

## A Two-Dimensional Model That Employs Explicit and Implicit Attitudes to Characterize Prejudice

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In the authors' 2-dimensional model of prejudice, explicit and implicit attitudes are used to create 4 profiles: truly low prejudiced (TLP: double lows), aversive racists (AR: low explicit modern racism/high implicit prejudice), principled conservatives (PC: high explicit modern racism/low implicit prejudice), and modern racists (MR: double highs). Students completed an Asian Modern Racism Scale and an Asian/White Implicit Association Test. The authors compared the 4 groups' prejudice-related ideologies (i.e., egalitarianism/humanism and social conservatism) and economic/political conservatism (Study 1,  $N = 132$ ). The authors also tested whether MR but not PC (Study 2,  $N = 65$ ) and AR but not TLP (Study 3,  $N = 143$ ) are more likely to negatively evaluate an Asian target when attributional ambiguity is high (vs. low). In support of the model, TLP did not hold prejudice-related ideologies and did not discriminate; AR were low in conservatism and demonstrated the attributional-ambiguity effect; PC did not strongly endorse prejudice-related ideologies and did not discriminate; MR strongly endorsed prejudice-related ideologies, were conservative, and demonstrated the attributional-ambiguity effect. The authors discuss implications for operationalizing and understanding the nature of prejudice.

*Keywords:* modern racism, aversive racism, implicit prejudice, conservatism, ideology

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The nature of prejudice varies from person to person; wide-ranging responses might characterize an individual's racial attitudes. Conservatives might act in a biased manner (i.e., treating outgroups differently from ingroups) but rationalize their response as fair. Liberals who value egalitarianism might demonstrate unintentional bias. Some might appear prejudiced because of their conservative principles and yet not act in a biased fashion. Finally, some might be truly low in prejudice, valuing equality, all people, and social change. Despite a long history of research in this area, it is still unknown how to best identify and differentiate people with different prejudice profiles. We draw on recent innovations in the conceptualization and measurement of implicit versus explicit attitudes to propose a two-dimensional model of prejudice that identifies four groups: aversive racists, modern racists, principled conservatives, and people truly low in prejudice. Importantly, we test our operationalization of these groups by testing whether their endorsement of prejudice-related ideologies (i.e., egalitarianism/humanism and social conservatism), economic/political conservatism (Study 1), and discriminatory behavior (Studies 2 and 3) reflects how they are characterized in the literature.

### Explicit and Implicit Prejudice

Historically, prejudice has been assessed as an explicit, consciously held negative evaluation of an outgroup that is retrieved from memory and can be self-reported. Recently, researchers have identified indirect means (e.g., response-latency tasks) to assess

implicit prejudice, that is, automatically activated negative associations with an outgroup. Explicit and implicit measures of prejudice are found to load on separate factors (Cunningham, Nezlek, & Banaji, 2004) and tend to be only weakly related (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Rudman, 2004). Thus, these are two relatively independent dimensions of prejudice.<sup>1</sup>

The MODE (Fazio, 1990) and dual-attitudes models (Wilson, Lindsey, & Schooler, 2000) suggest that explicit and implicit measures of prejudice should differentially predict behavior because deliberative processes should guide the attitude to behavior relation only if an individual has both the motivation and the opportunity to control his or her behavior. Indeed, in interaction studies, explicit prejudice has typically predicted more deliberative behaviors (such as verbal friendliness toward a Black confederate), whereas implicit prejudice has predicted more spontaneous behaviors, such as nonverbal friendliness (Dovidio, Kawakami, & Gaertner, 2002; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; McConnell & Leibold, 2001).

Interestingly though, implicit attitudes also predicted more deliberative responses (Gawronski, Geschke, & Banse, 2003; Poehlman, Uhlmann, Greenwald, & Banaji, 2007; Ziegert & Hanges, 2005). For instance, participants' explicit and implicit prejudice uniquely predict judgments of a Black target (Lambert, Payne, Ramsey, & Shaffer, 2005), perhaps because complex behaviors involve both automatic and controlled processes that have mutual interplay (Gawronski & Bodenhausen, 2006; Strack & Deutsch, 2005). This opens the door for a novel proposition: We suggest that people's levels of explicit and implicit prejudice should be considered in conjunction to predict their prejudice-related responses. Given that implicit prejudice and measures of modern racism are only weakly correlated (Lambert et al., 2005; Ziegert & Hanges, 2005), it is possible for people to be double lows, low in explicit but high in implicit prejudice, low in implicit but high in explicit prejudice, or double highs. We propose a specific two-dimensional model by focusing on modern (or symbolic) racism as the explicit prejudice measure of interest. Employing explicit modern racism does not allow us to characterize all forms of prejudice, such as bigotry (see General Discussion for more on bigots). However, it does allow us to address debates concerning the nature of prejudice among those on the political right and left.

### Prejudice on the Right: Modern Racism Versus Principled Conservatism

To account for the nature of prejudice changing for some from old-fashioned racism (i.e., bigotry) against Blacks to more subtle forms of prejudice, researchers introduced the theories of modern and symbolic racism (Kinder & Sears, 1981; McConahay, 1986). Although they are very similar, symbolic racism places a greater emphasis on Blacks' violation of individualism (Kinder, 1986; Tarman & Sears, 2005). As this issue might not generalize to other groups (e.g., Asians), our measure derives from the Modern Racism Scale (MRS), and we use this label.

Modern racism blends racial antipathy with symbolic (i.e., abstract) values, such as justice, order, and in particular, conservatism (Kinder, 1986; Sears & Henry, 2003). Modern racists believe that discrimination no longer exists and that Blacks are making too many demands that upset the status quo (Henry & Sears, 2002).

They endorse statements such as, "Blacks are demanding too much from the rest of society," without considering themselves prejudiced because they rationalize their responses on nonracial, symbolic grounds, like objections to government assistance (Nail, Harton, & Decker, 2003). From item to item on the MRS, the nonprejudiced explanation for agreement varies, making them a less probable—and prejudice a more probable—source of overall endorsement (McConahay, 1986).

Although the MRS is reactive when responding lacks confidentiality (Fazio, Jackson, Dunton, & Williams, 1995), there is good evidence for its convergent, divergent, and predictive validity. The MRS correlates with political conservatism (Feldman & Huddy, 2005; Nail et al., 2003) and with other measures of prejudice (Lambert & Chasteen, 1997; McConahay, 1986; Ziegert & Hanges, 2005), yet modern racism and old-fashioned racism items load on separate factors (Tarman & Sears, 2005). Also, it predicts attitudes toward racial policies (Henry & Sears, 2002; McConahay, 1986), even when controlling for political conservatism and other forms of prejudice (Meertens & Pettigrew, 1997; Sears & Henry, 2005). Measures have been refined (Henry & Sears, 2002), in part, to fit current social contexts and successfully adapted for other groups, such as women (Swim, Aikin, Hall, & Hunter, 1995), visible minorities (Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998), and Asians (Son Hing, Li, & Zanna, 2002).

We investigated prejudice toward Asians because East and Southeast Asians are the largest visible minority group in Canada (Statistics Canada, 1996).<sup>2</sup> Even though Asians are labeled a "model minority" (Cheryan & Bodenhausen, 2000), they are still the targets of prejudice (Jackson et al., 1996) and discrimination (Dion & Kawakami, 1996; Son Hing et al., 2002; Tang, 1997). Despite differing stereotypes and sociocultural contexts, the theory of modern racism can be applied to Asians in Canada if prejudice stems from a mix of anti-Asian affect and symbolic values (see Appendix for the Asian Modern Racism Scale [AMRS]; Son Hing et al., 2002).

The modern-racism construct has been widely criticized as being conceptually confounded with nonracial values, primarily conservatism (Fazio et al., 1995). In its defense, modern racism is empirically distinct from conservative ideology (Sears & Henry, 2003; Tarman & Sears, 2005). Yet the problem could still exist that people can score high on the MRS, not because they are prejudiced and feel antipathy toward outgroup members, but because they are principled conservatives who cherish abstract values, such as tradition, which leads them to resent upheaval of the racial status quo (Sniderman & Carmines, 1997; Sniderman & Tetlock, 1986). Consistent with the notion of principled conservatism, compared with political liberals, conservatives are more opposed to government equal opportunity programs, regardless of whether beneficiaries are Blacks or women (Sniderman & Piazza, 1993; Sniderman, Piazza, Tetlock, & Kendrick, 1991). Yet principled conservatism might not be a race-neutral ideology; rather,

<sup>1</sup> There is controversy regarding whether implicit and explicit prejudice represent dual attitudes (Wilson et al., 2000) or different measures of the same attitude (Fazio & Olson, 2003). The reasoning for our two-dimensional model is independent of this debate.

<sup>2</sup> Pilot testing revealed that our participants understand "Asian" to refer to people of East and Southeast Asian descent.

racism and conservatism could be linked because both are used to legitimize hegemony (Sidanius, Pratto, & Bobo, 1996). Indeed, people who are more politically conservative are often more prejudiced and more strongly endorse stereotypes (Reyna, Henry, Korfmacher, & Tucker, 2006; Sidanius et al., 1996).

We propose a means to help resolve these debates. Among people who score high on a measure of modern racism, their level of implicit prejudice can distinguish modern racists and principled conservatives. Modern racists should score relatively high on an explicit measure of modern racism because they experience racial resentment; they should score high on an implicit measure of prejudice because they have well-practiced, negative, early acquired, automatic reactions toward outgroup members (McConahay, 1986; Rudman, 2004).

Principled conservatives should score relatively high on an explicit measure of modern racism because they cherish values confounded with the content of the MRS. However, they should score low in implicit prejudice. This proposition was not overtly stated in initial theorizing on principled conservatives, as this literature predated research on implicit attitudes. However, the basic logic and findings of early studies support this claim: The discriminatory response of conservatives to a Black (vs. White) target was tested when the target violated conservative values (e.g., work ethic). Even though an excuse to discriminate existed and thus appropriate behavior was ambiguous, principled conservatives were predicted, and found, to evaluate the Black and White targets equivalently (Sniderman et al., 1991), suggesting that they are low in implicit prejudice (Wilson et al., 2000). Recently, principled-conservatism researchers have suggested looking to implicit-prejudice measures (Feldman & Huddy, 2005).

#### Prejudice on the Left: Aversive Racism Versus Truly Low Prejudice

The above review might lead one to suspect that prejudice is always found more among those on the political right; however, liberals also demonstrate racial bias (Sniderman & Piazza, 1993). According to Dovidio and Gaertner (1998, 2005), most liberal North Americans who value fairness and espouse egalitarian values are actually aversive racists. In contrast to old-fashioned racists, aversive racists consciously embrace nonprejudiced beliefs and disavow discrimination. However, aversive racists are theorized to unconsciously hold negative feelings toward outgroup members due to normal cognitive, motivational, and sociocultural processes, such as the ingroup bias or exposure to a hierarchical society (Dovidio & Gaertner, 1998). Theoretically, aversive racists differ from modern racists in that they are more liberal, and they have internalized nonprejudiced values to a greater degree (Nail et al., 2003).

Gaertner and Dovidio (1986) asserted, "effective questionnaire measures of aversive racism, in our opinion, would be difficult if not impossible to develop" (p. 67) because aversive racists would honestly self-report as low in prejudice. So how does one assess aversive racism? Whites who score low on explicit measures of racism (Dovidio & Gaertner, 1998) and people with a liberal political ideology (e.g., Nail et al., 2003) are often classified as aversive racists. However, at times, those who score high on explicit racism behave in a manner consistent with aversive-racism theory (e.g., Dovidio & Gaertner, 2000; Hodson, Dovidio, &

Gaertner, 2002), whereas liberals sometimes fail to do so (e.g., Feldman & Huddy, 2005; Sniderman et al., 1991). Thus, it is difficult to distinguish aversive racists from others.

Recently, Son Hing et al. (2002) devised a way to identify aversive racists, operationalizing them as individuals who hold low prejudiced explicit attitudes but high prejudiced implicit attitudes (see also Dovidio & Gaertner, 2005; Son Hing, Chung-Yan, Grunfeld, Robichaud, & Zanna, 2005). If aversive racists become aware of the negative component of their attitudes, they should bend over backward to avoid discriminatory behavior (Gaertner & Dovidio, 1986). Son Hing et al. (2002) found that, as predicted, aversive racists faced with their own prejudicial slip-ups bent over backward not to discriminate. Using a similar operationalization, Dovidio, Gaertner, Kawakami, and Hodson (2002) found that aversive racists worked less effectively with a Black confederate and judged the Black confederate to be less trustworthy compared with others.

Drawing on this previous work, we propose that among those who score low on an explicit measure of modern racism, truly low prejudiced people and aversive racists can be distinguished by their level of implicit prejudice. Aversive racists should score low in explicit modern racism because they believe themselves to be nonprejudiced and they value egalitarianism; however, because they have negative automatic associations or feelings toward outgroup members, they should score high in implicit prejudice (Son Hing et al., 2002, 2005). In contrast, someone who is truly low in prejudice should score low on both dimensions of prejudice. There is evidence that people with more chronic egalitarian goals (Moskowitz, Gollwitzer, & Wasel, 1999) and those who are more motivated to avoid prejudice due to internal and not external reasons (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002) show less implicit bias.

#### Study 1

The goal of Study 1 was to test our two-dimensional model by examining if truly low prejudiced people (double lows), aversive racists (low explicit modern racism, high implicit), principled conservatives (high explicit modern racism, low implicit), and modern racists (double highs) differ in their sociopolitical ideologies in a manner consistent with theory. To create four groups, we used median splits to identify participants into those low or high on explicit modern racism and on implicit prejudice. Although such an approach creates artificial dichotomies, it allows us to test the veracity of long-standing hypotheses concerning the nature of these different prejudice types (e.g., modern racists should be more conservative than aversive racists).

To help characterize the four prejudice profiles, we examined individual difference variables that should reflect prejudice. On the basis of previous research on social attitudes and beliefs (Saucier, 2000), motivational goals (Duckitt, 2001; Stangor & Leary, 2006), and value types (Duriez & Van Hiel, 2002), we suggest that there are two basic dimensions of sociopolitical ideology: egalitarianism/humanism and social conservatism, which are relatively independent (cf. Jost, 2006). Egalitarianism/humanism is marked by supporting equality for, recognizing the worth of, and feeling empathy toward and connection with all individuals and groups. Social conservatism involves conventionalism, traditionalism, and a desire for social control.

We propose that people's level of egalitarianism/humanism is fundamentally linked to prejudice, perhaps particularly toward groups of lower status or groups with which one must compete (Saucier, 2000; Stangor & Leary, 2006). One way to assess egalitarianism is to reverse score (R) the Social Dominance Orientation (SDO) Scale (Pratto, Sidanius, Stallworth, & Malle, 1994), which assesses desire for group dominance and hierarchy in society. SDO predicts prejudice against a variety of groups (e.g., Duckitt, 2001, 2006; Sidanius & Pratto, 1999; Whitley, 1999). There is also some evidence that humanism is linked to prejudice. Empathy plays an important role in intergroup relations and prejudice (Pedersen, Beven, Walker, & Griffiths, 2004; Stephan & Finlay, 1999). In addition, the dehumanization of outgroup members is related to greater prejudice (Hodson & Costello, 2007). Egalitarianism/humanism could relate to Whites' prejudice against Asians because they can be seen as different, and they might provoke dominance motives because of their supposed competence (Fiske, Xu, Cuddy, & Glick, 1999).

In addition, we propose that social conservatism should be related to prejudice depending on the social context. Perhaps the best way to assess social conservatism is the Right-Wing Authoritarianism (RWA) Scale (Altemeyer, 1996), which assesses adherence to conventional values, deference to authority, and aggression toward those labeled deviant by authorities. RWA predicts ethnocentrism (Altemeyer, 1998; Duckitt, 2001; Whitley, 1999). People who are more socially conservative should be more prejudiced toward outgroups who are seen as unconventional and as threatening moral order (Duckitt, 2006; Lambert & Chasteen, 1997). Social conservatism could relate to prejudice toward Asians because they are seen as cold (Fiske et al., 1999) or cliquish, as failing to adapt to the dominant group's social norms (Lin, Kwan, Cheung, & Fiske, 2005), or as "un-Canadian," provoking threat concerns.

Despite the fact that prejudice and conservatism are conceptually linked and often correlated (e.g., Cunningham et al., 2004; Jost, Banaji, & Nosek, 2004), a relation is not always found (Lambert & Chasteen, 1997; Saucier, 2000). This might be because different forms of conservatism are frequently conflated (e.g., Jost, 2006; Jost, Glaser, Kruglanski, & Sulloway, 2003). Given that social conservatism and economic/political conservatism are separate and only weakly related constructs (Fleishman, 1988) with differential relations with other variables—most notably racism (Sidanius & Pratto, 1993; van Hiel, Pandelaere, & Duriez, 2004)—we will also compare the four groups on their economic/political conservatism.

We test whether our characterizations of the four groups match existing theory by making specific comparisons. First, we hypothesize that modern racists should endorse prejudice-related ideologies more strongly than principled conservatives. Thus, modern racists should be lower in egalitarianism/humanism but higher on social conservatism than principled conservatives. In addition, we hypothesize that modern racists and principled conservatives should be equivalently high on economic/political conservatism because both groups are theorized to be politically and economically conservative (Sears & Henry, 2005; Sniderman & Tetlock, 1986).

Second, we hypothesize that aversive racists should be higher in egalitarianism/humanism than modern racists would be because the former consciously embrace egalitarian ideals (Gaertner &

Dovidio, 1986), whereas the latter experience negative racial feelings (Nail et al., 2003; Sears & Henry, 2003). Further, because modern racists are thought to consciously experience resentment over upheaval of the status quo, we hypothesize that they should be higher in social conservatism than aversive racists would be (McConahay, 1986). Finally, aversive racists should be lower in economic/political conservatism because they are theorized to be liberal, whereas modern racists are thought to be economically and politically conservative (Dovidio & Gaertner, 1998, 2005).<sup>3</sup>

Third, we hypothesize that truly low prejudiced people should be lower in economic/political conservatism than principled conservatives would be, as this latter group should be particularly high. We explore if the two groups differ in their prejudiced-related ideological beliefs.

Fourth, we test if differences exist between truly low prejudiced people and aversive racists. The two could be equally high in egalitarianism/humanism and equally low in social conservatism because aversive racists consciously reject prejudice, embrace egalitarian ideals, and are socially liberal (Dovidio & Gaertner, 2005). Alternatively, the greater implicit prejudice of aversive racists might be reflected in their sociopolitical ideologies (Cunningham et al., 2004). Finally, we test if the two groups differ in their economic/political ideology.

Although we are primarily interested in comparing the sociopolitical ideologies of the four prejudiced profiles, an alternate approach has been to test the predictive validity of explicit and implicit measures of prejudice, either by correlating them with outcome variables of interest (e.g., McConnell, & Liebold, 2001) or by testing their unique effects (e.g., Lambert et al., 2005). Consistent with our two-dimensional model of prejudice, we also test the unique and interactive effects of explicit modern racism and implicit prejudice for people's sociopolitical ideologies using multiple regression.

## Method

### Participants

In Phase 1, 1,623 participants (475 men and 1,148 women) completed an online mass-testing questionnaire. In Phase 2, 132 participants (58 men, 74 women) ranging in age 17- to 35-years old ( $M = 18.84$ ,  $SD = 1.97$ ) completed an Asian/White Implicit Association Test (IAT) in the lab. Participants were granted one research credit for each phase.

### Procedure and Materials

*Phase 1.* Within the mass-testing questionnaire, participants completed a measure of ethnicity. In total, 83% ( $n = 1,354$ ) identified themselves as Caucasian (e.g., Canadian, British), 8% ( $n = 129$ ) as East or Southeast Asian (e.g., Chinese, Japanese), 8% ( $n = 127$ ) as other visible minorities (e.g., South Asian, Caribbean), and 1% ( $n = 13$ ) did not indicate their ethnicity. The ethnic

<sup>3</sup> Although some argue that high political liberalism is not equivalent to low political conservatism (e.g., Kerlinger, 1980), liberalism/conservatism is typically operationalized as a one-dimensional construct, and we treat it as such.

composition of mass-testing participants for Studies 2 and 3 were nearly identical.

Participants also completed the AMRS. The AMRS taps beliefs regarding the denial of discrimination, Asians having too many advantages, and the idea that Canada is becoming too Asian. Given the stereotype of Asian competence, we chose not to specify that the advantages Asians experience are undeserved or that they violate the principle of individualism (see Appendix). Participants were instructed to complete mass testing in private and were assured confidentiality. As expected, non-Asians scored significantly higher on the AMRS ( $M = -0.63$ ,  $SD = 1.17$ ) compared with Asians ( $M = -1.39$ ,  $SD = 1.06$ ),  $t(1608) = 7.09$ ,  $p < .001$ . This finding was replicated in Studies 2 and 3 ( $ts > 5.66$ ,  $ps < .001$ ). Thereafter, we excluded all participants who self-identified as being of East or Southeast Asian or unknown descent. The remaining participants' mean scores on the AMRS ranged from  $-4.00$  to  $3.56$  (Cronbach's  $\alpha = .82$ , median =  $-0.44$ ).

To assess egalitarianism/humanism, we had participants complete the 16-item SDO Scale (Pratto et al., 1994). They indicated their response to items such as, "Some groups of people are simply inferior to other groups" (1 = *very negative* to 7 = *very positive*) and the extent to which they identify as being a member of the following social groups: "Humanist," "Feminist," and "Environmentalism" (1 = *not at all* to 5 = *strongly*). To assess social conservatism, we had participants complete a 30-item RWA Scale (1990, Version 1; B. Altemeyer, personal communication, June 6, 2005). A sample item is, "It is important to protect fully the rights of radicals and deviants (R)" ( $-4 = \textit{very strongly disagree}$  to  $4 = \textit{very strongly agree}$ ). Finally, they indicated their self-identification as "Conservative" and as "Capitalist" (1 = *not at all* to 5 = *strongly*).

*Phase 2.* Implicit prejudice against Asians versus Whites was assessed with the IAT (Greenwald, McGhee, & Schwartz, 1998). The IAT has good internal consistency, test-retest reliability, convergence with other measures of implicit attitudes (Cunningham, Preacher, & Banaji, 2001; Greenwald et al., 2002), and it shows differences between known groups, such as Jews and Christians (Rudman, Greenwald, Mellot, & Schwartz, 1999). The IAT is the most prevalent implicit-attitudes measure (Fazio & Olson, 2003; Rudman, 2004) despite debate and criticism (Arkes & Tetlock, 2004; Blanton & Jaccard, 2006).

Potential participants were e-mailed an invitation for a study supposedly testing people's automatic associations for various categories. In groups of 2 to 5, 132 participants came to the lab. From a list of categories, the Caucasian experimenter selected an Asian/White IAT on the basis of an apparently random draw. For the task, category labels were listed at the top left and right of the screen, and words to be sorted appeared in the middle. To sort a word into its appropriate category, participants pressed the corresponding key (i.e., "E" or "I").

Participants completed practice blocks before the critical blocks. In the congruent block, the categories "Asian" and "I dislike" shared a response key as did "White" and "I like" (Olson & Fazio, 2004). In the subsequent incongruent block, "White" and "I dislike" shared a response key as did "Asian" and "I like." The underlying assumption of the IAT is that classification decisions will be easier and consequently faster when an evaluative category is paired with a descriptive category that is congruent (vs. incongruent) with participants' underlying attitudes. Target words in-

cluded positive and negative stimuli (e.g., love, rotten) as well as Asian or Caucasian surnames (e.g., Chan, Tsang, Linton, Weber) that pilot data revealed were clearly identifiable in origin (by over 80% of the participants) and equally familiar ( $p = .65$ ).

Upon misclassifying a word, participants saw an "X" and were required to re-sort it before moving on to successive trials. Thus, errors were reflected by longer response times, which were recorded in milliseconds. The IAT took about 7 min to complete. After the IAT, but before being debriefed, participants' suspicion was assessed. None were suspicious.

## Results

### Preliminary Analyses

The index of social conservatism, that is the RWA Scale, had good internal consistency (Cronbach's  $\alpha = .92$ ). The two indicators of economic/political conservatism, self-identification as a conservative and as a capitalist, were correlated,  $r(1477) = .34$ ,  $p < .001$ . RWA was correlated with participants' self-identification as a conservative,  $r(1479) = .32$ ,  $p < .001$ , but not with their self-identification as a capitalist,  $r(1479) = .03$ ,  $p = .21$ . To avoid shared variance between social conservatism and economic/political conservatism, we aggregated self-identification as a capitalist with a residualized measure of self-identification as a conservative, which had RWA partialled out, with self-identification as a capitalist. Finally, an egalitarianism/humanism aggregate was created by averaging SDO (R) and self-identification as a humanist, feminist, and environmentalist (Cronbach's  $\alpha = .93$ ). All measures were standardized before being aggregated because of their different scaling. Egalitarianism/humanism was negatively correlated with social conservatism,  $r(1477) = -.38$ ,  $p < .001$ , but was unrelated to economic/political conservatism,  $r(1477) = .04$ ,  $p = .11$ . The two conservatism aggregates were not related,  $r(1477) = .02$ ,  $p = .36$ . Within the study sample, the scale reliabilities and pattern of intercorrelations were comparable to the mass-testing sample.

Average response latencies for the IAT critical blocks fell within the recommended range of 300 to 3,000 ms for participants in all studies (Greenwald et al., 1998). In Studies 1 and 2, participants' level of implicit prejudice was computed using the new scoring algorithm (resulting in  $D$  scores) in which response latencies from critical practice and test blocks are used and differences between critical congruent and incongruent blocks are divided by their associated pooled standard deviations (Greenwald, Nosek, & Banaji, 2003). Higher IAT  $D$  scores correspond to more negative implicit associations with Asians versus Whites. IAT  $D$  scores ranged from  $-0.25$  to  $1.36$  ( $M = 0.68$ ,  $SD = 0.34$ , median =  $0.69$ ). We classified participants who scored above the median on the IAT as high and those at or below the median as low. Participants' implicit and explicit prejudice levels were unrelated in this sample,  $r(130) = .11$ ,  $p = .23$ .

### Main Analyses

Separate one-way analyses of variance were conducted for each sociopolitical ideology, and then simple-effects tests were conducted to test our central hypotheses comparing groups. For egalitarianism/humanism, there was a significant difference between

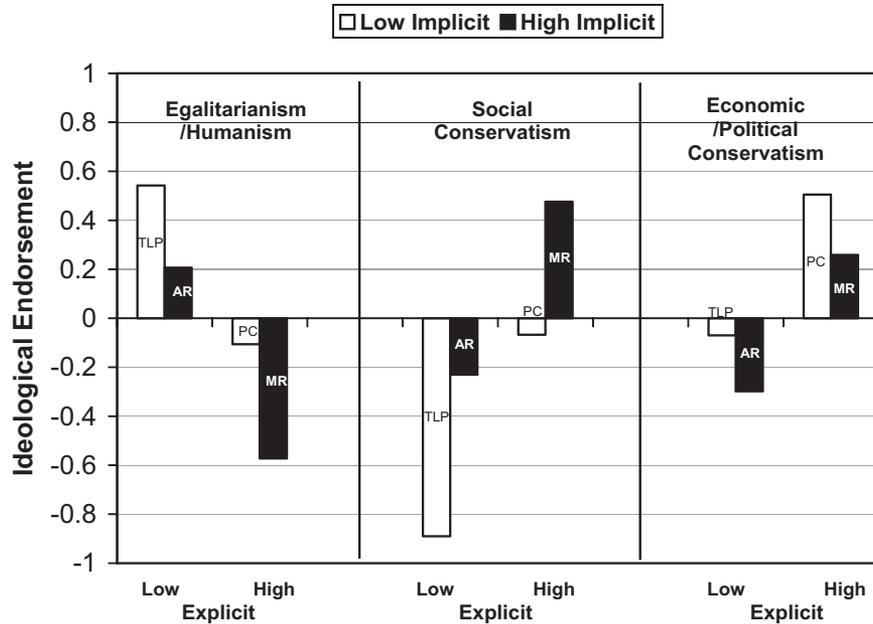


Figure 1. Study 1: Endorsement of egalitarianism/humanism, social conservatism, and economic/political conservatism as a function of level of explicit modern racism and implicit prejudice. TLP = truly low prejudiced; AR = aversive racists; PC = principled conservatives; MR = modern racists.

groups in endorsement,  $F(3, 128) = 14.95, p < .001$  (see Figure 1). More importantly, the specific comparisons supported our characterization of each group. First, as hypothesized, modern racists were lower in egalitarianism/humanism than were principled conservatives,  $F(1, 128) = 7.48, p = .007$ . Second, exploratory analyses revealed that aversive racists tended to be lower in egalitarianism/humanism than were truly low prejudiced people,  $F(1, 128) = 3.22, p = .07$ . Third, as hypothesized, modern racists were lower in egalitarianism/humanism than were aversive racists,  $F(1, 128) = 18.76, p < .001$ . Finally, exploratory analyses revealed that principled conservatives were lower in egalitarianism/humanism than were truly low prejudiced people,  $F(1, 128) = 13.27, p < .001$ .

The difference between groups in endorsement of social conservatism was significant,  $F(3, 128) = 12.91, p < .001$  (see Figure 1), and the pattern supported our two-dimensional model. First, as hypothesized, modern racists were higher in social conservatism than were principled conservatives,  $F(1, 128) = 6.28, p = .01$ . Second, exploratory analyses revealed that aversive racists were higher in social conservatism than were truly low prejudiced people,  $F(1, 128) = 7.63, p = .007$ . Third, as hypothesized, modern racists were higher in social conservatism than were aversive racists,  $F(1, 128) = 9.54, p = .003$ . Finally, exploratory analyses revealed that principled conservatives were higher in social conservatism than were truly low prejudiced people,  $F(1, 128) = 13.13, p < .001$ .

The groups differed in their endorsement of economic/political conservatism,  $F(3, 128) = 6.96, p < .001$  (see Figure 1), and the pattern supported our model. First, as hypothesized, modern racists and principled conservatives were equivalently high in economic/political conservatism,  $F(1, 128) = 1.93, p = .16$ . Second, exploratory analyses revealed that aversive racists and truly low preju-

diced people were equivalently low in economic/political conservatism,  $F(1, 128) = 1.37, p = .24$ . Third, as hypothesized, modern racists were higher in economic/political conservatism than were aversive racists,  $F(1, 128) = 8.83, p = .004$ . Finally, as predicted, principled conservatives were higher in economic/political conservatism than were truly low prejudiced people,  $F(1, 128) = 9.64, p = .003$ .

#### Predictive Validity Analyses

To test the predictive validity of explicit modern racism and implicit prejudice, following procedures outlined by Aiken and West (1991), we simultaneously regressed on each sociopolitical ideology, AMRS, IAT *D* scores, and their interaction term (predictors were centered and then multiplied to create the interaction term). There were no significant interactions.

For egalitarianism/humanism, there was a significant effect of explicit modern racism ( $B = -0.44, SE B = 0.06, p < .001$ ) and of implicit prejudice ( $B = -0.45, SE B = 0.17, p = .01$ ), with those higher in prejudice endorsing egalitarianism/humanism less ( $R^2 = .37$ ). For social conservatism, there was a significant effect of explicit modern racism ( $B = 0.41, SE B = 0.08, p < .001$ ) and of implicit prejudice ( $B = 0.62, SE B = 0.24, p = .01$ ), with those higher in prejudice endorsing social conservatism more ( $R^2 = .24$ ). Finally, for economic/political conservatism ( $R^2 = .21$ ), there was a significant effect of explicit modern racism ( $B = 0.32, SE B = 0.06, p < .001$ ), such that higher scorers endorsed this form of conservatism more. In addition, there was a nonsignificant trend for those higher in implicit prejudice to identify as less economically/politically conservative ( $B = -0.34, SE B = 0.19, p = .07$ , part correlation =  $-.14$ ).

### Discussion

Study 1 results support the notion that a two-dimensional model of prejudice can be used to identify truly low prejudiced people, aversive racists, principled conservatives, and modern racists. Consistent with theory and with previous work on modern racism toward Blacks (McConahay, 1986; Sears & Henry, 2003, 2005), we found that higher scores on the AMRS were related to two forms of conservatism: social and economic/political. In addition, modern racists have been theorized to consciously experience resentment and hostility toward outgroups (Nail et al., 2003), and we found participants who scored higher on the AMRS endorsed egalitarianism/humanism less. Thus, at first glance, it appears that greater prejudice is found more among those on the right.

However, close inspection of the data reveals that not all those who score high on the AMRS are equally prejudiced. Principled conservatives (high explicit, low implicit) endorsed egalitarianism/humanism more and social conservatism less than did modern racists (double highs). In support of the principled-conservatism argument (Sniderman & Tetlock, 1986), it appears that people low in implicit prejudice can score high on an explicit measure of modern racism—not because they hold particularly prejudiced ideologies, but because they endorse other potentially race-neutral principles (e.g., principled conservatives were among the most economically and politically conservative). Consistent with the group-dominance perspective (Sidanius et al., 1996), principled conservatives endorsed prejudice-related ideologies more than did truly low prejudiced people. Nonetheless, principled conservatives' mean levels of endorsement were not particularly unequalitarian or socially conservative.

Important theoretical differences between modern racists and aversive racists were found. First, the current study provides the first direct evidence that modern racists are more conservative (i.e., socially and economically/politically) than are aversive racists. Also, consistent with theory, aversive racists were more egalitarian/humanist than were modern racists. However, it appears that aversive racists tend to hold prejudice-related ideologies more than do truly low prejudiced people. In future research, it would be interesting to further study how implicit biases might influence ideology among those who explicitly disavow prejudice.

The multiple regression analyses reveal that explicit modern racism and implicit prejudice uniquely relate to, and together account for 37% and 24% of the variance in, participants' egalitarianism/humanism and social conservatism. Knowing the ideological beliefs at the root of prejudice—a lack of support for equality/lack of identification with humanity, as well as a desire for tradition, convention, and a dislike for change and those who represent it—helps us to understand the nature of prejudice. Recall that the target group was Asians, who are generally respected but disliked (Fiske et al., 1999). This suggests that egalitarianism/humanism might predict negative attitudes toward any outgroup, not only those with low status, perhaps because outgroups are dehumanized (Haslam, 2006; Leyens et al., 2003). It is also possible that perceptions of Asians' competence might trigger concerns about competition for those high in SDO (Duckitt, 2001). That social conservatism predicted prejudice toward Asians suggests that this group is seen as threatening order—a major concern for those high in RWA—perhaps because they perceive Canada as becoming “too Asian” or because Asians are seen as failing to

adopt the social norms of the dominant group (Lin et al., 2005). Whether such beliefs serve as mediating mechanisms should be investigated. Critics could argue that the current results might not generalize to other groups given that stereotype content differs, but they might very well generalize because people who are prejudiced toward one group tend to be more prejudiced toward others when assessed with explicit and with implicit measures (Cunningham et al., 2004).

Finally, we found that different forms of conservatism can differentially relate to prejudice. People who were more socially conservative scored higher in both dimensions of prejudice. Also, people more economically/politically conservative were higher in explicit modern racism. In contrast, there was a trend linking greater economic/political conservatism to lower implicit prejudice. More research with better measures of conservatism (e.g., political party identification) is needed before more definitive claims can be made. However, it appears that not all forms of conservatism are associated with greater prejudice and that economic and political conservatism should not be equated with social conservatism or with antiegalitarianism.

### Study 2

The results of Study 1 provide good preliminary evidence for our operationalization of the four groups. However, to know whether our characterizations are accurate, it is important to test the groups' reactions to an outgroup member. We began by further exploring the differences between principled conservatives and modern racists. In situations with high attributional ambiguity (e.g., when non-race-related justifications for negative responses exist or when appropriate action is unclear), modern racists should discriminate without violating their self-image as nonprejudiced (McConahay, 1983). However, in situations with low attributional ambiguity, modern racists should not engage in discriminatory acts that can be readily attributed to prejudice. We refer to this phenomenon as the *attributional-ambiguity effect*.

To date, evidence for the attributional-ambiguity effect among modern racists has been surprisingly weak. Some investigated the effect of attributional ambiguity on discrimination without assessing individual differences in modern racism (e.g., Pfeifer & Ogloff, 1991). Among those who did measure modern racism, the results are mixed. Consistent with modern racism theory, McConahay (1983) found that participants high in modern racism discriminated by recommending a White job candidate for hire more than they did a matched Black candidate but only in a high attributional-ambiguity condition. Recently, Ziegert and Hanges (2005) failed to replicate this effect. Brief, Dietz, Cohen, Pugh, and Vaslow (2000) found that within a high attributional-ambiguity condition, higher levels of modern racism were associated with lower hiring recommendations of a Black target. However, they did not report whether, among participants high in modern racism, an attributional-ambiguity effect was found. We propose that a lack of support for the attributional-ambiguity effect might occur because, in previous research, all participants high on the MRS were erroneously considered modern racists.

The goal of Study 2 was to investigate the effect of attributional ambiguity on evaluations of a fictitious Asian job candidate (i.e., Gary Chang) among participants identified as modern racists versus principled conservatives. Should principled conservatives (i.e.,

high in explicit modern racism, low in implicit prejudice) demonstrate the attributional-ambiguity effect? If principled conservatives are simply more prejudiced at the explicit versus implicit level, then they might. However, if principled conservatives score high on the AMRS because of values (e.g., economic/political conservatism) other than prejudice, then they should not negatively evaluate an outgroup member, even if an excuse exists. Thus, whether this group demonstrates the attributional-ambiguity effect provides a critical test for characterizing the nature of their racial attitudes.

We operationalized attributional ambiguity by manipulating whether there was a non-race-related excuse to negatively evaluate the target. Following the tradition of previous studies (Dovidio & Gaertner, 2000; McConahay, 1983), the excuse for negative evaluations of the target involved his ambiguous job qualifications. Participants evaluated an Asian target, and the study design was a 2 (condition: no excuse vs. excuse)  $\times$  2 (group: principled conservatives vs. modern racists). Our aim in designing the excuse manipulation was that it be subtle enough that only participants motivated to seize upon a justification would derogate the target and rationalize that he is "unqualified." Thus, we did not expect all participants to give lower hiring recommendations in the excuse versus no-excuse condition.

We hypothesize that modern racists in the excuse condition should have lower hiring recommendations than would participants in all other study conditions (i.e., contrast weights of 1, 1, 1, -3, respectively). This prediction involves more specific hypotheses. First, participants classified as modern racists should demonstrate the attributional-ambiguity effect by giving lower hiring recommendations in the excuse versus no-excuse condition. Second, given that the excuse provided for derogation is a very subtle one, excuse condition should not affect hiring recommendations for those who are not motivated to "lower the boom" on an Asian job candidate. Therefore, principled conservatives should give equivalent ratings, regardless of excuse condition. Third, in the excuse condition, because there is attributional ambiguity, modern racists should give lower hiring recommendations compared with principled conservatives. Finally, within the no-excuse condition, we hypothesize that principled conservatives and modern racists should provide comparable ratings because, when attributional ambiguity is low, modern racists should not be motivated to discriminate.

### Method

#### Participants

In Phase 1, 3,052 introductory psychology students completed an on-line mass-testing questionnaire (746 men, 2,306 women). In Phase 2, 69 participants (34 men and 35 women) ranging in age from 17- to 24-years old ( $M = 18.67$ ,  $SD = 1.16$ ) evaluated fictitious job candidates. They were randomly assigned to either the no-excuse condition ( $n = 36$ ) or the excuse condition ( $n = 33$ ). In Phase 3, 68 participants completed the IAT. Phase 2 took 45 min and Phase 3 took 15 min to complete. Study 2 and 3 participants were remunerated with two research credits.

#### Procedure

*Phase 1: Assessing explicit modern racism.* Participants completed the ethnicity measure and the AMRS (Son Hing et al.,

2002), as in Study 1. We excluded all participants who self-identified as being of East or Southeast Asian descent ( $n = 267$ ). Participants' scores on the AMRS ranged from -4.00 to 3.78 ( $M = -0.66$ ,  $SD = 1.16$ ). The AMRS had good internal consistency (Cronbach's  $\alpha = .81$ ). Those who scored above the median (-0.56) on the AMRS were identified as potential participants.

*Phase 2: Main study.* Participants were contacted to take part in two ostensibly unrelated studies (1 to 8 participants per session). A Caucasian, female researcher posed as an employee for an organizational consulting firm that was allegedly developing a new interview tool to assess job candidates. Using information previously gathered with the tool, participants were to evaluate interview summaries for the target, Gary Chang, and two filler candidates with Caucasian sounding names (one was evaluated as stronger and one as weaker than the target, all  $ps < .001$ ).

The interview summaries described the candidate's performance for five competencies (i.e., skills/abilities). The target was strong on the critical thinking and learning skills/work ethic competencies (e.g., he "draws solid conclusions from available information"). In contrast, he appeared moderately proficient for the interpersonal and communication competencies (e.g., "For the most part, [he] presents information in a clear and precise way"). Organizational skills was used as a filler competency. With the interview summaries accessible, participants rated each candidate on all five competencies with items such as, "This candidate has exceptional Critical Thinking Skills" (1 = *strongly disagree* to 7 = *strongly agree*). The interview summaries and rating forms were then removed, creating a potentially more ambiguous situation.

In the no-excuse condition, the target was evaluated for a data analyst position for which he was well qualified. This position required strong analytical and learning skills with duties such as, "Applies statistical methodology to provide information for scientific research and statistical analysis." In the excuse condition, the target was evaluated for a human relations position for which he was not obviously qualified, yet he was not clearly unqualified. This position ("Employee Relations Specialist") required strong interpersonal and communication skills with duties such as, "Evaluates and resolves human relations, labor relations, and work-related problems, and meets with management to determine appropriate action." Participants completed two filler scales and then made their hiring recommendations for each candidate: "Gary Chang is well-suited for the Data Analyst (Employee Relations Specialist) job" and "I recommend that Gary Chang be hired as a(n) Data Analyst (Employee Relations Specialist)" (1 = *strongly disagree* to 7 = *strongly agree*). The two items were correlated,  $r(63) = .85$ ,  $p < .001$ , and aggregated to create an index of hiring recommendations.

Then participants were cued with the target's first name, "Gary," and asked to remember his last name. To test whether they had noticed and remembered the target's ethnicity, we later coded whether responses were Asian last names. Finally, an open-ended probe was used to assess suspicion. One participant was excluded because they did not list any name and one was excluded for being suspicious.

*Phase 3: Assessing implicit prejudice.* Approximately 1 week later, participants met a different female Caucasian experimenter in a new lab room for an allegedly unrelated study. The procedure for the IAT was the same as in Study 1 except that the category labels "I like" and "I dislike" were changed to "Pleasant" and

“Unpleasant.” Three participants were excluded ( $n = 65$ ) because box-plot analyses revealed them to be univariate outliers (IAT  $D$  scores higher than 2.50). For remaining participants, IAT  $D$  scores ranged from 0.18 to 2.45 ( $M = 1.01$ ,  $SD = 0.45$ ). We classified participants who scored above the median on the IAT ( $D = 0.90$ ) as modern racists ( $n = 31$ ) and those at or below the median as principled conservatives ( $n = 34$ ) because all participants had scored relatively high on the AMRS.

## Results

### Preliminary Analyses

We checked to ensure that participants randomly assigned to the two conditions were equivalent in their level of implicit prejudice. Unexpectedly, participants in the no-excuse condition ( $M = 1.37$ ,  $SD = 0.66$ ) had higher implicit prejudice scores than those in the excuse condition ( $M = 1.03$ ,  $SD = 0.36$ ),  $t(63) = 2.52$ ,  $p = .01$ , creating a more conservative test of our key hypothesis. Participants' levels of explicit modern racism and implicit prejudice were unrelated,  $r(63) = .03$ ,  $p = .81$ .

We tested whether the target was seen as having stronger critical thinking skills and learning skills/work ethic than interpersonal and communication skills. Ratings for the interpersonal and communication skill competencies,  $r(63) = .69$ ,  $p < .001$ , were aggregated to form an index of social skills. Ratings for the critical thinking and learning skills/work ethic competencies,  $r(63) = .26$ ,  $p = .04$ , were aggregated to form an index of intellectual skills. As intended, participants rated the target's intellectual skills ( $M = 5.43$ ,  $SD = 0.62$ ) higher than his social skills ( $M = 4.70$ ,  $SD = 0.95$ ),  $t(64) = 5.98$ ,  $p < .001$ . Thus, whether a job requires stronger social skills could provide a subtle, non-race-related excuse to negatively evaluate the target.

### Main Analyses

*Perceptions of target's competencies.* Principled conservatives and modern racists initially evaluated Gary Chang's intellectual skills,  $t(63) = 0.94$ ,  $p = .35$ , and social skills,  $t(63) = 0.05$ ,  $p = .96$ , equivalently. Thus, at this stage, with all relevant information on hand for participants to review and with no excuse yet introduced, implicit prejudice did not predict ratings of the target.

*Discriminatory behavior.* We conducted a planned-comparison contrast analysis (Rosenthal, Rosnow, & Rubin, 2000) to test our hypothesis that the target should receive lower hiring recommendations from modern racists when he is being considered for the human relations job (i.e., excuse condition), compared with modern racists in the no-excuse condition and principled conservatives in both conditions (3 vs. 1 contrast test). As predicted, the Asian candidate was significantly less likely to be recommended for hire by modern racists in the excuse condition compared with participants in the other study conditions,  $t(61) = 3.16$ ,  $p = .002$ , Cohen's  $d = 0.81$  (see Figure 2).<sup>4</sup>

Planned comparisons were conducted to test our other specific hypotheses. First, modern racists were less likely to recommend the Asian candidate for hire in the excuse condition ( $M = 4.00$ ,  $SD = 1.37$ ) compared with their counterparts in the no-excuse condition ( $M = 5.33$ ,  $SD = 0.91$ ),  $t(61) = 3.21$ ,  $p = .002$ , Cohen's  $d = 0.82$ . In contrast, principled conservatives did not significantly

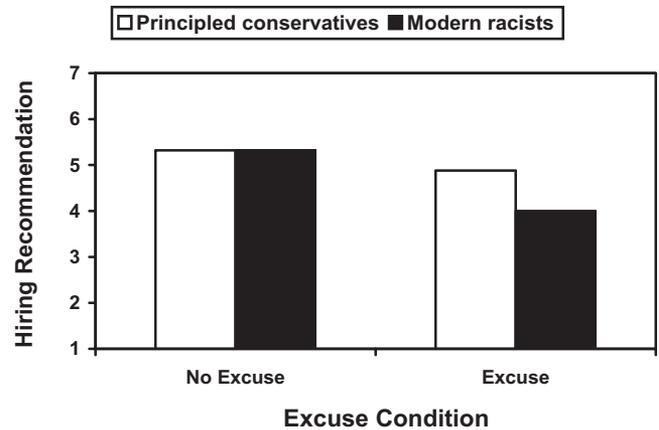


Figure 2. Study 2: Decision to recommend the Asian candidate for hire as a function of condition (no excuse vs. excuse) and group (principled conservatives vs. modern racists).

differ in their likelihood to recommend the Asian candidate for hire in the excuse condition ( $M = 4.88$ ,  $SD = 1.33$ ) compared with their counterparts in the no-excuse condition ( $M = 5.32$ ,  $SD = 0.58$ ),  $t(61) = 1.18$ ,  $p = .24$ . Thus, among participants high in explicit modern racism, only those high in implicit prejudice behaved in a manner consistent with modern racism theory by demonstrating the attributional-ambiguity effect.

In addition, within the excuse condition, modern racists were less likely to recommend the Asian candidate for hire compared with principled conservatives,  $t(61) = 2.09$ ,  $p = .04$ , Cohen's  $d = 0.53$ . Thus, in the presence of an excuse, participants' implicit prejudice predicts negative responses to the Asian target. In contrast, as expected, in the no-excuse condition, modern racists and principled conservatives gave equivalent hiring recommendations,  $t(61) = 0.03$ ,  $p = .98$ .

### Discussion

We found that participants categorized as modern racists (double highs) were more likely to lower the boom for hiring recommendations when a non-race-related excuse was present (vs. absent) in the form of an ambiguous fit between the candidate's qualifications and the selection criteria for the job. In conjunction with the Study 1 findings that double highs are socially conservative and low in egalitarianism/humanism, their demonstration of the attributional-ambiguity effect provides strong evidence for our operationalization of modern racism.

According to theory (McConahay, 1986), modern racists should demonstrate the attributional-ambiguity effect because they do not want to appear prejudiced to themselves or others. On the one hand, because modern racists were the only ones to distinguish the target's suitability for the two positions, they could be construed as

<sup>4</sup> A similar but weaker pattern of findings was obtained for a second measure of discrimination. Modern racists in the excuse condition tended to set the bar higher for requisite performance on a social skills test compared with participants in the other three conditions ( $p = .06$ ). No follow-up comparisons were significant (all  $ps > .08$ ).

being motivated to find an excuse to negatively respond to an Asian job candidate. On the other hand, in a low ambiguity situation—when participants initially rated the target with the interview summary in front of them—modern racists gave identical ratings as principled conservatives, which might suggest that modern racists work hard to maintain a nonracist self-image or appearance. It would be interesting to investigate how aware modern racists are of their biases and to test whether any motivation to appear nonprejudiced stems from internal or external sources (Plant & Devine, 1998).

The interview summaries provided stereotype-consistent (Asian target with mediocre social skills) rather than stereotype-inconsistent information. This might have more strongly evoked perceptions of the target as cold or unsocial (Bodenhausen, 1988). Thus, it is impressive that principled conservatives did not evince discriminatory behavior. In conjunction with the Study 1 finding that they endorse prejudice-related ideologies less than modern racists do, this strongly supports our assertion that principled conservatives are not particularly prejudiced. More research is needed for us to confidently assert that only people who score high in explicit modern prejudice and high in implicit prejudice are truly modern racists. For instance, the design of the current study could be conducted with an American sample, a Black versus White target, and the Symbolic Racism 2000 Scale (Henry & Sears, 2002).

Given that there was no White target, it is difficult to say whether in the excuse condition, modern racists discriminated or whether principled conservatives were lenient. To get a sense of a control condition, we ran a follow-up study using a procedure similar to Study 2. Participants (23 modern racists, 21 principled conservatives) evaluated a matched White target (Gary Walsh) for the human relations position. Modern racists in the follow-up study gave significantly higher hiring recommendations for the White target ( $M = 4.50$ ,  $SD = 1.13$ ) than did modern racists evaluating the matched Asian target in Study 2 ( $M = 4.00$ ),  $t(22) = 2.13$ ,  $p = .045$ . In contrast, principled conservatives in the follow-up study gave equivalent hiring recommendations for the White target ( $M = 4.86$ ,  $SD = 1.13$ ) to those given by principled conservatives for the Asian target in Study 2 ( $M = 4.88$ ),  $t(20) = 0.07$ ,  $p = .94$ . These findings suggest that when there is an excuse to do so, modern racists—but not principled conservatives—discriminate against an Asian job candidate versus White job candidate. Finally, principled conservatives and modern racists gave equivalent hiring recommendations to the White job candidate,  $t(42) = 1.05$ ,  $p = .30$ .

### Study 3

In Study 3, we tested our two-dimensional model by probing the discriminatory behavior of truly low prejudiced participants and aversive racists. We improved the study design by including target ethnicity as a factor (i.e., participants evaluated an Asian or White job candidate). Like modern racists, aversive racists are theorized to demonstrate the attributional-ambiguity effect: not discriminating in situations where bias would be obvious because they desire to be nonprejudiced but discriminating in situations with attributional ambiguity because their behavior can be justified (Dovidio & Gaertner, 2005). In contrast, truly low prejudiced participants should be nondiscriminatory regardless of excuse condition or target ethnicity.

Past evidence for the attributional-ambiguity effect among aversive racists has been indirect because aversive racism was not assessed. For instance, Dovidio and Gaertner (2000) found that when the norms for hiring decisions were clear (i.e., candidates' qualifications were very strong or very weak), Black and White candidates were recommended for hire to an equivalent degree. However, when the norms for the situation were ambiguous (because the candidates' qualifications were mixed), the White candidate was recommended for hire more than the matched Black candidate was. Participants' level of self-reported prejudice did not moderate the findings. Others have found the same pattern of results (Gaertner & Dovidio, 1986). In a more recent study (Hodson et al., 2002), the attributional-ambiguity effect was found only for participants high in explicit prejudice. With past research, because no individual difference measures were used to distinguish aversive racists from modern racists, principled conservatives, and those low in prejudice, it is uncertain who does and who does not demonstrate the attributional-ambiguity effect.

Study 3 had a 2 (condition: excuse vs. no excuse)  $\times$  2 (group: truly low prejudiced vs. aversive racist)  $\times$  2 (target ethnicity: White vs. Asian) between-participants design. The procedure and materials were the same as in Study 2 except that implicit prejudice was assessed before the main study. Also, to probe whether they justified any discriminatory behavior via biased recollections, after participants made their hiring recommendations, we assessed their memories of the target's qualifications—particularly his social skills because this was the basis for the excuse to discriminate. Aversive racists should justify their discriminatory behavior in order to protect their egalitarian self-image (Dovidio & Gaertner, 2005). For instance, Hodson et al. (2002) found that after participants evaluated a Black candidate with mixed qualifications, they considered whatever dimension on which the applicant was weaker to be more important.

We hypothesize that aversive racists, as compared to truly low prejudiced people, should make discriminatory hiring decisions to the disadvantage of the Asian target but only when they have a non-race-related excuse to do so. As such, we predict one condition (aversive racist, Asian candidate, excuse) should have a significantly lower hiring recommendation than the other seven conditions (i.e., contrast weights of 1, 1, 1, 1, 1, 1, 1, -7, respectively). In addition, we predict that aversive racists should demonstrate the attributional-ambiguity effect, recommending the Asian target for hire less in the excuse condition compared with their counterparts in the no-excuse condition. Because the manipulation is very subtle, we predict that truly low prejudiced participants should not differ in their likelihood to recommend the Asian candidate depending on excuse condition. We predict that in the excuse condition, aversive racists—but not truly low prejudiced participants—should give lower evaluations to the Asian candidate compared with their counterparts evaluating the matched White candidate. Finally, in the excuse condition, aversive racists should evaluate the Asian target more negatively than truly low prejudiced participants do.

In line with earlier reasoning, we propose that aversive racists evaluating the Asian candidate for the human relations position should have the least positive memories for the target's social skills compared with the memories of the participants in the other conditions (i.e., contrast weights of 1, 1, 1, 1, 1, 1, 1, -7, respectively) because aversive racists may justify their discrimi-

natory behavior through biased memory retrieval. We hypothesize that the effect of the contrast vector on participants' memories of the target's social skills should be mediated by their hiring recommendations. To help ensure that we tap post-hiring recommendation rationalizations, we control for participants' initial perceptions of the target's competencies.

### Method

#### Participants

In Phase 1, 1,840 introductory psychology students (442 men and 1,398 women) completed a mass-testing questionnaire. One hundred and forty six (30 men and 116 women) participants completed the IAT in Phase 2 and the main part of the study in Phase 3. They were randomly assigned to one of the following conditions: no excuse/White target ( $n = 35$ ), no excuse/Asian target ( $n = 34$ ), excuse/White target ( $n = 34$ ), or excuse/Asian target ( $n = 43$ ). Participants were 17- to 23-years old ( $M = 19.24$ ,  $SD = 1.12$ ).

#### Procedure

*Phase 1: Assessing explicit modern racism.* Within the mass-testing questionnaire, participants completed the same measures of ethnicity and AMRS as earlier. We excluded all participants ( $n = 106$ ) who self-identified as being of East or Southeast Asian descent. Remaining participants' mean scores on the AMRS ranged from  $-4.00$  to  $4.00$  ( $M = -0.72$ ,  $SD = 1.08$ ). The AMRS had good internal consistency (Cronbach's  $\alpha = .80$ ). Those who fell below the median ( $-0.67$ ) on the AMRS were identified as potential participants.

*Phase 2: Assessing implicit prejudice.* We employed the same cover story, procedure, and apparatus as in Study 2. In this study, IAT scores were computed using the traditional scoring procedure (mean latencies for the test-congruent block were subtracted from mean latencies for the test-incongruent block) because unfortunately there were missing data at the trial level; thus, the new scoring algorithm could not be employed. Three participants were excluded because box-plot analyses revealed them to be univariate outliers (IAT scores higher than 501 ms). For remaining participants, IAT scores ranged from  $-140.45$  ms to  $500.22$  ms ( $M = 179.26$ ,  $SD = 127.66$ ). Participants who scored at or below the median ( $176.88$ ) were classified as truly low prejudiced ( $n = 72$ ) and those above the median as aversive racists ( $n = 71$ ).

*Phase 3: Main study.* Following completion of the IAT, participants were led to a new room for the second study. A different Caucasian female research assistant conducted the same procedures as in Study 2 with the following additions. First, participants were randomly assigned to read the interview summary for and assess the competencies of a target named either "Gary Chang" in the Asian condition or "Gary Walsh" in the White condition. Second, after making their hiring recommendations, participants completed a filler task and then reported their memories of the target. They were required to freely recall and list information about the target's competencies from the interview summary sheet. Third, a check for the ethnicity manipulation was completed in which the job candidates were listed by first name and surname initial (e.g., Gary C.). Participants were asked to indicate the

candidate's ethnic origin with the response options of Caucasian, Asian, East Indian, and Hispanic. No participant indicated any suspicion that the two studies were related. Many commented on the believability of the cover story.

*Judges' ratings of memory measure.* Three judges, unaware of participants' level of implicit prejudice or their condition, independently rated the degree to which the points recalled by participants suggested that the job candidate was proficient with regard to each competency (1 = *negative* to 5 = *positive*). There was high interrater agreement for all competencies (intraclass correlations ranged from .85 to .93) so the judges' ratings were averaged. Judges' ratings of how positively participants recalled the target's interpersonal and communication skills were aggregated into a measure of memory for the target's social skills,  $r(134) = .64$ ,  $p < .001$ .

### Results

#### Preliminary Analyses

In the Asian condition, 87.7% ( $n = 64$ ) of participants correctly identified the target (i.e., Gary C.) as Asian. In the White condition, 79.7% of participants ( $n = 51$ ) correctly identified the target (i.e., Gary W.) as Caucasian. Participants might have felt uncomfortable reporting ethnicity making this manipulation check a more reactive measure than the one used in Study 2. Results were consistent when analyses were conducted with or without those who incorrectly identified the key candidate's ethnicity, so we included all to maximize statistical power.

We tested whether random assignment of participants was successful. A 2 (excuse condition)  $\times$  2 (ethnicity condition) analysis of variance revealed that participants' levels of implicit prejudice were equivalent across conditions ( $ps > .40$ ). Again, participants' levels of explicit modern racism and implicit prejudice were unrelated,  $r(141) = -.02$ ,  $p = .77$ .

Participants' initial ratings for the critical thinking and learning skills/work ethic competencies,  $r(141) = .44$ ,  $p < .001$ , were aggregated to form an index of intellectual skills, as were ratings for the interpersonal and communication skill competencies,  $r(141) = .69$ ,  $p < .001$ , to form an index of social skills. As expected, participants rated the target's intellectual skills ( $M = 5.31$ ,  $SD = 0.85$ ) higher than his social skills ( $M = 4.62$ ,  $SD = 1.10$ ),  $t(142) = 9.92$ ,  $p < .001$ .

#### Main Analyses

*Perceptions of target's competencies.* A 2 (group)  $\times$  2 (target ethnicity) analysis of variance revealed no effects for participants' perceptions of the key candidate's intellectual skills (all  $ps > .15$ ) or social skills (all  $ps > .31$ ). Therefore, with all relevant information on hand for participants to review and with no excuse yet introduced, regardless of their level of implicit prejudice or the target's ethnicity, participants rated him equivalently.

*Discrimination.* The two hiring recommendation items were aggregated,  $r(139) = .77$ ,  $p < .001$ . As hypothesized, the Asian candidate was significantly less likely to be recommended for hire by aversive racists in the excuse condition compared with those in the seven other study conditions,  $t(135) = 3.46$ ,  $p = .001$ , Cohen's  $d = 0.60$  (see Figure 3). Planned-contrast comparisons were con-

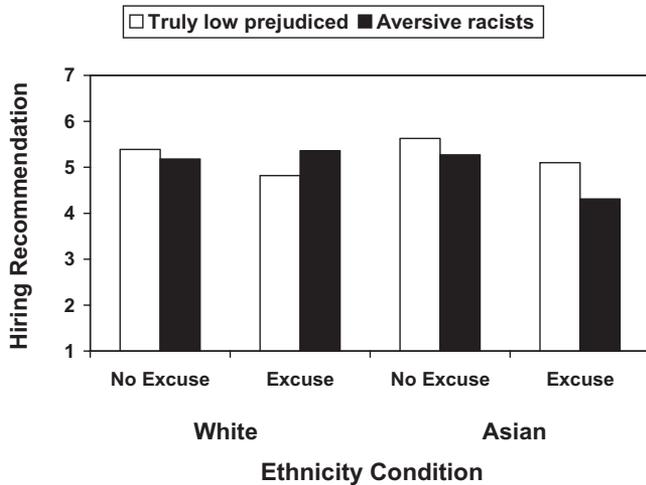


Figure 3. Study 3: Decision to recommend the candidate for hire as a function of condition (no excuse vs. excuse), group (truly low prejudiced vs. aversive racists), and target ethnicity (White vs. Asian).

ducted to test our other specific hypotheses. As expected, aversive racists were less likely to recommend the Asian candidate for hire in the excuse condition ( $M = 4.26$ ,  $SD = 1.54$ ) than were their counterparts in the no-excuse condition ( $M = 5.11$ ,  $SD = 1.17$ ),  $t(135) = 2.29$ ,  $p = .02$ , Cohen's  $d = 0.39$ . In contrast, truly low prejudiced participants did not differ in their likelihood of recommending the Asian candidate for hire in the excuse condition ( $M = 5.03$ ,  $SD = 1.44$ ) versus the no-excuse condition ( $M = 5.63$ ,  $SD = 0.85$ ),  $t(135) = 1.47$ ,  $p = .15$ . Thus, aversive racists but not truly low prejudiced participants demonstrated the attributional-ambiguity effect.

In addition, aversive racists in the excuse condition were less likely to recommend the Asian candidate for hire ( $M = 4.26$ ,  $SD = 1.54$ ) compared with their counterparts who evaluated the White candidate ( $M = 5.37$ ,  $SD = 1.06$ ),  $t(135) = 2.82$ ,  $p = .005$ , Cohen's  $d = 0.49$ . In contrast, truly low prejudiced participants in the excuse condition gave equivalent recommendations for hire to the Asian ( $M = 5.03$ ,  $SD = 1.44$ ) and White candidate ( $M = 4.74$ ,  $SD = 1.10$ ),  $t(135) = 0.75$ ,  $p = .46$ . Thus, when a candidate is not clearly qualified for a position, aversive racists but not truly low prejudiced participants demonstrate ethnic discrimination. Finally, within the excuse condition, aversive racists were less likely to recommend the Asian candidate for hire than were truly low prejudiced participants,  $t(135) = 2.06$ ,  $p = .04$ , Cohen's  $d = 0.35$ . This suggests that irrespective of the two groups' shared low explicit prejudice, aversive racists' greater implicit prejudice led to more negative evaluations.

The requirements of the human relations position were not much of an excuse for lower hiring recommendations for most participants. The target was seen as well suited/worthy of recommendation for the human relations job by all participants when he was White, and when he was Asian, truly low prejudiced participants also saw him as fit for the job. Only aversive racists evaluating the Asian target acted on the excuse to give lower ratings.

**Memory measure and mediation analyses.** We hypothesized that aversive racists should justify their low hiring recommendations with a biased recall of the Asian target's job-related compe-

tencies. We focused on perceptions of the target's social competencies because these are the grounds for potential discrimination in the excuse condition. Mediation analyses were conducted as outlined by Baron and Kenny (1986). To help ensure that we assessed biases in recollections of the target that occurred after hiring recommendations were made, we controlled for participants' initial perceptions of his social skills ( $\beta = .33$ ,  $SE \beta = .11$ ,  $p = .004$ ) and intellectual skills ( $\beta = -.16$ ,  $SE \beta = .11$ ,  $p = .15$ ) with hierarchical regression analyses.

First, the contrast (7 vs. 1) vector was a significant predictor of participants' memories of the target's social skills ( $\beta = .19$ ,  $SE \beta = .08$ ,  $p = .03$ ). Thus, aversive racists who evaluated the Asian candidate for the human relations job had the least positive memories of the target's social skills. Second, consistent with earlier analyses, the contrast vector was a significant predictor of the proposed mediator (i.e., hiring recommendations;  $\beta = .25$ ,  $SE \beta = .07$ ,  $p = .001$ ). Third, when controlling for the contrast vector, the lower participants' hiring recommendations were, the more negatively they recalled the target's social skills ( $\beta = .53$ ,  $SE \beta = .08$ ,  $p < .001$ ). In addition, when controlling for hiring recommendations, the relation between the contrast vector and memories of the target's social skills dropped to zero ( $\beta = .06$ ,  $SE \beta = .08$ ,  $p = .44$ ). The drop of the beta from the total to the direct effect was significant ( $z = 2.99$ ,  $p = .003$ ) using the second Goodman (1960) formula, as suggested by Kenny (2001). Thus, as predicted, analyses are consistent with the notion that what led aversive racists to remember the Asian candidate later as socially unskilled was the degree to which they had recommended earlier that he not be hired for the human relations position.

### Discussion

Earlier conceptualizations of aversive racism (e.g., all those low in explicit prejudice or those who demonstrate the attributional-ambiguity effect) were too broad. We refine the construct by identifying aversive racists as those who explicitly disavow prejudice and yet implicitly have negative automatic associations for outgroup versus ingroup members. This study is the first to validate our operationalization of aversive racists by showing that they demonstrate the attributional-ambiguity effect (see also Dovidio, Gaertner, et al., 2002; Son Hing et al., 2002).

Study 1 findings suggest that aversive racists are able to maintain a self-image as egalitarian humanists. This might be possible because they do not discriminate in situations where such behavior would be obvious (e.g., when they have all relevant information on hand or when assessing a highly qualified candidate for a position). In addition, once aversive racists engage in discriminatory behavior, it appears that they protect their self-image with post hoc rationales (see also Hodson et al., 2002). To explore how specific such rationales are, we analyzed participants' memories of the target's intellectual skills. Aversive racists in the excuse condition remembered the Asian target's intellectual skills as positively as did all other study participants. Thus, aversive racists exaggerated the Asian target's shortcomings only for competencies related to the excuse provided for discrimination. Presumably, such specific rationalization processes help aversive racists to see their behavior as just.

Manipulating attributional ambiguity did not affect the hiring recommendations of truly low prejudiced people, and they did not

discriminate against the Asian (vs. White) target. Thus, truly low prejudiced people behaved in a manner consistent with their espoused ideologies of egalitarianism/humanism and anti-social conservatism. These findings demonstrate the importance of not assuming that all who score low on a measure of modern racism are aversive racists. Rather, it appears that there are individuals who have kicked the prejudice habit (Devine, 1989) in terms of both their automatically activated attitudes and their discriminatory behavior.

A potential criticism of this study's (and Study 2's) design is that the manipulation of the excuse condition is consistent with the Asian stereotype, in that the target had weaker social (vs. intellectual) skills. Stereotype-consistent information is given greater attention, elaboration, and rehearsal than neutral information (Bodenhausen, 1988), creating the possibility that discriminatory responding in the excuse condition is facilitated by, or is dependent on, employing a stereotype-consistent excuse. However, Son Hing et al. (2005, Study 2) replicated the current findings employing an Asian stereotype-inconsistent excuse to discriminate in that the target was forceful and vocal (Jackson et al., 1996; Lin et al., 2005). Thus, the attributional-ambiguity effect (for aversive racists at least) is not dependent on employing a stereotype-consistent excuse to discriminate. In any event, if having a stereotype-consistent excuse makes discrimination more likely, the fact that truly low prejudiced participants (in Study 3) and principled conservatives (in Study 2) did not demonstrate the attributional-ambiguity effect is all the more informative.

### Combining Studies 2 and 3

To explore the effects of attributional ambiguity for participants with a full range of explicit modern racism scores, we conducted supplementary analyses in which participants assigned to the Asian condition in Studies 2 and 3 were combined ( $N = 139$ ). This allowed us to test, in a factorial design, the independent and interactive effects associated with excuse condition, explicit modern racism, and implicit prejudice. Due to a difference in scaling, for each study sample, IAT (or IAT *D*) scores were transformed into *z* scores. Participants' implicit and explicit prejudice levels were unrelated,  $r(137) = .01, p = .45$ .

Multiple regression analyses and follow-up simple-effects tests were conducted following procedures outlined by Aiken and West (1991). There were significant effects for excuse condition ( $B = -0.42, SE B = 0.10, p < .001$ ) and for implicit prejudice ( $B = -0.32, SE B = 0.13, p = .01$ ). However, these effects were qualified by a significant Excuse Condition  $\times$  Implicit Prejudice interaction ( $B = -0.28, SE B = 0.13, p = .03$ ). Consistent with our major findings in Studies 2 and 3, simple-effects tests revealed that in the excuse condition, participants higher in implicit prejudice gave lower hiring recommendations to the Asian candidate ( $B = -0.60, SE B = 0.20, p = .003$ ). In contrast, in the no-excuse condition, there was no effect of implicit prejudice ( $B = -0.04, SE B = 0.15, p = .82$ ). Considering the interaction the other way, among participants lower in implicit prejudice, the effect of excuse condition was not significant ( $B = -0.16, SE B = 0.15, p = .29$ ). However, consistent with our major findings in Studies 2 and 3, among participants higher in implicit prejudice, those in the excuse condition gave lower hiring recommendations than did those in the no-excuse condition ( $B = -0.68, SE B = 0.16, p < .001$ ). The

finding that implicit prejudice predicts discrimination only in an ambiguous condition is consistent with previous research (Ziegert & Hanges, 2005) and with the dual attitudes and MODE models (Fazio, 1990; Wilson et al., 2000). Neither the main nor interactive effects of explicit modern racism were significant (all  $ps \geq .10$ ).

Although the three-way interaction did not achieve statistical significance ( $p = .22$ ), we wanted to investigate whether, when there was an excuse to discriminate, modern racists evaluated the Asian job candidate more negatively than did aversive racists. Therefore, we conducted a contrast test comparing these two conditions with the other six conditions coded as zero (i.e., contrast weights of 0, 0, 0, 0, 0, 1, 0,  $-1$ , respectively). Median splits were used to identify participants as low or high in implicit prejudice (median =  $-0.05$ ) and as low or high in explicit modern racism (median =  $-0.67$ ). To use as stable an indicator as possible, we employed the median from the mass-testing sample ( $N = 4,480$ ) for the AMRS. With these criteria, 10 participants switched groups. We found that modern racists ( $M = 3.61, SD = 1.68$ ) gave lower hiring recommendations to the Asian candidate for the human relations position than did aversive racists ( $M = 4.50, SD = 1.32$ ),  $t(131) = 2.15, p = .03$ , Cohen's  $d = 0.38$ . Participants in the other six study conditions gave comparatively higher hiring recommendations ( $M = 5.22, SD = 1.07$ ),  $t(131) = 5.00, p < .001$ , Cohen's  $d = 0.87$ .

### General Discussion

We proposed a two-dimensional model of prejudice in which measures of explicit modern racism and implicit prejudice are necessary to theoretically and empirically differentiate those with different prejudice profiles. Modern racists endorsed prejudiced-related ideologies most strongly, were conservative, and demonstrated the attributional-ambiguity effect. In contrast, principled conservatives were economically/politically conservative but did not particularly endorse prejudice-related ideologies and did not negatively evaluate the Asian target, even when they had an excuse to do so. Aversive racists were low in conservatism and displayed ethnic discrimination only when they had an excuse to do so. Finally, those considered truly low prejudiced were most egalitarian, least socially conservative, and did not discriminate. These results are highly consistent with previous theorizing, providing strong support for our model.

Given that explicit and implicit prejudice are continuous variables, some might object to classifying participants as low or high. A potential problem with this approach is that cut-off scores are sample specific and malleable. We suggest that set cut-offs not be used (e.g., zero for the IAT, midpoint of the AMRS) unless validation studies are conducted (Blanton & Jaccard, 2006). Whether people's racial attitudes can best be characterized and operationalized using a dimensional or a taxonomic approach is an empirical question (MacCallum, Zhang, Preacher, & Rucker, 2002). However, the current work suggests that there are benefits with each approach. A dimensional approach provides greater parsimony when describing the relations between prejudice and relevant phenomena, whereas the taxonomy approach allows for the testing of specific comparisons that map onto existing theories of prejudice.

When combining Studies 2 and 3, multiple regression analyses revealed that participants' level of modern racism did not signif-

icantly affect their discriminatory behavior; rather, implicit prejudice predicts discriminatory behavior in a high—but not low—attribitional-ambiguity condition. Given our model, higher explicit modern racism should not translate into greater discriminatory behavior among those low in implicit prejudice or for those in the no-excuse condition. Nonetheless, this pattern of findings might raise concerns that the AMRS is an invalid measure of attitudes due to participants' motivation to avoid appearing prejudiced (Dunton & Fazio, 1997). We believe that such concerns are unfounded because the AMRS significantly predicted participants' sociopolitical attitudes, and in all three studies, it distinguished non-Asian from Asian participants in mass testing.

Perhaps explicit modern racism was adequately assessed, yet it is unrelated to discriminatory behavior. Should we conclude that only the dimension of implicit prejudice matters—making our conceptual framework unnecessary? If this were the case, then aversive racists could be equated with modern racists and principled conservatives with truly low prejudiced people. However, we find that compared with aversive racists, modern racists are more explicitly prejudiced, more socially conservative, less egalitarian, and more economically and politically conservative. The same is true for principled conservatives versus truly low prejudiced people. Finally, supplementary analyses revealed that when there is an excuse to do so, modern racists more negatively evaluate an Asian target than do aversive racists. Thus, there is ample evidence that explicit modern racism plays an important role in characterizing people's prejudice.

Now that we have more refined operationalizations for modern and aversive racism, research can be conducted to further distinguish the psychologies of prejudice for these two groups. For instance, are modern racists more aware of their implicit biases (Dovidio & Gaertner, 2005), hiding their prejudice more from others than from themselves (Nail et al., 2003), compared with aversive racists? If so, modern racists should reveal greater prejudice under private versus public responding or with a bogus pipe-line versus a control condition. Furthermore, we might expect to see more robust differences in the discriminatory behavior of modern and aversive racists if a target group member that evokes stronger racial resentment is evaluated or if reactions to a social policy are explored for which there are marked left/right differences (e.g., affirmative action).

We recommend that explicit and implicit prejudice should be considered in order to characterize an individual's prejudice. However, we proposed a specific model of prejudice by focusing on explicit modern racism. Would our characterizations of the four groups differ if a more pure attitude measure (e.g., semantic differential) were used? In this case, double lows could still be characterized as truly low prejudiced, those low in explicit but high in implicit prejudice could be considered aversive racists, but double highs might now be considered bigots. In addition, principled conservatism is no longer a logical explanation for how one might score high in explicit but low in implicit prejudice. Rather, this group might have positive associations with outgroups, such as Asians, at the implicit level (e.g., respect) causing feelings of threat, leading to negative evaluations on explicit measures. We suspect that this group would be fewer in number, hold prejudiced-related ideologies, and deliberately discriminate.

In the past, many important issues in characterizing prejudice have been addressed but not resolved, such as the following: Who

is prejudiced, those on the right or those on the left? Does explicit prejudice or implicit prejudice reflect someone's real attitude? Are conservatism and racism blended or distinct? Our two-dimensional model of prejudice takes us beyond questions such as these to a recognition that different prejudice profiles exist, reflecting both prejudice on the left and prejudice on the right and that to characterize the nature of an individual's prejudice correctly, one must consider both explicit racial attitudes as well as implicit, automatic biases.

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## Appendix

## Asian Modern Racism Scale

Please indicate your reaction to each of the statements by circling the appropriate number on each scale. There are no correct answers so please respond as accurately as possi-

ble. You will probably find that you agree with some of the statements, and you disagree with others, to varying degrees.

- 4	- 3	- 2	- 1	0	1	2	3	4
very strongly disagree	strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree	very strongly agree

1. There are too many foreign students of Asian descent being allowed to attend university in Canada.
2. Canada should open its doors to more Asian immigration from the poorer countries. (R)
3. It's good to live in a country where there are so many Asians. (R)
4. Intermarriage between Asians and Whites is a good thing for Canada. (R)
5. It is not fair that so many scholarships and awards are awarded to Asian students.

6. It is too easy for Asians to illegally arrive in Canada and receive refugee status.
7. Many Asians do not bother to learn proper English.
8. Discrimination against Asians is no longer a problem in Canada.
9. English Canadians do not get treated very well in places like Chinatown.

(R) indicates reverse-keyed items.

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