# Implicit Ingroup Favoritism, Outgroup Favoritism, and Their Behavioral Manifestations

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*Three broad themes that emerge from the social psychological research on unconscious or implicit prejudice and stereotypes are highlighted in this article. First, individuals who belong to socially advantaged groups typically exhibit more implicit preference for their ingroups and bias against outgroups than do members of socially disadvantaged groups. This research suggests that intergroup preferences and prejudices are influenced by two different psychological forces—people's tendency to prefer groups associated with themselves as a confirmation of their high self-exteem versus their tendency to prefer groups valued by the mainstream culture as a confirmation of the sociopolitical order in society. Second, these implicit prejudices and stereotypes often influence people's judgements, decisions, and behaviors in subtle but pernicious ways. However, the path from implicit bias to discriminatory action is not inevitable. People's awareness of potential bias, their motivation and opportunity to control it, and sometimes their consciously held beliefs can determine whether biases in the mind will manifest in action. Finally, a new line of research suggests that implicit biases exhibited by individuals who belong to socially disadvantaged groups towards their own group may have unintended behavioral consequences that are harmful to their ingroup and themselves.*

In the last 50 years grassroots social justice movements dedicated to the civil rights of historically disadvantaged groups have produced far-reaching changes in the laws and policies that govern civil society and have also elicited concurrent changes in social norms that guide individuals' attitudes and beliefs (Albert and Albert, 1984; Chong, 1991; Cruikshank, 1992; D'Emilio, 1983; Gitlin, 1987; Levy, 1992; Vaid, 1990; Williams, 1987). The notion that prejudice and discrimination

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against disadvantaged groups, most notably African Americans, other racial/ethnic minorities, and women, is illegitimate and unethical has become an increasingly mainstream philosophy. These changes in American public opinion are clearly reflected in national surveys that reveal prejudice and stereotypes have declined steadily over the past few decades, especially toward African Americans (Brigham, 1972; Karlins *et al.*, 1969; Maykovich, 1971, 1972; Schuman *et al.*, 1997), women (Huddy *et al.*, 2000; Kluegel and Smith, 1986), and to a lesser extent, gays and lesbians (Herek, 1991, 2002; Yang, 1997).

Despite these optimistic findings, other evidence continues to show group-based inequality in several domains of everyday life—healthcare, housing, education, employment, and the justice system (Badgett, 1996; Daniels, 2001; Ellis and Riggle, 1996; Leonhardt, 2002; Portwood, 1995; Raudenbush and Kasim, 1998; Ridgeway, 1997; Rubenstein, 1996; Stohlberg, 2002). The discrepancy between increasingly tolerant self-reported attitudes in the face of enduring and glaring disparities in people's lived experience prompted some social psychologists to urge the development of alternative, less obtrusive, measures of attitudes and behavior that do not rely so heavily on people's willingness and ability to accurately self-report their thoughts and actions, especially with regard to socially sensitive issues like prejudice and stereotypes (Crosby *et al.*, 1980; Gaertner and Dovidio, 1977; Jones and Sigall, 1972; also see Nisbett and Wilson, 1977).

Serendipitously, at about the time that social psychology was searching for new ways to capture intergroup attitudes and behavior, cognitive psychology was witnessing the evolution of new theories of nonconscious or implicit memory and new tools with which to measure memory without relying on individuals' conscious recollections of past events (Jacoby, 1991; Richardson-Klavehn and Bjork, 1988; Roediger, 1990; Roediger and McDermott, 1993; Schacter, 1987). This body of research together with theories and measures of semantic memory (Meyer and Schvaneveldt, 1971, 1976; Neely, 1977; Posner and Snyder, 1975) gave rise to a new knowledge base and tools with which to study cognition that operates without conscious awareness and volitional control. These theories and tools were eagerly adapted by social psychologists for the study of nonconscious or implicit *social* cognition—that is, how people think and feel about social issues.[2] The focus on implicit social cognition is particularly important in the study of prejudice and stereotyping for two reasons. First, the controversial nature of these issues raise the possibility that people's voluntary reports of their attitudes and behavior may be overly determined by their desire to put their best foot forward (i.e., concerns about impression management and self-presentation bias). Second, while self-reporting

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[2]Over the years, nonconscious or implicit social cognition has been defined as thoughts, feelings, and behavior toward social objects that are influenced by "traces of past experience" without people's awareness, intention, and/or control (see Bargh, 1989, 1994; Greenwald and Banaji, 1995; Kihlstrom, 1990). However, it is rare for any psychological judgment or behavior to meet all of these criteria at the same time. Typically, psychological responses measured in research studies have been called "implicit," "automatic," or "nonconscious" to the extent that at least one of the primary criteria—lack of awareness, intention, or control—has been operational.

their attitudes and behavior people often make a strong distinction between their own personal attitudes and those circulating in the larger culture ("society at large may be prejudiced against Group X, but I am not"); yet there is often a great deal of overlap between individuals' own mental representations of social groups and the mainstream culture's construal of the same groups (Banaji and Greenwald, 1994; Greenwald and Banaji, 1995; Nisbett and Wilson, 1977). Early converts among social psychologists to this new way of thinking were Fazio, Dovidio, Gaertner and their colleagues (Dovidio *et al.*, 1986; Fazio *et al.*, 1986; Gaertner and McLaughlin, 1983) who adapted cognitive psychology's new tools, particularly reaction time tasks, to assess attitudes and beliefs spontaneously associated with social groups for the study of prejudice and stereotypes respectively (for more detail on the history of implicit social cognition, see Banaji, 2001; Banaji and Bazerman, 2004).[3]

In the first series of such studies, Gaertner and McLaughlin (1983) investigated the nature of contemporary racial stereotypes starting with the assumption that a stereotype, like any other cognitive representation, can be conceptualized as a mental association between a social group (e.g., African Americans) and a particular characteristic (e.g., athletic). One way to assess the strength of such a mental association without relying on self-reports is to measure how quickly and easily certain traits and attributes "pop into mind" when people see the name or picture of a particular group. In their research Gaertner and McLaughlin used a computerized task called semantic priming to assess how quickly people associated Black compared to White Americans with racial stereotypes that were positive or negative. In this task, a racial label (the word "Black" or "White") was presented briefly on a computer screen and was rapidly replaced by a (positive or negative) word or a nonword. All negative words selected for this study were stereotypes associated with African Americans (e.g., lazy, welfare) whereas all positive words were stereotypes associated with White Americans (e.g., ambitious, smart). Participants' task was simply to indicate, as quickly as possible, whether the second stimulus presented on screen was a word or nonword. Their speed of response was taken to be an indirect indicator of the degree to which they associated those stimulus characteristics with African Americans relative to White Americans. In other words, if participants thought White Americans, as a group, were smarter than African Americans, then exposure to the label "White" (compared to "Black") ought to activate White stereotypes in their mind, which in turn ought to speed up their response to the word "smart" when it appeared on screen. If, however, participants did not think White Americans were any different from

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[3]In this paper, I make a distinction between *prejudice* and *stereotypes*, in keeping with other researchers' work (Ashmore and Del Boca, 1981; Fiske and Pavelchak, 1986; Greenwald and Banaji, 1995; Hamilton and Trolier, 1986). Prejudice is defined as a negative evaluation of a group and refers to one's unfavorable feelings toward the group and its members (Eagly and Chaiken, 1993; Thurstone, 1931; Zajonc, 1980). A stereotype is defined as a belief and refers to characteristics thought to be possessed by most or all members of a particular group. Whereas a prejudicial attitude implies a negative evaluation of a group, a stereotype may involve both positive and negative beliefs.

African Americans in terms of intelligence, then exposure to the label "White" compared to "Black" ought not to facilitate responses to the word "smart." Results revealed that the speed with which participants classified positive words ("smart," "ambitious") after seeing the label "White" was substantially faster than the speed with which they classified the same words after seeing "Black."

Follow-up studies extended this research by demonstrating that participants were also faster at classifying negative words after "Black" compared to "White" primes (Dovidio *et al.*, 1986). Moreover, the degree to which they exhibited automatic racial stereotyping was unrelated to their self-reported racial attitudes measured by traditional paper-and-pencil questionnaires. This marked the beginning of a long and productive line of research leading to greater methodological and theoretical sophistication in the study of implicit attitudes and beliefs about a host of groups.

## THE FIRST WAVE: IMPLICIT INGROUP FAVORITISM

Initial investigations on the nature of implicit prejudice and stereotypes focused entirely on attitudes and beliefs held by members of advantaged groups toward members of disadvantaged groups. This lopsided research attention was partly pragmatic given the unequal distribution of power and resources in the hands of individuals who belonged to advantaged groups compared to disadvantaged groups. That is, negative attitudes and beliefs held by members of advantaged groups were far more likely to have a pernicious impact on the lives of disadvantaged group members, whereas mirror image perceptions on the part of disadvantaged group members were less likely to have the same impact. The primary prediction of the early research on implicit intergroup relations was that people would favor their own group at the expense of other groups in terms of their evaluations, judgments, and behavior in intergroup situations. This prediction is consistent with social identity theory which argues that when people strongly identify with their ingroup and when their self-esteem is linked to the perceived worthiness of their ingroup, they will tend to favor their ingroup and sometimes derogate other outgroups (Abrams and Hogg, 1988, 1990; Bourhis, 1994; Bourhis *et al.*, 1997; Oakes and Turner, 1980; Rubin and Hewstone, 1998; Tajfel, 1981; Tajfel and Turner, 1986; Turner *et al.*, 1987).

By now almost a hundred studies have documented people's tendency to automatically associate positive characteristics with their ingroups more easily than outgroups (i.e., ingroup favoritism) as well as their tendency to associate negative characteristics with outgroups more easily than ingroups (i.e., outgroup derogation). While many of these studies have focused on automatic *attitudes* toward outgroups (particularly automatic prejudice), a significant number have also focused on automatic *beliefs* about outgroups (particularly stereotypes about those groups).

In the case of intergroup attitudes, a host of studies have found that people's implicit intergroup preferences captured by indirect attitude measures reliably predict their membership in various social groups, typically those of high status. For example, in the domain of race, White Americans, on average, show strong implicit preference for their own group and relative bias against African Americans (Dasgupta *et al.*, 2000; Dasgupta and Greenwald, 2001; Devine, 1989; Dovidio *et al.*, 1986, 1997, 2002; Fazio *et al.*, 1995; Greenwald *et al.*, 1998; Kawakami *et al.*, 1998; Lowery *et al.*, 2001; McConnell and Leibold, 2001; Nosek *et al.*, 2002a; Pratto and Shih, 2000; Richeson and Ambady, 2003; Rudman *et al.*, 2001; von Hippel *et al.*, 1997; Wittenbrink *et al.*, 1997, 2001b). Similar results have been obtained in terms of White Americans' implicit attitudes toward other ethnic minority groups such as Latinos (Ottaway *et al.*, 2001; Uhlmann *et al.*, 2002), Jews (Rudman *et al.*, 1999), Asians (Son Hing *et al.*, 2002), and non-Americans (Ashburn-Nardo *et al.*, 2001; Devos and Banaji, 2004; Rudman *et al.*, 1999). In other national contexts outside the United States, parallel findings have been obtained in terms of majority group members' attitudes toward racial/ethnic minority groups (e.g., aborigines in Australia, Locke *et al.*, 1994; Turkish immigrants in Germany, Gawronski *et al.*, 2003).

In the domain of age-related attitudes, young people, typically college students, show very strong preference for their ingroup and relative prejudice against the elderly (Dasgupta and Greenwald, 2001; Jelenec and Steffens, 2002; Mellott and Greenwald, 1999; Nosek *et al.*, 2002a; Perdue and Gurtman, 1990). In the case of attitudes toward sexual minorities, heterosexuals' implicit attitudes toward lesbians and gay men also show strong evidence of ingroup favoritism and outgroup bias (Banse *et al.*, 2001; Dasgupta, 2002; Dasgupta and Rivera, 2004; Lemm, 2001).

When it comes to gender-related attitudes, the data are a little bit different in that both men and women express implicit positive attitudes toward women in general relative to men in general; however, women's attitudes tend to reveal more pro-female sentiments than men's attitudes (Carpenter, 2001; Richeson and Ambady, 2001; Skowronski and Lawrence, 2001). Finally, illustrating the extreme case, even when arbitrary in- and outgroups are created in the laboratory, people quickly develop attachments to their own group, and exhibit automatic preference for the ingroup and relative bias against the outgroup within a very short period of time (Ashburn-Nardo *et al.*, 2001; DeSteno *et al.*, 2004; Perdue *et al.*, 1990; cf. Brewer, 1979; Brewer and Brown, 1998).

Although the preponderance of evidence in the domain of implicit ingroup favoritism and outgroup bias has focused on pure evaluations, there is also plenty of evidence for the pervasiveness of stereotypic beliefs about outgroups especially when those outgroups are racial minorities (Correll *et al.*, 2002; Devine, 1989; Devos and Banaji, 2004; Kawakami and Dovidio, 2001; Payne, 2001; Sekaquaptewa *et al.*, 2003; Wittenbrink *et al.*, 1997, 2001b), the elderly (Bargh

*et al.*, 1996; Chasteen *et al.*, 2002; Dijksterhuis *et al.*, 2000; Galinsky and Moskowitz, 2000; Kawakami *et al.*, 2002), and women (Banaji *et al.*, 1993; Banaji and Greenwald, 1995; Banaji and Hardin, 1996; Blair *et al.*, 2001; Blair and Banaji, 1996; Dasgupta and Asgari, in press; Kawakami and Dovidio, 2001; Moskowitz *et al.*, 1999; Nosek *et al.*, 2002a,b; Rudman *et al.*, 2001; Rudman and Glick, 2001).

Although the single-minded focus on implicit prejudice and stereotypes harbored by members of advantaged groups has been enormously productive in revealing the existence of subtle and nonconscious bias despite the scarcity of willingly expressed bias, the story is clearly not complete without considering how members of disadvantaged groups perceive their own group relative to the advantaged majority. A close inspection of the research reviewed above already contains hints that individuals belonging to disadvantaged groups do not always implicitly favor their ingroup in a mirror image fashion.

## THE FIRST WAVE (REVISED): IMPLICIT OUTGROUP FAVORITISM

Social identity theory and most other theories on intergroup relations in social psychology (e.g., self-categorization theory, Turner *et al.*, 1987; social dominance theory, Sidanius and Pratto, 1999; realistic conflict theory, Sherif, 1967, etc.) posit that people have a strong tendency to favor their ingroup in terms of their attitudes, beliefs, and behavior. While this is often true, people also have other reactions to in- and outgroups particularly in the context of power and status differences between groups. For example, system justification theory argues that people's intergroup attitudes and behavior may sometimes reflect the tendency to legitimize existing social hierarchies even at the expense of personal and group interest (Jost *et al.*, in press; Jost and Banaji, 1994). In other words, in the case of individuals who belong to advantaged or dominant groups, their tendency to implicitly favor their ingroup relative to competing outgroups may be as much a function of the desire to preserve current social hierarchies (system justifying motive) as it is the desire to protect their self-esteem (ego-justifying motive). In the case of individuals who belong to disadvantaged or subordinate groups, the two motivations work in opposition—the desire to protect self-esteem should lead to ingroup favoritism and outgroup bias, but the desire to maintain current social arrangements leads to predictions of outgroup favoritism. Put differently, there may be two independent sources of implicit attitudes. The first source, consistent with social identity theory, relies on group membership. To the extent that people's group membership is a meaningful source of self-beliefs and self-esteem, it should promote implicit preference for the ingroup relative to outgroups. The second source, consistent with system justification theory, is the mainstream culture's imposition of high or low value on particular groups. Thus, for members of disadvantaged social groups, implicit liking for the ingroup may sometimes be attenuated by the cultural construal of their group, whereas for members of advantaged groups, implicit liking

for the ingroup may sometimes be exacerbated by the cultural construal of their group.

Consistent with system justification theory, a number of studies reveal outgroup favoritism (or sometimes, less ingroup favoritism) in the case of disadvantaged groups, especially when people's attitudes and beliefs are assessed using indirect measures rather than self-report measures. In the case of gender, for example, although women show strong preference for women in general compared to men in general, their attitudes are quite different when attention is drawn to people in leadership roles—women are as likely as men to implicitly favor male leaders over female leaders (Rudman and Kilianski, 2000; but see Carpenter, 2001). Likewise, women are as likely as men to express automatic gender stereotypes (i.e., both sexes spontaneously associate women with communal traits like "sensitive" and men with agentic traits like "ambitious"; Banaji *et al.*, 1993; Blair *et al.*, 2001; Blair and Banaji, 1996).

Implicit outgroup favoritism is also evident in the domain of racial attitudes and beliefs. Livingston (2002) assessed the extent to which African Americans believe that the mainstream American culture regards their ingroup negatively and examined the extent to which such beliefs correlated with Black participants' implicit and explicit racial attitudes. He found that the more negativity African Americans perceived in the mainstream culture's construal of their ingroup, the *less* ingroup favoritism they exhibited at an implicit level, but the *more* ingroup favoritism they reported at an explicit level. Taking a different approach, Nosek *et al.* (2002a) measured a large sample of White and Black participants' implicit and explicit racial attitudes via the Internet ($N$s > 17,000). They found that whereas White Americans exhibited strong implicit ingroup favoritism, African Americans exhibited no ingroup favoritism on average, but rather showed much more variability in their implicit interracial attitudes compared to White Americans. However, in terms of explicit attitudes, African Americans as a group expressed stronger ingroup favoritism than did White Americans (see also Jost *et al.*, in press, for more relevant data from this source). Similar findings were obtained by Spicer (2000) and Ashburn-Nardo *et al.* (2003); in fact in some of their studies African Americans favored White Americans over their ingroup implicitly but not explicitly. Finally, with regard to implicit racial stereotypes, Correll *et al.* (2002) demonstrated that African American and White American participants were equally likely to harbor implicit stereotypes associating Black with criminality which were revealed in their tendency to respond faster when "shooting at" Black compared to White armed fictitious characters in a video game simulating a police chase.

Even when group distinctions are based on ethnicity or, even more simply, skin color, people implicitly prefer lighter-complexioned outgroups over darker-complexioned ingroups. Moreover, they also prefer lighter-complexioned ingroup members over darker-complexioned ingroup members. Specifically, Uhlmann *et al.* (2002) assessed Hispanic American and Chilean participants' implicit

attitudes towards Latinos (their ethnic ingroup) versus Anglos (their outgroup) and found that at an implicit level, Chileans strongly preferred Anglos over Latinos whereas Hispanic Americans did not favor either group on average. More interestingly, participants' implicit attitudes revealed further fractures along color lines. Both Hispanic Americans and Chileans expressed strong preference for lighter-complexioned Hispanics (called "Blanco" in Spanish) over darker-complexioned Hispanics (called "Moreno" in Spanish). Implicit preference for Blancos was evident both among self-identified Moreno as well as Blanco participants in both countries, suggesting that preference for light skin apparently supersedes national boundaries and reverses the ubiquitous ingroup favoritism effect usually obtained in intergroup research.

Implicit attitudes about age constitute yet another domain in which a disadvantaged social group is known to show outgroup favoritism: older adults implicitly favor young people and show relative bias against the elderly to the same extent as young adults (Levy and Banaji, 2002; Mellott and Greenwald, 1999; Nosek *et al.*, 2002a). Whereas explicit attitudes vary as a function of participants' own age, implicit attitudes do not. Moreover, older people are as likely as young people to express implicit stereotypes about the elderly (Chasteen *et al.*, 2002).

Similar findings have also been obtained for other types of groups that are based on transient group memberships (e.g. college affiliation), rather than stable ones (e.g., race, gender, etc.). For example, Jost *et al.* (2002) found that students at San Jose State University were more likely to implicitly favor a higher status university (e.g., Stanford) than their own, and more likely to implicitly stereotype their ingroup as insufficiently intellectual compared to the outgroup. To the extent that similar hierarchies often exist within the same university among residential colleges on campus (i.e., dormitories), a similar pattern of in- and outgroup favoritism may also be evident there. As predicted, Yale undergraduates who belonged to lower status residential colleges within Yale College implicitly (but not explicitly) favored higher status residential colleges to their own (Lane *et al.*, 2003).

The degree of outgroup favoritism manifested by individuals who belong to disadvantaged groups appears to be moderated by a few interrelated variables: (a) the degree of status difference between perceivers' ingroup and the comparison outgroup (Rudman *et al.*, 2002), (b) group members' perception of the mainstream culture's opinion of their group (Livingston, 2002), and (c) the degree to which group members endorse politically conservative beliefs which is arguably a form of system justification (Jost *et al.*, in press). Larger differences in intergroup status (e.g., rich vs. poor as opposed to Christians vs. Jews), more conservative political beliefs, and more negativity perceived to be directed at one's ingroup, all produce stronger nonconscious preference for outgroups on the part of individuals belonging to lower status groups.

To the extent that implicit attitudes and beliefs function like any other (explicit) attitudes and beliefs, they are unlikely to remain confined to the mind, but rather should diffuse into people's judgments, decisions, and behavior in ways that

maintain social inequities and hierarchies and sometimes even exacerbate them. The idea that implicit prejudice and stereotypes have the potential to shape behavior has propelled research in a new direction that focuses on testing the link between such attitudes and various types of behavior, judgments, and decisions.

## THE SECOND WAVE: FROM IMPLICIT ATTITUDES AND BELIEFS ABOUT OUTGROUPS TO BEHAVIOR

A new wave of research was marked by the 1995 publication of an article by Fazio and colleagues in which they reported a study demonstrating research participants' implicit racial attitudes, as measured by an evaluative priming task, predicted their friendliness toward a Black experimenter as judged by the experimenter herself. Specifically, the more implicit race bias participants exhibited during a reaction time task, the less friendly was their nonverbal and verbal behavior in the eyes of a Black experimenter who was unaware of their attitudes. Implicitly prejudiced participants smiled less, made less eye contact, and were less friendly toward the experimenter. Implicit prejudice also correlated with participants' opinions about a particular racially divisive incident in recent American history—i.e., the degree to which they attributed responsibility for the 1990 Los Angeles riots after the Rodney King trial to the local African American community. However, participants' conscious or explicit racial attitudes did not correlate with their nonverbal behavior or attributions of responsibility—a finding consistent with Fazio *et al.*'s theoretical framework which argues that people's motivation and opportunity to respond carefully determine whether their attitudes and behaviors will be driven by automatic or controlled mental processes (Fazio, 1990).

A number of related publications followed on the heels of the first report. These studies, 36 in all, are listed in Table I.[4] Some of them directly replicated and extended Fazio and colleagues' initial finding in several ways (Dovidio *et al.*, 1997, Experiment 3; Dovidio *et al.*, 2002; Fazio and Hilden, 2001; McConnell and Leibold, 2001; Rudman and Lee, 2003, Experiment 2; Sekaquaptewa *et al.*, 2003, Experiments 1 and 2). First, they illustrated the generalizability of the phenomenon by confirming that implicit prejudice and stereotypes assessed by a variety of measures influence different types of behaviors, judgments, and decisions.[5] For example, the more implicit prejudice participants harbored against

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[4]For the sake of clarity, in the text and table I only discuss studies in which the measurement or manipulation of implicit attitudes ensured that participants were either (a) *unaware* of the construct being measured or manipulated, or (b) *unable to control their responses* even if they became aware. Thus, studies that manipulated stereotype activation using tasks such as sentence unscrambling or prolonged exposure to a person from a particular target group are not included here given the possibility that participants may have become aware of the stereotype being activated in the study.

[5]These studies used subliminal lexical decision tasks (LDT), Implicit Association Tests (IAT), evaluative priming, and tasks measuring Stereotypic Explanatory Bias (SEB) to measure implicit racial attitudes.

**Table I.** A List of Studies on the Relation between Implicit Intergroup Attitudes/Beliefs and Behavior

| Study | Attitude/belief measure | Behavior/outcome measure | Moderators of attitude behavior relation |
|---|---|---|---|
| *Link between implicit attitudes/beliefs about outgroups and behavior* | | | |
| Devine (1989, Exp 2) | Subliminal priming (race stereotypes) | (1) Judgments of a race-unspecified person whose behavior is ambiguous | None |
| Fazio *et al.* (1995, Exp 1) | Supraliminal evaluative priming (race attitudes) | (1) Nonverbal behavior toward a Black confederate as rated by the confederate (smiling eye contact, spatial distance) (2) Attributions of responsibility for L.A. riots after Rodney King trial | None |
| Bargh *et al.* (1996, Exp 3) | Subliminal LDT (Black or White faces) | (1) Hostile behavior rated by experimenter, observer | None |
| Chen and Bargh (1997) | Subliminal LDT (Black or White faces) | (1) Hostile behavior toward interaction partners (2) Partners' hostile response | None |
| Dovidio *et al.* (1997, Exp 3) | Subliminal LDT (race attitudes) | (1) Visual gaze and eye blinking during interaction with Black compared to White confederates | None |
| Bessenoff and Sherman (2000) | Subliminal LDT (antifat attitudes) | (1) Seating distance away from an overweight interaction partner | None |
| McConnell and Leibold (2001) | IAT (race attitudes) | (1) Nonverbal behavior toward Black compared to White confederates as rated by confederates and third party observers (smiling, speaking time, speech errors, hesitations, social comments, molar/gestalt impression) | None |
| Fazio and Hilden (2001) | Supraliminal evaluative priming (race attitudes) | (1) Guilt and agitation after forming an invalid stereotypic impression of a Black male target in an advertisement | MCPR (implicit attitude to behavior was not moderated by MCPR) |
| Rudman and Glick (2001) | IAT (gender stereotypes) | (1) Evaluations of agentic female and male job candidates | None |
| Dovidio *et al.* (2002) | Subliminal LDT (race attitudes) | (1) Nonverbal friendliness toward Black vs. White confederates; rated by confederates and observers | None |
| Gawronski *et al.* (2003, Exp 1) | IAT (gender stereotypes) | (1) Use of individuating information in forming impressions of female and male target persons | None |
| Gawronski *et al.* (2003, Exp 2) | IAT (gender stereotypes) | (1) Recall of stereotypic vs. counterstereotypic individuating information about female vs. male target | None |

**Table I.**  Continued

| Study | Attitude/belief measure | Behavior/outcome measure | Moderators of attitude behavior relation |
|---|---|---|---|
| Sekaquaptewa *et al.* (2003, Exp 1) | SEB (race attitudes) | (1) Number of stereotypical interview questions asked of Black vs. White job candidates | None |
| Sekaquaptewa *et al.* (2003, Exp 2) | SEB (race attitudes) | (1) Nonverbal behavior toward Black confederate (friendliness, eye contact, initiation of conversation, body posture) | None |
| Rudman and Lee (2003, Exp 2) | IAT (race stereotypes) | (1) Impression of Black or White target in terms of hostility and sexism | Exposure to violent and misogynistic rap music vs. nonviolent pop music (implicit attitude to judgment relation was not moderated by music exposure) |
| Gawronski *et al.* (in press) | IAT (ethnic attitudes) | (1) Negative evaluation of Turkish compared to German target person's present behavior (2) Dispositional attributions about Turkish vs. German target | MCPR (implicit attitude to judgment relation was not moderated by MCPR) |
| Jackson (1997)* | Supraliminal evaluative priming | (1) Evaluation of a Black student's essay quality | None |
| Lemm (2001, Exp 1)* | IAT (attitudes toward gay men) | (1) Nonverbal behavior toward gay compared to heterosexual male confederate (comfort, eye gaze) | Internal and external motivation to control prejudice (attitude to behavior relation was not moderated by EMS, IMS) |
| Dasgupta (2002)* | IAT (attitudes toward lesbians) | (1) nonverbal behavior toward lesbian compared to heterosexual confederate (smiling, eye gaze, openness friendly, comfort, interest) | None |
| *Link between implicit attitudes/beliefs about outgroups and behavior is moderated by other variables* | | | |
| Dunton and Fazio (1997) | Supraliminal evaluative priming (race attitudes) | (1) Impression of a typical Black male undergraduate student | (1) MCPR (implicit attitude to behavior relation was significantly moderated by restraint but not concern subscale) |
| Lepore and Brown (1997, Exp 2) | Subliminal priming (race categories) | (1) Judgments of a race-unspecified person whose behavior is ambiguous | (1) Level of explicit racial prejudice |
| Dijsterhuis *et al.* (2000, Exp 1) | Subliminal LDT (elderly or neutral primes) | (1) Word recall | Amount of prior contact with the elderly (significant moderation) |
| Dijksterhuis *et al.* (2000, Exp 2) | Subliminal LDT (elderly or neutral primes) | (1) Word recall | Amount of prior contact with the elderly (significant moderation) |

**Table I.** Continued

| Study | Attitude/belief measure | Behavior/outcome measure | Moderators of attitude behavior relation |
|---|---|---|---|
| Towles-Schwen and Fazio (2003) | Supraliminal evaluative priming (race attitudes) | (1) Anticipated comfort and willingness to enter into hypothetical interracial interactions | (1) MCPR both subscales (significant moderation)<br>(2) Type of situation: varying in intimacy, scriptedness (significant moderation) |
| Olson and Fazio (in press) | Supraliminal evaluative priming (race attitudes) | (1) Impressions of Black and White target people in different professions | MCPR (implicit attitude to behavior relation was significantly moderated by restraint but not concern subscale) |
| Carpenter (2001, Exp 1)* | IAT (attitude toward female vs. male political leaders) | (1) Voting preference for the female or male politician | Participant sex (significant moderation) |
| Dasgupta and Rivera (2004, Exp 1)* | IAT (attitudes toward gay men) | (1) Nonverbal behavior toward gay vs. heterosexual man (smiling, gaze, openness, friendliness, comfort, interest | Participant sex (significant moderation) |
| Dasgupta and Rivera (2004, Exp 2)* | IAT (attitudes toward gay men) | (1) Nonverbal behavior toward gay vs. heterosexual target (smiling, eye gaze openness, friendliness, comfort, interest, speech errors, length of conversation) | Participant sex, MCPR, traditional beliefs about gender and own sexuality (significant |
| *Link between implicit attitudes/beliefs about ingroups and behavior* | | | |
| Levy (1996, Exp 1) | Subliminal priming (negative or positive age stereotypes) | (1) Five recall measures | None |
| Hausdorff *et al.* (1999) | Subliminal priming (negative or positive age stereotypes) | (1) Walking speed<br>(2) Swing time during walking | None |
| Levy (2000) | Subliminal priming (negative or positive age stereotypes) | (1) Quality of handwriting<br>(2) Judgments of personality based on handwriting<br>(3) Judgments of age based on handwriting | None |
| Levy *et al.* (2001) | Subliminal priming (negative or positive age stereotypes) | (1) Blood pressure<br>(2) Heart rate<br>(3) Skin conductance<br>(4) Performance on math test<br>(5) Math self-efficacy | None |
| Levy *et al.* (2001) | Subliminal priming (negative or positive age stereotypes) | (1) Decisions about own medical treatment given various illness scenarios | None |
| Ashburn-Nardo *et al.* (2003) | IAT (race attitudes) | (1) Black partners' likelihood of selecting White partner over Black partner for intellectually challenging joint task | Motivation to win (no moderation) |

**Table I.**  Continued

| Study | Attitude/belief measure | Behavior/outcome measure | Moderators of attitude behavior relation |
|---|---|---|---|
| Rudman and Heppen (2003) | IAT-assessed romantic fantasies about men | Women's interest in: (1) Higher education (2) Occupations that confer status or wealth (3) Volunteering for a leadership role | Being in a relationship (no moderation) |
| Spicer (2000)* | IAT | (1) Stereotype activation during difficult test (2) Anxiety (3) Self-handicapping (4) Test performance | Attitudes measured before or after the test |

*Note.* All studies are listed in chronological order according to their date of publication. Unpublished studies, marked with asterisks, are listed at the end of each relevant section.

African Americans, the more uncomfortable and anxious they appeared in terms of their nonverbal behavior during interracial interactions (e.g., more speech errors, shorter conversations, etc.) as rated both by Black interaction partners and by third party observers. Implicit race bias also predicted participants' behavior in employment situations, specifically the frequency with which they chose to ask racially stereotypic interview questions to Black compared to White job candidates during simulated job interviews (Sekaquaptewa *et al.*, 2003, Experiment 1; cf. Rudman and Borgida, 1995). Moreover, implicit bias influenced the degree to which participants formed stereotypic impressions of a Black or White male target person whose behavior was ambiguous (Rudman and Lee, 2003, Experiment 2). Similarly, such race bias predicted the degree to which participants felt guilty after realizing that their first impression of a Black man featured in a particular advertisement was wrong (i.e., most participants misperceived him to be a criminal rather than a police officer). The more implicit race bias participants harbored, the less guilty they felt after discovering the falsity of their inference (Fazio and Hilden, 2001).

Second, extending Fazio *et al.*'s (1995) research, in all the above-mentioned studies that measured nonverbal behavior, participants interacted with both Black and White confederates, which allowed researchers to determine whether participants' interaction styles differed as a function of the confederates' race. Third, one of these studies (Dovidio *et al.*, 2002) vividly illustrated why interracial interactions sometimes go awry with individuals coming away with very different impressions about the quality of their interactions with each other. Dovidio and colleagues found that when Black and White individuals interacted with each other, their opinions about interaction quality were based on very different types of information—Black individuals were more influenced by the subtle cues being communicated by White partners (i.e., White partners' implicit racial attitudes and nonverbal

behavior) whereas White individuals were more influenced by the overt cues they were communicating (i.e., their explicit racial attitudes and their verbal behavior).

Three other studies extended this line of research beyond a Black–White comparison, to other stigmatized social groups, namely lesbians and gay men (Dasgupta, 2002; Lemm, 2001), overweight people (Bessenoff and Sherman, 2000), and Turkish immigrants in Germany (Gawronski *et al.*, 2003). Dasgupta (2002), found that stronger implicit negativity against lesbians relative to hetero-sexuals predicted a host of social distancing behaviors when participants interacted alone with a woman who was allegedly gay compared to one who was allegedly heterosexual. These nonverbals included less smiling, less eye contact, more tense body posture, less overall friendliness, and less interest in a conversation with a lesbian interaction partner compared to a heterosexual one. Lemm (2001) ob-tained a similar finding with regard to people's implicit attitudes and behavior toward gay men. Along similar lines, Bessenoff and Sherman (2000) found that the more implicit antifat bias people evinced, the further away they chose to sit from an interaction partner they were yet to meet, but who they thought was over-weight. Using a different type of dependent measure, Gawronski and colleagues tested whether White Germans' implicit attitudes toward Turks influenced their evaluations of a Turkish individual compared to a German individual behaving in an identical fashion. They found that implicit prejudice toward Turks not only made people render negative evaluations of a Turkish person's current behavior, but it also led them to make more definitive dispositional attributions about that person's future actions than they did when the person was German (Gawronski *et al.*, 2003).

Just as implicit attitudes about social groups predict certain types of behaviors and judgments directed at members of those groups, so too implicit *stereotypic beliefs* also influence important judgments such as people's impressions of oth-ers (Devine, 1989, Experiment 2), decisions about who should be hired for a job (Rudman and Glick, 2001), as well as other ingredients of decision-making such as the ability to remember counterstereotypic information about individuals who be-long to outgroups, and the likelihood of using such information to form impressions about them (Gawronski *et al.*, 2003). For example, Rudman and Glick (2001) found that people who held strong implicit gender stereotypes associating women with communal traits (e.g., helpful) and men with agentic traits (e.g., ambitious) were more likely to evaluate negatively an agentic (thus counterstereotypic) female job candidate for her "poor" social skills. Moreover, such stereotypic beliefs produced more positive evaluations of an equally agentic male job candidate in terms of his suitability for the job. In other studies, participants who expressed the same implicit gender stereotypes showed poor memory for counterstereotypic individuating in-formation about women and men, and not surprisingly, were less likely to use that information in forming impressions of those individuals (Gawronski *et al.*, 2003).

Other research has taken a different approach to the relation between im-plicit stereotypes and behavior by arguing that the automatic activation of group

stereotypes ought to increase the likelihood that perceivers themselves will act in a stereotype consistent manner even if they do not belong to the particular target group whose stereotype had been activated (Bargh *et al.*, 1996; Chen and Bargh, 1997; cf. Bargh, 1997). On the basis of theory of ideomotor action, Bargh and colleagues have argued if perception and behavior are closely linked mental representations, the activation of a particular representation (e.g., a stereotype) should lead people to act in a way that is congruent with that representation, automatically, without the mediation of conscious thought or interpretation. Consistent with their prediction, Bargh *et al.* (1996, Experiment 3) found that White participants who were subliminally exposed to Black male faces (compared to White male faces) for a fraction of a second, responded with greater hostility and anger toward an experimenter after being told that they would have to repeat a boring task because of a computer malfunction. Here, presumably, exposure to Black faces not only activated the category "African American" but also activated the associated stereotype "hostile" and the behaviors that go along with it, leading participants to enact those behaviors within the experimental situation. Taking this argument a step further, Chen and Bargh (1997) demonstrated that the subliminal activation of stereotypes could lead to behavioral confirmation. They found that once racial stereotypes had been activated and manifested in perceivers' hostile behavior toward a naïve interaction partner, that behavior in turn elicited a similar response from the partner, which led each person to believe that the other had provoked the hostile interaction.

In summary, the first generation of studies demonstrating a link between implicit attitudes/beliefs and behavior tells a fairly simple story that has been replicated with variations a reassuring number of times. However, further probing reveals that the story gets more complicated—new research suggests that implicit attitudes and beliefs influence behavior under some conditions but not under other conditions.

## THE SECOND WAVE (REVISED): MODERATORS OF THE IMPLICIT ATTITUDE/BELIEF—BEHAVIOR LINK

Some research suggests that implicit prejudice and stereotypes do not result in discriminatory behavior in an obligatory fashion. For people who consciously endorse egalitarian attitudes, exposure to members of stigmatized groups may not automatically activate related stereotypes in their mind and produce biases in subsequent judgments (Lepore and Brown, 1997). Moreover, even when stereotypes and prejudices are automatically activated, whether or not they will bias behavior depends on how *aware* people are of the possibility of bias, how *motivated* they are to correct potential bias, and how much *control* they have over the specific behavior. Just as implicit attitudes have, in recent years, been shown to be remarkably malleable (e.g., Blair *et al.*, 2001; Dasgupta and Greenwald, 2001; Wittenbrink

*et al.*, 2001a; for a review see Blair, 2003), so too behaviors are also quite mal-leable depending on the extent to which awareness, control, and motivation are at play. For example, consider studies that assess people's nonverbal behavior to-ward outgroup members in terms of smiling, eye contact, spatial distance, overall friendliness, and so on. Typically, people are relatively unaware of such nonver-bal actions and thus do not try to control or correct them. However, this modal response masks a great deal of individual variability in people's vigilance over their own nonverbal "body language" as well as that of others. For those who are aware of such behaviors, they can control and correct them to the extent that they are motivated to do so. In the case of prejudice-related behavior, people who are motivated to behave in an unbiased fashion because of their conscious egalitarian values or contemporary social norms may be particularly vigilant in intergroup settings and particularly motivated to correct any appearance of bias (Dunton and Fazio, 1997; Plant and Devine, 1998). Similarly, in the case of other types of out-comes (e.g., first impressions), people may be able to prevent implicit prejudice or stereotypes from influencing their judgments to the extent that they are aware of the possibility of bias and possess the requisite motivation and opportunity to correct their responses.

A few studies by Fazio and his colleagues recently sought to test whether peo-ple's motivation to control prejudicial responses influences the degree to which implicit race prejudice affects judgments and emotions (Dunton and Fazio, 1997; Olson and Fazio, in press; Towles-Schwen and Fazio, 2003). Fazio and colleagues were particularly interested in two aspects of prejudice-related motivation—people's concern about acting in a prejudiced fashion, and their motivation to avoid interracial disputes, which were measured by a scale entitled Motivation to Control Prejudiced Responses (MCPR; Dunton and Fazio, 1997). All three studies showed that people's motivation to control prejudice significantly moderated the relation between their implicit racial attitudes and their judgments or anticipated emotions; however, this moderation effect was sometimes produced by people's concern about appearing prejudiced and at other times by their motivation to avoid disputes. For example, Dunton and Fazio (1997) found that among participants who were not motivated to avoid interracial disputes, greater implicit prejudice predicted less positive judgments about a typical Black male undergraduate stu-dent. However, among those who were highly motivated to avoid interracial dis-putes, the relation between implicit attitudes and judgment was reversed—greater implicit prejudice predicted more positive judgments of the Black male target. The authors argued that motivated participants were correcting their judgments to prevent bias, but were falling prey to overcorrection or were "bending over back-wards" to compensate for potential bias (cf. Wegner and Petty, 1997). The same pattern of findings was replicated by Olson and Fazio (in press) using a differ-ent judgment measure—specifically, people's trait ratings of Black compared to White individuals in different professional positions. In both these studies, concern

about appearing prejudiced did not moderate the relation between implicit racial attitudes and judgments.

The way in which motivation to control prejudice moderates the relation between implicit racial attitudes and behavior also depends on the nature of the dependent variable. For example, Towles-Schwen and Fazio (2003) explored how comfortable participants were about anticipating interracial encounters that varied in intimacy (e.g., having a Black roommate) and scriptedness (the presence of clear behavioral norms). They found that anticipated comfort in interracial interactions decreased as the intimacy of the situation increased, especially for participants who were implicitly prejudiced compared to others who were less prejudiced. Moreover, when interracial situations were relatively unscripted (i.e., when rules of engagement were unclear leaving more room for unintended bias), implicitly prejudiced participants who wanted to avoid interracial conflict admitted feeling uncomfortable about entering such interactions if they were also not concerned about appearing biased. However, participants who were concerned about appearing biased reported feeling comfortable about entering such interactions suggesting that they were "correcting" or modifying their reports of anticipated comfort. Finally, among participants who were not motivated to avoid interracial conflict, implicit attitudes and concern about appearing biased did not predict anticipated comfort.

New research in the domain of antigay attitudes and behavior suggests that whether implicit prejudice will translate into action also depends on other related variables; specifically, the degree to which people are aware of, and vigilant about, their nonverbal behavior and the degree to which they endorse traditional beliefs about gender and sexuality (Dasgupta and Rivera, 2004). These traditional beliefs involve (a) people's endorsement of customary gender demarcations in society in terms of the traits, roles, and behaviors deemed appropriate for men versus women, and (b) people's investment in making their own normative heterosexuality known to others and the self. Dasgupta and Rivera (2004) found that among men who endorsed traditional beliefs about gender and sexuality and who were not vigilant about their behavior, the more implicitly antigay their attitudes were the more subtly discriminatory was their nonverbal behavior toward a gay male with whom they were interacting. However, among traditional men who *were* motivated to control bias, greater implicit prejudice resulted in more friendly behavior toward the gay man interaction partner suggesting that participants were overcorrecting their behavior or "bending over backwards." Among nontraditional men, implicit prejudice did not translate into discriminatory action regardless of their level of behavior vigilance. Finally, in the case of women, the data suggest that their beliefs about gender and sexuality were substantially more nontraditional than those of their male counterparts, which may explain why women's implicit prejudices did not translate into action. Together, these data suggest that during interactions with sexual minorities, people's behavior may be guided by a blend of psychological

factors—their implicit attitudes toward gays and lesbians, their personal values about gender and sexuality, and their ability to monitor their own actions in the immediate situation.

Finally, a different type of moderation effect has been observed in some research that examined the effect of stereotype activation on self-relevant behavior even among participants who were not members of the target group. Dijksterhuis *et al.* (2000) argue that when a group stereotype has a "kernel of truth" (e.g., memory decline in older adults), people who have a great deal of contact with members of that particular outgroup (in this case, old people) and thus who have more knowledge about memory loss in old people should be more susceptible to stereotype activation than others who have little contact with the same outgroup. Moreover, strong stereotype activation should lead social perceivers to enact the stereotype nonconsciously (in keeping with the principle of ideomotor action), but weak stereotype activation should not lead to such stereotypic behavior. In two experiments, Dijksterhuis *et al.* (2000) demonstrated that among college students who had had a great deal of contact with the elderly, subliminal exposure to old primes (e.g., the words "old," "gray," "bingo") resulted in worse performance on a subsequent memory test than subliminal exposure to neutral primes. No such behavioral effect was seen among participants who had had little contact with the elderly. This predicted effect is clearly dependent on assumptions about the accuracy of the elderly-forgetful stereotype. In other words, if extended contact with older adults demonstrates that the "forgetful" stereotype does not apply to all older adults, intergroup contact ought to undermine stereotype activation and its manifestation in behavior. This hypothesis is yet to be investigated.

## THE THIRD WAVE? FROM IMPLICIT OUTGROUP FAVORITISM TO BEHAVIOR

Existing data suggest that members of disadvantaged groups sometimes show more individual variability in their implicit attitudes toward their ingroup than do members of advantaged groups (e.g., Nosek *et al.*, 2002a). Specifically, members of disadvantaged groups sometimes exhibit weak implicit preference for their ingroup, and at other times show preference for advantaged outgroups. These data beg the question: Do disadvantaged group members' implicit attitudes predict their behavior in ways that impact on their ingroup and themselves? Very few studies have examined this question, but those that have, point to a new direction of research that have both intriguing and disturbing implications.

Consider the following study by Ashburn-Nardo *et al.* (2003). African American participants were led to believe that they would take part in a challenging intellectual task for which they had to choose another student as a partner (the latter was either Black or White). Task motivation was manipulated by informing some participants that the winning team would win $100. Then, under the guise of a second unrelated study, participants' implicit and explicit racial attitudes were

measured using an IAT and self-report questionnaires. Results revealed that Black participants showed a great deal of individual variability in their implicit racial attitudes, but on average, exhibited significant preference for Whites. More importantly, the more White preference participants exhibited, the more favorably they evaluated the White partner compared to the Black partner for the intellectually challenging task. The relation between implicit outgroup favoritism and preference for the White task partner was significant regardless of participants' task motivation and their explicit racial attitudes.

While the above-mentioned study illustrates how the implicit attitudes held by members of disadvantaged groups affect their behavior toward other ingroup members, several other recent studies extend this line of work by showing that people's implicit attitudes and beliefs about their ingroup can have direct consequences for the self. One such study by Spicer (2000) examined whether Black students' thoughts, feelings, and performance during an academic testing situation would be associated with their implicit racial attitudes. He found that Black participants who exhibited more pro-White sentiments implicitly showed more stereotype activation, anxiety, and self-handicapping immediately after the test. Surprisingly, however, more pro-White attitudes were also associated with better performance on particularly difficult parts of the test. A closer examination of this finding suggests that participants' test performance may have influenced their implicit racial attitudes rather than vice versa. Specifically, among participants whose attitudes were measured before the test, there was no relation between implicit attitudes and performance. However, among those whose attitudes were measured after the test, the better their test performance, the more implicit outgroup favoritism they evinced. Mediational analyses suggested that participants who had experienced more automatic stereotype activation during the test may have exerted more effort to disprove the stereotype resulting in better performance. However, the unintended consequence of stereotype activation may have been greater outgroup favoritism on the posttest attitude measure.

In the case of gender stereotypes, a series of studies have found a strong link between women's implicit stereotypes about idealized heterosexual relationships and their interest in personal power (Rudman and Heppen, 2003). Women who implicitly associated male romantic partners with chivalry and heroism were less likely to express interest in personal power, high-status jobs, high educational goals, leadership roles, and future income. Interestingly, women's self-reported beliefs about romance were not linked to any of these indicators of professional power. These findings suggest that when members of disadvantaged groups nonconsciously absorb system justifying gender stereotypes circulating in the mainstream culture, their goals about their own professional future become limited by the status quo.

Implicit ageist stereotypes have also been found to elicit disturbing self-stereotypic behaviors in older adults. In the first study of its kind, Levy (1996) demonstrated that older adults who were subliminally exposed to negative

age-related stereotypes (e.g., words such as "alzheimer's" and "dementia"), showed a substantial decline in memory performance on a subsequent task, whereas older adults who were subliminally exposed to positive age stereotypes (e.g., "wise" and "learned") showed a substantial increase in memory performance on a subsequent task. More recently, Levy and colleagues have extended this line of research in several ways. First, they found that implicit stereotype activation has serious consequences for older adults' physical health. Specifically, subliminal activation of negative aging stereotypes increased older adults' cardiovascular stress (measured by heart rate and blood pressure) when they were faced with mathematical and verbal challenges, whereas subliminal activation of positive stereotypes decreased such cardiovascular stress (Levy *et al.*, 2000b). Moreover, participants in the same study who were primed with negative stereotypes performed significantly worse on a subsequent mathematics test and expressed less efficacious beliefs about math than their peers primed with positive stereotypes. Second, other studies have found that subliminal activation of age-related stereotypes affects how older adults function in everyday life: exposure to negative (compared to positive) age stereotypes hampered older adults' handwriting, which became shaky and characteristic of physically debilitated people (Levy, 2000b), and hampered the speed and energy with which they walked (Hausdorff *et al.*, 1999). Finally, and perhaps most disturbingly, exposure to negative age-related stereotypes influenced the medical decisions older adults made regarding their lives when given hypothetical medical scenarios. Participants primed with negative stereotypes were more likely to refuse life-prolonging medical interventions offered in the scenarios whereas their peers primed with positive age stereotypes were more likely to accept such interventions (Levy *et al.*, 2000b).

Taken together, these studies suggest that implicit biases in one's attitudes and beliefs toward the ingroup can result in behaviors and judgments that are harmful to both the self and one's ingroup. Yet, given the small number of studies in this area, more replications and extensions are needed to determine the stability of these findings and to test the boundary conditions of the link between implicit outgroup preference and behavior.


## CONCLUSION

In the 20 years since the first studies on implicit prejudice and stereotypes were first reported, we now know a few facts with reassuring clarity. First, implicit prejudice and stereotypes are real, not methodological artifacts. Although they sometimes overlap with people's explicitly reported attitudes and beliefs, the overlap is considerably variable (for a detailed discussion of the relationship between implicit and explicit attitudes, see Rudman, 2004).

Second, members of high status or advantaged groups typically exhibit more implicit favoritism toward their ingroup and bias against salient outgroups than

do members of lower status or disadvantaged groups. The data suggest that people's implicit attitudes about ingroups relative to outgroups are influenced by two different forces—the tendency to prefer groups associated with the self as a confirmation of their positive self-esteem, and the tendency to prefer groups valued by the mainstream culture as a confirmation of the sociopolitical order in society. As a result of these opposing tendencies, members of disadvantaged social groups show more variable implicit attitudes toward their ingroup and, on average, show less ingroup favoritism, and sometimes even outgroup favoritism.

Third, it is also clear that people's implicit attitudes and beliefs toward in- and outgroups affect specific types of behaviors, some of which may operate without social actors' awareness or control; but it is also evident that implicit biases do not always result in discriminatory action in an obligatory fashion. People's awareness of potential bias, their motivation and opportunity to control it, are a few of the factors that influence whether attitudes translate into action. Other moderating variables have also been identified, and together, these constitute an emerging topic of research of both theoretical and practical importance that can elucidate the conditions under which biases in implicit social cognition will result in actions that help perpetuate social inequities.

Finally, a new line of research from the perspective of historically disadvantaged groups suggests that implicit biases exhibited by individuals toward their own groups can also have unintended behavioral consequences that are harmful to the ingroup and self. This is another emerging topic that is likely to attract a lot of research attention given its disturbing illustration that implicit bias acts like an "equal opportunity virus" that infects both advantaged and disadvantaged groups, calling into question assumptions of group-based immunity. On a more optimistic note however, given the evidence that implicit prejudice and stereotypes are malleable and that they do not always produce discriminatory action, a potentially productive program of future research might be the investigation of environmental and individual difference variables that may either prevent the cognitive activation of biased attitudes and beliefs or disable their translation into action.

## ACKNOWLEDGMENTS

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