, Flake, & Calanchini, 2017), whereas in regions of the US in which Whites, in aggregate, were more explicitly racially prejudiced, health-related interventions involving Black participants were less effective at promoting safe sex practices (Reid, Dovidio, Ballester, & Johnson, 2014). Aggregate-level effects of outgroup attitudes on behavior and

outcomes of minority groups are not limited to the context of race. In the gender context, for example, Brandt (2011) found in a study across 57 societies that average levels of sexist attitudes predicted subsequent society-level increases in gender inequality.

Taken together, these findings converge to demonstrate that aggregated by geographical location or social setting, both explicit and implicit prejudice can be associated with a number of highly consequential outcomes, at times literally involving matters of life and death (see also Payne, Vuletich, & Lundberg, 2017). Together with the previously reviewed evidence that when measured at the individual level, intergroup attitudes consistently predict discrimination, this highlights the important challenges that negative intergroup attitudes and widespread prejudice constitute to a society.

Ameliorating prejudice and improving intergroup attitudes has accordingly been one of the most dynamic areas of research in intergroup psychology, and in the next section we will review key developments in this area.

Improving Intergroup Attitudes and Relations

A vast body of intergroup research has theorized and tested interventions aimed at improving intergroup relations through changing intergroup attitudes. Most work in this area has been focused around fostering positive intergroup contact, as well as altering the ways in which people categorize ingroup and outgroups (see Schellhaas & Dovidio, 2016). Other research has tested interventions that aim directly to alter explicit and implicit intergroup attitudes, as well as interventions that target the impact of prejudice on discriminatory behavior.

Intergroup Contact

Largely guided by Allport's (1954) reformulated contact hypothesis, a wealth of laboratory and field research across a wide range of contexts has supported the basic idea that intergroup contact can improve intergroup attitudes and reduce prejudice (for reviews, see Dovidio, Love, et al., 2017; Pettigrew & Tropp, 2011). Allport argued that contact is most likely to be successful when it is structured to emphasize equal status, cooperation, common goals, and the support of authorities, law, or custom.

A comprehensive meta-analysis confirmed that experiencing intergroup contact improves intergroup attitudes, and that this relationship is stronger in the context of Allport's "optimal" conditions (Pettigrew & Tropp, 2006). Subsequent meta-analyses further demonstrated that forming cross-group friendships through contact substantially improves intergroup attitudes (Davies, Tropp, Aron, Pettigrew, & Wright, 2011) and confirmed the effectiveness of contact interventions in field settings (Lemmer & Wagner, 2015). Although both are influential, the quality of contact (i.e., the favorability of the contact experience) is more important than the quantity (i.e., frequency) of contact for reducing prejudice (Voci & Hewstone, 2003). Moreover, intergroup contact has been shown to improve not only explicit but also implicit attitudes toward outgroup members (albeit with weaker effects; e.g., van Ryn et al., 2015).

Practically, opportunities for interacting with outgroup members are most readily available in diverse and desegregated environments. Although exposure to outgroup members in more diverse environments may be experienced as threatening and result in less favorable outgroup attitudes (Enos, 2014), insofar as diversity affords opportunities for contact between different groups it typically leads to more favorable outgroup attitudes (Schmid, Al Ramiah, & Hewstone, 2014). Moreover, initial cross-group

interactions, especially across racial lines, can pose significant challenges to interactants (e.g., heightened stress and anxiety) and result in adverse experiences that can worsen intergroup attitudes (Shelton & Richeson, 2015). These initially negative contact effects, however, tend to diminish with repeated interactions over time (MacInnis & Page-Gould, 2015).

Because the divide between different social groups can limit opportunities for direct intergroup contact, researchers have investigated the effectiveness of various forms of indirect contact for reducing prejudice. For example, the extended contact hypothesis (Wright et al., 1997) proposed that knowledge of ingroup-outgroup friendships leads to reductions of intergroup bias, under others because it makes positive relations between groups appear more normatively acceptable. Other forms of indirect contact can also improve intergroup attitudes (see Dovidio, Love, et al., 2017), including observing positive cross-group interactions (*vicarious contact*), mentally simulating positive contact experiences (*imagined contact*), and computer-mediated interactions (*virtual contact*). Although effects of these indirect forms of contact tend to be smaller than those of direct contact (Lemmer & Wagner, 2015), they are important for improving attitudes toward outgroups – especially in contexts where direct contact is rare, difficult, or nonexistent.

The effects of positive intergroup contact, both direct and indirect, on intergroup attitudes occur through several distinct mechanisms. Contact results in more personalized connections with outgroup members and greater interest in learning about their group (Brannon & Walton, 2013), enhances empathy and perspective-taking with the outgroup, and reduces group-based anxiety (Pettigrew & Tropp, 2008).

In addition to Allport's (1954) "optimal" conditions, the relationship between contact and attitudes is governed by a number of additional boundary conditions. Research has revealed an asymmetry in the impact of contact effects on the attitudes of majority and minority groups: The experience of positive contact is more strongly and more consistently associated with improved intergroup attitudes for members of majority groups than for members of minority groups (see Tropp & Pettigrew, 2005). One possible explanation is that Allport's prerequisites for "optimal" contact (e.g., common goals) may be particularly compatible with the needs of majority-group members to be liked and affirmed, but less effective at satisfying the desire of minority-group members to be respected and empowered (Bergsieker, Shelton, & Richeson, 2010; Shnabel & Nadler, 2015). Intergroup contact may also be more impactful for perceivers with certain personality predispositions. For example, Dhont and van Hiel (2009) showed that interracial contact experiences had a particularly powerful effect on intergroup attitudes among individuals high in RWA and SDO. By contrast, intergroup contact is more effective for improving intergroup attitudes within egalitarian cultures than in those more hierarchical in structure and values (Kende, Phalet, van den Noorgate, Kara, & Fischer, 2017). Finally, contact partners can vary in the extent to which they are perceived as typical of the outgroup, and contact experiences with atypical group members may be less effective at improving attitudes toward the outgroup overall (see Brown & Hewstone, 2005).

Recategorization

Whereas intergroup contact aims to ameliorate prejudice by reducing tensions and enhancing understanding between groups, other approaches aim to intervene at the level

of categorization to improve intergroup attitudes and relations. Because social categorization is a flexible process, it may be possible to harness and redirect categorization processes to improve intergroup attitudes.

The core idea behind this recategorization approach, as articulated in the common ingroup identity model (Gaertner & Dovidio, 2000; Gaertner, Dovidio, Guerra, Hehman, & Saguy, 2016), is that highlighting a common identity can extend and redirect the forces of ingroup favoritism toward former outgroup members. Transforming the psychological boundaries that define “us” and “them” and instead encouraging people to focus on a shared categorization at a superordinate level (“we”) can transform outgroup members into ingroup members, and thereby improve intergroup attitudes. Common identities may become salient when people’s expectations or goals for intergroup interactions shift toward interdependence or shared goals, or when shared group memberships become focal (e.g., a team, school, or nation).

In line with the common ingroup identity model, recategorization has been linked to more favorable intergroup attitudes across a wide range of demographic groups and sociocultural contexts, and with regard to a broad range of biases, including implicit attitudinal biases (Scroggins, Mackie, Allen, & Sherman, 2016; see Gaertner et al., 2016). Recategorization improves intergroup attitudes and orientations through ingroup-favoring processes, such as greater empathic concern, reduced feelings of threat, and enhanced perspective-taking with recategorized outgroups that are activated when others formerly perceived to be outgroup members become seen as ingroup members within a common group identity.

Under some conditions, however, recategorization may be ineffective, or even exacerbate bias. Emphasizing only a common ingroup identity may threaten the need for positive distinctiveness and as a result, intensify attitudinal bias to re-establish positive differentiation (Hornsey & Hogg, 2000). However, this defensive response is less likely when both a common ingroup identity and the original subgroup identities are made salient simultaneously and integrated into a dual identity (e.g., African American; Gaertner et al., 2016). Moreover, people may project characteristics of their subgroup onto the superordinate group, such that members of the other subgroup are construed as deviating from a normative group prototype (Wenzel, Mummendey, & Waldzus, 2007). Although such ingroup projection can result in more negative attitudes, it is less likely to occur when the common ingroup identity is clearly defined or represented in ways that recognize the group's complexity (Ehrke, Berthold, & Steffens, 2014).

In addition to creating a common ingroup identity, there are alternative ways to alter social categorization and, as a result, improve intergroup attitudes. One such approach, outlined by Wilder (1981), involves decategorization, whereby the salience of group boundaries is weakened and people relate to one another primarily in interpersonal ("me" and "you") rather than group-based ("us" versus "them") terms. Decategorization may be achieved by personalization, in which individuals are encouraged to focus on the individual qualities of another person (Miller, 2002), as well as by cross-cutting categorization, in which people from opposing groups are made aware that they share membership in a third group, thereby weakening the relevance of the original categorization (Crisp, Ensari, Hewstone, & Miller, 2003). However, decategorization may be more difficult to maintain than recategorization, because people tend to default to

group-based processing of their social environment (Fiske & Taylor, 2013), and in personalized cross-group interactions, even a slight disagreement can automatically reestablish the interaction as an intergroup exchange (Kunda, Davies, Adams, & Spencer, 2002).

Intergroup contact and recategorization are complementary mechanisms through which intergroup attitudes can be improved (see Dovidio, Love, et al., 2017). Indeed, one of the critical mechanisms through which intergroup contact improves attitudes is by encouraging interactants to recategorize into a common ingroup identity. Moreover, the effects of the conditions originally identified as prerequisites by Allport (1954), such as cooperation and shared goals, may occur in part because they create a greater sense of common identity (Gaertner et al., 2016). The effectiveness and quality of intergroup contact experiences can thus be enhanced by promoting more inclusive forms of categorization (West, Pearson, Dovidio, Shelton, & Trail, 2009).

Beyond contact interventions and those targeting categorization, which have in large part focused on improving explicit intergroup attitudes, other research has focused more specifically on changing implicit intergroup attitudes to improve intergroup relations.

Implicit Bias Interventions

The two strategies for improving intergroup attitudes reviewed so far – positive intergroup contact and recategorization into a common ingroup identity – have both been found to produce less biased implicit attitudes. However, the vast amount of psychological research on implicit intergroup attitudes has led to the development of a

number of more targeted interventions, designed specifically to alter this type of intergroup attitude.

Some of these interventions inhibit the activation of negative implicit attitudes associated with an outgroup by leading people to think about positive exemplars of the group. For instance, Dasgupta and Greenwald (2001) reported that exposing college students to positive exemplars of older adults (e.g., Mother Teresa, Albert Einstein) reduced their implicit bias favoring young over old people on a subsequent IAT. Similar effects have been demonstrated for attitudes toward Blacks, and shown to persist even when respondents are first being presented with a negative group exemplar (Columb & Plant, 2016). However, the efficacy of such interventions may be limited by additional factors, such as perceivers' cognitive development and contextual influences. Gonzalez, Steele, and Baron (2017) found that exposure to positive exemplars (e.g., reading about an outstanding Black firefighter) reduced implicit racial bias on an IAT for 10-year-old children, but not for 7-year-olds, who have less cognitive flexibility. Also, the effect of normally positive group exemplars may be affected by social context. Skinner and Cheadle (2016) demonstrated that after arousing racial threat among White participants (by framing Barack Obama's election as a racial milestone for change), priming participants with a picture of Obama increased, rather than decreased, their implicit race bias.

Reconditioning, an alternative technique developed specifically to reduce implicit biases, is based on the premise that implicit attitudes represent strong associations that may be mitigated by creating even stronger, incompatible associations. For example, White participants may be presented repeatedly with positive words paired with

photographs of Black faces and negative word paired with White faces. When pairings occur with sufficient frequency to create strong associations incongruent with prevailing cultural associations, implicit biases can be reliably reduced (e.g., Burns, Monteith, & Parker, 2017). By the same token, repeatedly pairing outgroup stimuli with approach behaviors, such as moving a joystick forward, can also improve implicit racial attitudes (Kawakami, Phills, Steele, & Dovidio, 2007). However, reconditioning interventions do not necessarily reduce explicit bias, or the extent to which people express bias behaviorally – in part because people may perceive the training as an attempt to control their behavior and respond in biased ways to reassert their autonomy (Kawakami, Dovidio, & van Kamp, 2007).

Overall, compared to interventions designed to reduce explicit bias, interventions designed to reduce implicit biases have received more mixed empirical support. Lai et al. (2014) compared the effectiveness of 17 brief interventions hypothesized to reduce implicit bias toward Blacks (assessed using the IAT), and found that only 8 of the 17 interventions were effective, even when assessed immediately after the intervention. Interventions that encouraged counter-stereotypic thinking were shown to be most effective, whereas other hypothesized interventions, such as those that encouraged participants to take others' perspectives, asked participants to consider egalitarian values, or induced a positive emotion were shown to be relatively ineffective. Moreover, the effects of implicit bias interventions may not endure. In a highly-powered follow-up study (Lai et al., 2016), the 8 previously successful interventions showed immediate effects on implicit bias reduction, but these effects dissipated 1-2 days post-intervention.

In their meta-analysis, Forscher, Lai, et al. (2017) reviewed evidence from 494 separate studies, testing the efficacy of a variety of interventions to reduce bias in implicit intergroup attitudes. In particular, the largest changes in implicit bias were produced by tasks designed to strengthen positive or weaken negative associations ($d > .14$), invoke nonprejudiced goals ($d > .14$), or impact people's cognitive resources ($d = .23$). As discussed earlier, however, this meta-analysis did not find that reductions in implicit bias achieved by such interventions accounted for changes in explicit prejudice or discriminatory behavior – likely due to the modest interrelationships among these measures. As Penner et al. (this volume) propose, interventions for reducing discriminatory behavior might more productively focus on ways of limiting the *accessibility* of negative implicit attitudes within a given setting or their *impact* on behavior (e.g., by making people aware of their potential influence and helping them correct for its effects) rather than by attempting to *change* implicit attitudes directly.

Although the malleability of implicit attitudes has been demonstrated in the lab, implicit attitudes are culturally transmitted and deeply entrenched, and may thus be difficult to unlearn via brief experimental interventions. Accordingly, structured interventions that involve longer and more intensive training procedures have shown promise in producing enduring reductions in implicit bias and discriminatory behavior. Devine, Forscher, Austin, and Cox (2012), for instance, tested an intervention over a 12-week period. Participants in the treatment condition completed a 45-minute bias training program designed to evoke motivations to reduce implicit bias and train people how to reduce them. They were encouraged to consider ways in which implicit biases function as a habit and were provided with examples of ways in which implicit bias contributes to

discriminatory behaviors across a wide variety of contexts, such as employment and healthcare. Participants were then provided with an array of psychological strategies to reduce their own implicit bias (e.g., imagining counter-stereotypic examples, perspective-taking, and seeking opportunities for intergroup contact). Following the intervention, participants in the experimental group showed lower racial bias on an IAT and indicated greater concern and awareness of their personal biases 8 weeks post-intervention, compared to a control group (see also Carnes et al., 2015; but see Forscher, Mitamura, Dix, Cox, & Devine, 2017).

In addition to longer and more intensive training procedures, interventions that target structural features associated with intergroup bias (e.g., opportunities for intergroup contact) or provide people with strategies to resist biasing influences in the environment may also be more effective than those that target implicit or explicit attitudes alone (see Forscher, Lai, et al., 2017).

Influences on the Prejudice-Behavior Link

Complementing the traditional emphasis on targeting explicit or implicit attitudes as a strategy for improving intergroup relations, several theoretical advances have instead focused on targeting intergroup behavior directly, thereby reducing the impact of intergroup attitudes on discrimination, or indirectly, by influencing the context or psychological processes (e.g., emotion states) that can modulate expressions of prejudice. Examples of this include research on social norms, self-regulation of prejudice, and the formulation of action plans to reduce expressions of bias.

Normative influences. As we noted earlier, the influence of norms on behavior has been studied extensively in social psychology, and intergroup norms have been

identified as significant drivers of prejudice and discrimination (Crandall & Stangor, 2005; Rutland et al., 2005). As such, targeting social norms, or their perception, may provide a more efficient way to promote positive relations between groups than targeting individual attitudes, which may be deeply anchored in personal experiences and long-term socialization. Indeed, perceptions of social norms shift in response to contextual information, such as media portrayals of more harmonious intergroup relations (e.g., a radio soap opera in Rwanda; Paluck, 2009) or institutional decisions in support of a stigmatized group (e.g., a US Supreme Court ruling in favor of same-sex marriage; Tankard & Paluck, 2017) – even when personal attitudes remain unchanged. More favorable perceived social norms, in turn, produce more favorable intergroup behavior, such as more productive intergroup communication and cooperation across group lines (Paluck, 2009, 2011). Although changing norms can sometimes yield analogous changes in personal attitudes (e.g., Christ et al., 2014), they have shown considerable promise for improving intergroup relations even in the absence of systematic attitude change.

Self-regulation. Another mechanism influencing intergroup relations involves the self-regulation of bias. Plant and Devine (1998) distinguished between the external motivation to respond without prejudice, which results in intentions to hide one's biased attitudes, and the internal motivation to respond without prejudice, which is driven by personal values and promotes intentions to inhibit bias. Insofar as people are internally motivated to respond without prejudice, becoming aware of one's biases triggers feelings of guilt and compunction, increased vigilance toward bias, and a range of motivated regulatory processes to inhibit its expression (see Burns, Parker, & Monteith, 2017, for a review). The motivation to respond without prejudice has been studied primarily as an

individual-difference variable, showing a consistent negative relationship with expressions of prejudice, both explicit and implicit, and intergroup discrimination. However, even simply priming the internal motive to respond without prejudice can reduce the expression of both explicit and implicit bias toward an outgroup (Legault, Gutsell, & Inzlicht, 2011). Less is known, however, about specific factors that promote the development of a chronic internal motivation to respond without prejudice. Some work indicates that feeling more accepted by the outgroup leads to stronger internal motivation to respond without prejudice toward the group (Kunstman, Plant, Zielaskowski, & LaCrosse, 2013). Nevertheless, understanding the processes that lead people to internalize a motivation to respond without prejudice remains a critical area for future research.

Action plans. Consistent with psychological research on intentions as key predictors of behavior (see Ajzen et al., Volume 1), encouraging individuals to formulate explicit plans to respond without prejudice provides an additional mechanism for intervening at the link between intergroup attitudes and discrimination. For example, simply instructing people to avoid prejudice has previously been shown to be effective under some conditions (Lowery, Hardin, & Sinclair, 2001; cf. Legault et al., 2011). One particularly promising intervention relies on *implementation intentions*, a method derived from research on goal pursuit whereby explicitly formulating “if-then” plans ties situational cues to desired behavioral responses and, as a result, creates reflexive response patterns (Gollwitzer & Oettgen, 2011). In the domain of intergroup attitudes, implementation intentions have been shown to successfully reduce evaluative bias on the IAT (Lai et al., 2014, 2016), inhibit the translation of intergroup bias into discriminatory

behavior (Mendoza, Gollwitzer, & Amodio, 2010), and promote interest in engaging in activities, such as intergroup contact, that can reduce prejudice in the longer term (Stern & West, 2014).

Future Directions in Research on Attitudes and Intergroup Relations

In the remainder of the chapter, we trace emerging developments in the study of intergroup attitudes and highlight several promising pathways forward for understanding their conceptualization, long-term malleability, and relationship to individual discriminatory behavior and societal (macro-level) disparities.

Genetic and Developmental Influences

One area of recent development has focused on the relative contributions of biological and environmental factors that may influence the stability of intergroup attitudes over the lifespan (see Barlow, Sherlock, & Zietsch, 2017). Research with twin samples, for example, suggests a strong genetic component to intergroup attitudes. A 10-year longitudinal study in the US (Lewis & Bates, 2017) revealed a strong consistency in racial, ethnic, and religious ingroup favoritism among adult twins ($r_s = .50$ to $.76$) and estimated that most (74%) of this association was due to genetics. By contrast, observed *changes* in ingroup favoritism, over the 10-year period, were largely accounted for by non-genetic environmental influences. These findings indicate that whereas genetic influences may underpin the stability of ingroup favoritism, environmental influences may largely account for changes in attitudinal bias over time.

Other genetic studies have examined individual differences in susceptibility to acquiring implicit and explicit biases. For instance, some individuals are genetically predisposed to show heightened sensitivity to interpersonal threat and social rejection

(see Fox, Hane, & Pine, 2007), and these tendencies may influence both the acquisition and extinction of intergroup biases (Olsson, Ebert, Banaji, & Phelps, 2005). Consistent with this, individual differences in racial bias are associated with how fast participants learn to avoid threatening outgroup members in a reinforcement-learning task (Lindström, Selbing, Molapour, & Olsson, 2014). Relatedly, differences between prejudiced and non-prejudiced individuals may be partially rooted in the greater ease with which the former are capable of acquiring negative evaluative associations: Livingston and Drwecki (2007) found that in a classical conditioning paradigm, non-biased individuals were less likely to acquire negative affective associations and more likely to acquire positive affective associations to neutral stimuli, compared to those with negative implicit or explicit racial attitudes.

In addition to emerging research on genetic influences on prejudice, developmental studies have highlighted both the primacy of ingroup attitudes and the relative stability of implicit compared to explicit intergroup attitudes over the lifespan. For example, young children and even preverbal infants show a reliable preference for individuals on the basis of group markers, including gender (Shutts, Pemberton, & Spelke, 2013) and race (Bar-Haim, Ziv, Lamy, & Hodes, 2006), a finding that is consistent across cultures (Dunham, Chen, and Banaji, 2013). Baron and Banaji (2006) further demonstrated that children as young as 6 years of age showed evidence of implicit pro-White evaluations, but that implicit and explicit attitudes about race diverge by age 10, with implicit attitudes remaining stable whereas self-reported attitudes growing more favorable over time. The genetic and developmental influences underlying intergroup

prejudice represent an important theoretical frontier in research on implicit and explicit intergroup attitudes.

Enduring Attitude Change

Another important development in psychological research on intergroup attitudes is the growing interest in evaluating longer-term effects of prejudice-reduction interventions, beyond the immediate intervention. This focus on assessing enduring attitude change complements the substantial amount of research attention that has been directed toward strategies to improve intergroup attitudes in the lab.

Several recent studies have evaluated effects of interventions on explicit intergroup attitudes over time. In a field experiment, Broockman and Kalla (2016) showed that voters in Florida who had a brief conversation with canvassers, which was structured to encourage perspective-taking with transgender people, exhibited significantly more positive attitudes toward this marginalized group three months post-intervention. In a field study that capitalized on a natural transition toward greater intergroup contact in schooling (a shift from many segregated classes to one integrated class in German high schools), Eller, Abrams, and Koschate (2017) demonstrated that intergroup contact and categorization into a dual identity reduced attitudinal intergroup bias over a year later. Finally, a social-network study on the long-term effects of intergroup contact documented effects of contact experiences in childhood on the development of positive outgroup attitudes in adolescence (Wölfer, Schmid, Hewstone, & van Zalk, 2016). Similar to these intergroup studies, future investigations may continue to explore enduring attitude change beyond the laboratory and offer further insights into the influences that contribute to stable change.

Researchers studying implicit outgroup attitudes have also been cognizant of the long-term efficacy of bias-reduction interventions. As previously discussed, Devine et al. (2012) trained participants in a wide range of self-regulation strategies that resulted in less biased implicit racial attitudes after 12 weeks, relative to a control group (see also Carnes et al., 2015). However, a well-powered replication of this study (Forscher, Mitamura et al., 2017) failed to find lasting reductions of implicit bias two years later, even though participants who had undergone the intervention were significantly more likely to oppose the use of stereotypes, compared to a control group. Even more strikingly, as we reviewed earlier, Lai et al. (2014) found 8 brief interventions to be effective for reducing implicit race prejudice on the IAT; in a highly-powered follow-up study, Lai et al. (2016) found all previously successful interventions to be immediately effective at reducing implicit bias, but none of them resulted in significant implicit attitude change after a delay of 1-2 days. Together, these findings suggest that without enduring efforts to sustain reductions in implicit prejudice created in the lab, these changes are likely to dwindle over time.

In summary, empirical studies that have taken a longitudinal approach have in some cases generated evidence for long-term efficacy of attitude-change interventions, and in others indicated limited long-term success of interventions. Tracking the longitudinal impact of interventions therefore remains a critical avenue for future prejudice research.

A Promotion Focus for Improving Intergroup Attitudes

A considerable amount of research on changing intergroup attitudes has focused on the reduction, prevention, and avoidance of psychological processes underlying

prejudice. However, there are several reasons why this approach may be limited in its effectiveness (see Murphy, Richeson, & Molden, 2011). As noted earlier, racial attitudes develop relatively early in life and can be deeply entrenched, at least partly due to being reinforced by a range of social influences. Moreover, because many prejudice-reduction interventions seek to expose and change perceivers' undesirable characteristics, such as implicit stereotypes about another group, these approaches may elicit reactance (e.g., Kawakami, Dovidio, & van Kamp, 2007) and lead perceivers to avoid experiences that are valuable to achieving attitude change (e.g., intergroup contact). Finally, sensitizing people to their prejudice may prompt effortful forms of self-control that can be counterproductive. For instance, attempts at suppressing prejudice can produce rebound effects in which negative intergroup attitudes and feelings become hyper-accessible when efforts to control prejudice are relaxed (Moskowitz, 2010). In intergroup interactions, efforts to control prejudice can undermine the effectiveness of contact for improving intergroup attitudes because it produces a self-focus that interferes with the ability to develop rapport with the outgroup interaction partner (MacInnis & Page-Gould, 2015) – which, in turn, can exacerbate intergroup bias. As a consequence, enduring attitude change through anti-bias appeals that target the avoidance of undesirable psychological processes may be difficult to accomplish.

Rather than adopting a prevention focus aimed directly at reducing prejudice and its expression, an alternative approach for improving intergroup attitudes may be to focus on cultivating more egalitarian attitudes and positive orientations toward other groups (i.e., a promotion focus; Murphy et al., 2011). Because egalitarian attitudes can be incompatible with prejudice, developing such orientations may reduce the application,

and even the activation, of prejudicial attitudes. For instance, viewing interracial encounters as opportunities for learning or “growth” through the appreciation of differences, rather than as a test of one’s ability to respond without prejudice, can promote interest in intergroup interactions and improve intergroup relations generally (Migacheva & Tropp, 2013). Likewise, when majority-group members see diversity as a learning opportunity they may experience excitement rather than threat at the prospect of intergroup interaction (Toruńczyk-Ruiz & Lewicka, 2016; see also Brannon & Walton, 2013). In addition, framing diversity in an inclusive way – in which diversity efforts are portrayed as beneficial to *all* groups, including the majority group – rather than in a fashion that focuses only on the consequences for minority groups, can alleviate the threat of diversity messages to majority-group members and produce more positive attitudes toward diversity (Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011). As a consequence of this form of promotion focus, people may show less bias toward members of other groups and value intergroup contact and diversity more.

Understanding how positive intergroup orientations can be effectively framed, as well as the conditions under which they may backfire, remain important issues for future research. For instance, Trawalter, Driskell and Davidson (2016) found that a well-intentioned plea to promote diversity by highlighting its instrumental benefits (“diversity is good for organizations”) can inadvertently increase, rather than decrease prejudice. Specifically, such messages can result in the devaluing of qualified Black applicants by broadening the definition of diversity to include and prioritize non-demographic factors, such as personality traits. By contrast, framing the message as “diversity is fair” highlights ethical values and implies that creating a more diverse organization is a

desirable goal in and of itself, rather than a means to an end (e.g., to increase revenue). As this example illustrates, the content of promotion-focused messaging can be a critical determinant of their success in reducing intergroup bias and improving intergroup relations.

Although prejudice reduction has traditionally been conceptualized in terms of conscious efforts to avoid expressing negative attitudes and stereotypes, recent studies suggest that biases may also be combated at the implicit level. Underlying this work is the premise that implicit attitudes develop from repeated pairings of a social group with particular attributes, which can occur through cultural messages (e.g., through the media) and personal experience, such that these “overlearned” associations become chronically available and form a “prejudice habit” (Devine, Plant, & Buswell, 2000). As Johnson observed in his concluding chapter for Volume 1, such habits are difficult to break.

One promotion-oriented perspective that has proven effective for addressing implicit bias focuses on nonconscious processes that inhibit the activation of negative implicit attitudes in the first place (see Moskowitz, 2010). For instance, individuals with chronic explicit egalitarian goals spontaneously activate egalitarian thoughts when primed with Black (vs. White) faces (Moskowitz, Salomon, & Taylor, 2000), and they fail to exhibit the automatic activation of negative racial associations that Whites typically demonstrate when exposed to Blacks (Park, Glaser, & Knowles, 2008; see Moskowitz & Ignarri, 2009, for a review). Whereas conscious efforts to avoid stereotyping or prejudice may often fail or even exacerbate bias because individuals lack insight into the processes that promote and regulate it, *implicit* egalitarian goals may succeed by co-opting the very psychological mechanisms that sustain it, replacing

negative or stereotypical associations with egalitarian or atypical associations when perceiving or interacting with members of other racial and ethnic groups. Developing implicit egalitarian goals may often require extended practice to establish new responses and habits that can overcome prior stereotypic responses and may be sufficiently strong to endure over time.

Macro- and Micro-Level Influences on Intergroup Attitudes

Earlier, we discussed research documenting discriminatory outcomes for Blacks relative to other groups at a population level within a given geographic location, for example in terms of disparities in mortality rates associated with circulatory disease (Leitner et al., 2016a) and through the use of lethal force against criminal suspects by law enforcement (Hehman et al., 2017), as a function of prejudice against Blacks in these locales. However, there are a number of important questions raised by research of this type, which represent promising directions for future work in intergroup relations.

One issue, which has also been considered in research at the individual level, involves understanding whether explicit or implicit attitudes have stronger effects on behavior and outcomes when studied at the aggregate level (e.g., different geographical areas), as well as when and why. The answers to these questions are unclear based on the current data. For instance, Leitner et al. (2016a), found that when considered simultaneously, Whites' *explicit* bias (aggregated by county), but not their implicit racial bias, predicted racial disparities in death rates due to circulatory diseases. In another study, drawing upon the same racial attitudes data, Leitner, Hehman, Ayduk, and Mendoza-Denton (2016b) showed that in counties where Whites had greater explicit bias toward Blacks, Whites themselves had higher mortality rates, whereas in counties where

Blacks had greater implicit bias toward Whites, Blacks had higher mortality rates. By contrast, Hehman et al. (2017) found that Whites' *implicit* bias at the regional level, but not their explicit bias, significantly predicted disproportionate use of lethal force against Black criminal suspects. Finally, research by Orchard and Price (2017), who investigated county-level prejudice and its relationship to racial disparities in preterm births and low birth weight for newborns, found that implicit and explicit racial prejudice were highly correlated at the county level ($r = .86$) and, when considered separately, equivalently predicted racial disparities in these birth-related outcomes.

Although both explicit and implicit racial bias at an aggregate level appear to predict consequential outcomes, future research might identify the circumstances under which explicit or implicit bias is more important. Explicit prejudice, for example, is more likely to be openly communicated than implicit prejudice. As such, it might have greater influence at creating community-wide norms that facilitate systematic biases in policies and access to resources, which in turn fuel intergroup disparities. Implicit bias, by contrast, may potentially be more influential than explicit bias for outcomes of groups lower in structural power and, as with individual-level outcomes, for predicting specific, more spontaneous incidents of discrimination (e.g., use of lethal force in a conflict situation). Given the limited and complex pattern of data currently available, understanding how and when macro-level variations in intergroup attitudes affect outcomes for members of different social groups represents a challenging but important endeavor.

Another, related direction for future research would be to identify how macro-level societal factors (e.g., systemic inequality) shape micro-level intergroup attitudes,

their expression, and their relationship to discriminatory behavior (see Blair & Brondolo, 2017). These macro-level forces appear to have distinctive properties compared to individual-level processes. For instance, even though implicit and explicit measures of intergroup attitudes are only modestly associated at the individual level (Hofmann et al., 2005), as we noted earlier, these measures are strongly correlated when aggregated at the level of US counties (e.g., Orchard & Price, 2017).

In their bias of crowds model, Payne et al. (2017) offer some insight into these differences in micro- and macro-level effects. These researchers conceptualize implicit bias as an emergent group-level phenomenon (the “background radiation of systemic bias,” p. 33) and argue that the accessibility of biased associations underlying implicit attitude measures may be rooted primarily in situations rather than in person-level processes (but see Gawronski & Brannon, Volume 1). In particular, Payne et al. suggest that chronic and repeated exposure to expressions of prejudice and systemic inequalities may elevate the accessibility of biased associations in some environments more than others, and therefore increase the potential for disparate treatment in these settings. This perspective highlights the importance of future research considering environmental factors and their stability for developing effective and enduring prejudice-reduction interventions.

Intergroup Attitudes Beyond Prejudice

A vast amount of research in intergroup psychology has focused around the dynamics of prejudice, both at the individual and at the aggregate level, and interventions to reduce it. As Wright and Lubensky (2009) observed, this focus on prejudice reduction reflects the assumption that improving intergroup attitudes will, ultimately, translate into

more fair and equitable intergroup relations. Consistent with this view, some studies have demonstrated that creating more positive intergroup attitudes can reduce structural discrimination and increase support for egalitarian social change. For example, Devine, Forscher, Cox, Kaatz, Sheridan, and Carnes (2017) showed that employing a combination of techniques originally designed to improve attitudes toward women in academic science departments (Carnes et al., 2015) resulted not only in greater bias awareness, but also in increased levels of hiring of women into faculty positions, compared to departments that had not undergone the intervention. Also, positive interactions with members of traditionally disadvantaged groups are associated with greater support among majority-group members for public policies designed to make group relations more equitable (e.g., Voci & Hewstone, 2003), as well as support for collective action in solidarity with the disadvantaged group to bring about such change (Hässler et al., 2017; Reimer et al., 2017).

However, as suggested by research reviewed in the previous sections on enduring attitude change and on macro-level societal influences, improved intergroup attitudes may not necessarily result in structural changes that produce greater equality in status, opportunity, and power. Dixon, Durrheim, and Tredoux (2007) noted that even when members of advantaged groups become more supportive of equality *in principle* as a result of prejudice reduction, they may still remain opposed to relinquishing their relatively privileged status position *in practice*. Consistent with this “principle implementation gap,” Kalev, Dobbin, and Kelly (2006) found across 708 private-sector organizations that programs designed to improve managers’ attitudes toward traditionally underrepresented groups (white women, racial minorities) were relatively ineffective at

improving the representation of these groups in management. Future research might thus consider more fully the conditions under which changing intergroup attitudes among majority-group members will be more or less effective for producing more egalitarian outcomes at a societal level.

In addition, creating more positive intergroup attitudes may even undermine egalitarian social change, by weakening the motivation of minority-group members to take collective action to improve their position (Dixon, Levine, Reicher, & Durrheim, 2012; Dovidio, Gaertner, Ufkes, Saguy, & Pearson, 2016; Wright & Lubensky, 2009). At the heart of this argument lies the idea that promoting favorable intergroup attitudes and greater social cohesion, while disregarding the objective reality of intergroup inequality, may inadvertently lead minority-group members to become more accepting of the status quo. For example, Saguy, Tausch, Dovidio, and Pratto (2009) showed that for members of a disadvantaged group, developing positive relations with members of a dominant group yielded unrealistic expectations of fair treatment and, as a result, decreased their motivation to take action for equality. Similar “ironic” effects have been reported across empirical studies in a range of cultural contexts, for example among Black South Africans (Dixon et al., 2007) and ethnic minority Americans (Tausch, Saguy, & Bryson, 2015), as well as in a recent large-scale study involving 60 samples from 23 different countries (Hässler et al., 2017). Becker, Wright, Lubensky, and Zhou (2013) provided direct evidence that this relationship may be causal, demonstrating experimentally that contact with majority-group members reduces the support of minority-group members for collective action.

Likewise, other prejudice-reduction interventions, such as recategorization into a common ingroup identity, have also been shown to increase minority-group members' acceptance of their relatively disadvantaged position (see Dovidio et al., 2016, for a review). Both positive contact and recategorization may decrease increase acceptance of inequalities in part because they reduce identification with the minority ingroup (Wright & Lubensky, 2009) and divert attention away from group-based inequalities (e.g., Saguy et al., 2009; Ufkes, Calcagno, Glasford, & Dovidio, 2016). As the research on “ironic” effects of prejudice reduction highlights, a future challenge for research to improve intergroup relations is to identify interventions that not only improve intergroup attitudes but also produce greater intergroup justice. As such, research considering group members' support for collective action and public policies for egalitarian social change continues to be an important development in the field, complementing the study of intergroup attitudes.

Conclusion

In this chapter, we examined the basis of intergroup attitudes with respect to basic psychological processes, individual differences in personality and ideology, interpersonal relations, and structural factors in society. We also considered ongoing and emerging debates concerning the ways intergroup attitudes are measured, and the role of intergroup attitudes in predicting discriminatory behavior. In addition, we described two of the most thoroughly studied interventions for reducing bias (intergroup contact and recategorization), as well as interventions developed specifically to reduce implicit prejudice toward outgroups and ways to reduce the extent to which intergroup bias translates into discrimination.

Although the study of prejudice and intergroup relations has had a long history in social psychology, recent developments in the area have increasingly aligned work on this topic more closely to general theory and research on attitudes. These developments include general issues of attitude measurement, a fuller consideration of the relationship between prejudice and both behavior and intergroup outcomes, as well as a growing understanding of the cognitive, emotional, motivational, interpersonal, social, and structural influences on intergroup attitudes at micro and macro levels of analysis. Reciprocally, understanding the particular dynamics that affect the way prejudice is measured, when and how it influences behavior, and how it can be reduced in the short- and long term, can inform the study of attitudes more generally. The integration of traditional and contemporary approaches to prejudice with general principles underlying attitudes thus promises not only to advance theory, but also to make important contributions to the development of interventions that will make society fairer and more equitable for the benefit of all.

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