

# THE PSYCHOLOGY OF MODERN PREJUDICE

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*Chapter 5*

## MEASURING RACIAL PREJUDICE IN A MULTIRACIAL WORLD: NEW METHODS AND NEW CONSTRUCTS

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### ABSTRACT

This chapter argues for the use of new methods to assess racial prejudice because existing methods only provide a piecemeal understanding of the phenomenon, leading to an under-assessment of key constructs (e.g., ingroup favoritism, outgroup derogation) and provide no precision to assess new constructs, such as *generalized outgroup derogation* (negativity directed at all outgroups equally) and *selective outgroup derogation* (negativity directed at a specific outgroup or specific outgroups). The use of new response options, multiple targets, and multiple perceivers integrated into a single instrument is encouraged. The multidimensional architecture of the proposed instrument will allow researchers to uncover new constructs (e.g., selective or generalized outgroup derogation) and improve the assessment of existing constructs (e.g., ingroup favoritism, outgroup derogation) associated with racial prejudice. This chapter concludes by arguing that the methodological and theoretical clarity offered by these new methods in a single instrument will supplement and advance our understanding of racial prejudice, and that the approach is equally applicable to both the child and adult literatures.

### INTRODUCTION

Several theorists, including Biernat and Crandall (1999), have argued that “[r]ace...is one of the most complex and powerful dimensions of American political thought” (p. 297). It is

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no doubt also a powerful dimension of social perception in various countries, and sometimes has different definitions across cultures (see Davis, 1991). Throughout its ascendancy and current decline in the biological sciences (see Cavalli-Sforza and Cavalli-Sforza, 1995; Haga and Venter, 2003; Lewontin, 1972; Marks, 1995; Smedley and Smedley, 2005; Tate and Audette, 2001) and philosophy (Goldberg, 1993; Zack, 2003), the concept of “race”<sup>2</sup> has been prominent in the social sciences largely because of its social consequences (American Anthropological Association, 1998; Jones, 1997; Smedley and Smedley, 2005; Tate and Audette, 2001).

The most well researched social consequence of the belief in race is racism. Racism has various forms, notably racial prejudice, racial discrimination, racial ideology (Blumer, 1958), and structural relations (Bonilla-Silva, 1997), and the phenomenon is very much a part of many societies even if the concept of race lacks any biological validity (Smedley and Smedley, 2005; Tate and Audette, 2001). The study of racism, therefore, is an integral part of social science to the extent that most people participate in the project of making “human races” (Hirschfeld, 1996; Teo, 2004; see also Banton, 1977; Jones, 1997) and concomitantly develop attitudes about, and engage in behaviors toward, ascribed racial groups, including the one to which they claim membership.

Given the psychological depth and social importance of racism, this chapter explores current approaches to racial prejudice, which usually characterize the phenomenon as involving only two groups (the ingroup and one outgroup), and offers new insights into how racial prejudice might be studied given that the scientific and social conceptions of humans races have always posited multiple (i.e., three or more) racial groups (Smedley and Smedley, 2005; Tate and Audette, 2001). Consequently, the current approaches have difficulty capturing racial prejudice in a multiracial world.

## CHAPTER OVERVIEW

This chapter is divided into three interrelated parts. The first is a review of the current racial prejudice literature with special attention to the various methods that are used to assess it and the shortcomings of these methods. The second part explicates an overarching method that can provide a holistic assessment of racial prejudice; namely, developing a single instrument that uses multiple response options, multiple targets and multiple perceivers simultaneously. The third part delineates the new constructs that would be possible from the use of a single instrument with the proposed multidimensional architecture (concerning response options, targets and perceivers) and also shows how such an instrument would provide clarity to existing constructs in the literature while generating new ones.

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<sup>2</sup> We refer to the term “race” with quotes to underscore our stance that the construct is a cognitive representation of the social world with no meaningful biological referent (Smedley and Smedley, 2005; Tate and Audette, 2001). The use of the term without quotes invites misinterpretations of our meaning. Nevertheless, we do not use these quotes around the term in the remainder of the paper in order to improve readability, with the hope that our stance remains clear.

## HIGHLIGHTS FROM PAST APPROACHES TO RACIAL PREJUDICE

Social scientific studies of prejudice can be found as early as the 1920s when Bogardus (1928) began discussing ideas of social distance and racial groups in the United States. Bogardus (1933, 1959) developed social distance scales and wrote extensively about race-relations and associated social perceptions, encouraging other theorists to explore this issue as well. One notable study from that era relevant to this chapter was conducted by Thistlethwaite (1950) and examined how participants (identified as “Caucasian”) interpreted syllogisms concerning two target racial groups: “Negroes” (modern term “African-Americans”) and “Jews” (who were at that time considered a racial group).<sup>3</sup> Thistlethwaite (1950) recruited two samples of males: (a) those from southern states in the U.S., presumed to have “ethnocentric” attitudes, and (b) those from northern states in the U.S., presumed to have less ethnocentric attitudes. In modern terms, Thistlethwaite was trying to recruit high and low prejudiced individuals. Thistlethwaite (1950) assumed that the high-prejudiced participants would make more errors when judging the correctness of the syllogisms that featured African-Americans or Jews as the target group than would the low-prejudiced individuals. Yet, Thistlethwaite found that the regions – the proxy for high and low prejudiced individuals – differed in the amount of errors made when the syllogisms referred to “African-Americans;” however, no difference was noted when the syllogisms referred to “Jews.”<sup>4</sup> Although statistical analysis and our understanding of racial prejudice and discrimination have advanced considerably since 1950, Thistlethwaite’s method is important to consider because it was one of the first (and one of the only to this day) to use multiple racial outgroups as targets in a single study using the same measurement tool.

Since the 1950s, there has been consistent interest in both sociology and social psychology to develop scales and other instruments to measure the amount of racial prejudice that a given populace shows from one group to another based on the social concept of race. The current state of social science research includes a range of approaches—largely methodological (as opposed to theoretical)—concerned with the assessment of racial prejudice and discrimination. The breadth of research has produced a bevy of papers, informal schools of thought, and new phenomena, but there has been little apparent interest in integrating the existing knowledge base into one instrument. This chapter focuses primarily on racial prejudice<sup>5</sup> and argues for the creation of a single instrument to measure it. The logic and merits of this proposal (including uncovering new constructs and improved precision for

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<sup>3</sup> In the interest of completely describing the study, we note that participants were also asked to rate patriotic arguments (in addition to the syllogisms). Also, as a control comparison for the racial categories, participants responded to syllogisms about the target group “women” (a non-racial group).

<sup>4</sup> Given the statistical techniques widely available at that time, Thistlethwaite (1950) did not compare the responses directly; instead, he showed that there was significant difference (at  $p < .05$ ) across the regions for one target, “African-Americans” but not the other, “Jews.”

<sup>5</sup> We conceive of racial prejudice as a “rational” negative evaluation of a member of a racial group. We use the term “rational” to acknowledge that some theorists have offered compelling evidence regarding the internal coherence and non-pathological nature of racialized belief systems (e.g., Goldberg, 1993). The logic that inheres in racialized belief systems is counter to positions – in both sociology and psychology – that frame racial prejudice as pathological or “irrational” (see, for example, Allport [1954] describing “the pathology of bigotry” [p. 425] and the “tolerant personality” [p. 427]). Addressing this debate is beyond the scope of this paper; however, it is important to acknowledge that some sociologists have pointed out that the study of racial prejudice often serves to obfuscate issues of the structural racialized relations and the non-ideological aspects of racial matters by attempting to pathologize it (e.g., Bonilla-Silva, 1997). Of course, despite the internal coherence of racialized beliefs, they are deleterious to social cohesion and, therefore, should be ameliorated.

existing constructs) are detailed as the main arguments of this chapter. The eventual creation of such a measure is offered as a project for interested social scientists.

## **THE CURRENT RESEARCH LANDSCAPE ON RACIAL PREJUDICE**

The landscape of historical and current research on racial prejudice has three general forms: (a) explicit scales, (b) tasks, and (c) implicit measures. Explicit scales are constructed to measure attitudes based on participants' overt responses (of which they are presumably aware) using questionnaire methodology. The tasks involve participants responding to hypothetical or actual interactions or making choices that implicate ingroup and outgroup targets. Implicit measures are constructed to discern participants' unconscious racial attitudes via button-presses to computer-presented stimuli or as physiological responses to presented stimuli. Each form is described in detail below to better acquaint the reader with the underlying assumptions and limits of each.

### **Explicit Racial Prejudice Scales**

Racial prejudice scales have existed since Bogardus' (1928) Social Distance Scale. Excellent and detailed summaries of racial attitudes scales can be found in Biernat and Crandall (1999; adults) and in Cameron, Alvarez, Ruble, and Fuligni (2001; children). Thus, it is not our intention to further detail what others have so well documented. Instead, we wish to make clear the theoretical assumptions underpinning the scales since the 1920s and highlight the methodological procedures used to illustrate or support these assumptions.

As Biernat and Crandall (1999, pp. 301-302) argue, existing scales that measure racial attitudes in adults can be classified as focusing on: (a) "old fashioned" measures of out-group directed attitudes (e.g., Ard and Cook, 1977; Brigham, 1977, 1993; Sidanius, Pratto, Martin, and Stallworth, 1991; Woodmansee and Cook, 1967), (b) "modern" measures of out-group directed attitudes (e.g., Bogardus, 1959; Jacobson, 1985; I. Katz and Hass, 1988; Kinder and Sanders, 1996; Lepore and Brown, 1997; McConahay, 1986; Ponterotto et al., 1995), (c) hybrid measures of old-fashioned and modern racism (e.g., Meertens and Pettigrew, 1997), (d) measures of racial stereotypes (e.g., Farley, Steeh, Krysan, Jackson, and Reeves, 1994; Peffley, Hurwitz, and Sniderman, 1997), and (e) prejudice-related world views, such as social dominance-orientation (Pratto, Sidanius, Stallworth, and Malle, 1994; Sidanius and Pratto, 1993) and nonprejudice (e.g., Universal Orientation; Phillips and Ziller, 1997).

The distinction between old-fashioned and modern racist attitudes is roughly the distinction between harboring (and usually expressing) overtly racist attitudes (old-fashioned; e.g., supporting the use of racial slurs, believing that outgroups have lower abilities, deeming physical violence against outgroups to be acceptable, etc.) and comparatively more covert or subtle racist attitudes (modern; e.g., not wanting to associate with outgroup members, deeming obstructionism when dealing with racial outgroups to be acceptable, blaming minorities for structural inequality, etc.). There also has been renewed interest in assessing participants as high or low in their expression of racial prejudice (e.g., Lepore and Brown,

1997), as well as assessing participants' motivation to control prejudiced reactions or responses (e.g., Dunton and Fazio, 1997; Plant and Devine, 1998).

Scales also have been developed to assess children's racial prejudice, such as the Preschool Racial Attitudes Measure II (PRAM II) (Williams, Best, and Boswell, 1975; Williams, Morland, and Associates, 1975), the Katz-Zalk Projective Prejudice Test (KZPP) (P. Katz and Zalk, 1978; Zalk and Katz, 1976), and the Multi-response Racial Attitude Measure (MRA) (Doyle and Aboud, 1995). Given the participants, the scales for children do not distinguish between old-fashioned and modern forms of racism; instead, they focus on racial bias (PRAM II), ingroup pride and outgroup prejudice (Doyle and Aboud, 1995; P. Katz and Zalk, 1978), or on positivity or negativity attributed to both the ingroup and outgroup simultaneously (Doyle and Aboud, 1995). Developmental differences notwithstanding, both the adult and child scales ultimately measure positivity and negativity toward racial groups, as assessed by patterns of responses to standardized items.

### Tasks Designed to Assess Racial Prejudice

In addition to the explicit scales, one can find tasks designed to reveal racial prejudice in both the child and adult social cognition literature. These tasks are grouped and discussed here because they do not rely on rating or agreement scales in response to evaluative statements in the same way as do the explicit scales summarized above. Biernat and Crandall (1999) identify the Racial Reconciliation test (Doyle and Aboud, 1995) as one task measuring prejudice for children.<sup>6</sup> In this task, children are asked to solve hypothetical disagreements between the self and fictitious same-age, same-sex peers of (a) a different racial group and (b) the same racial group. Children are shown their arrangement of pictures and then one of the other children's arrangements and asked, "Are you both right or is someone wrong?" (Doyle and Aboud, 1995, p. 215). Choosing "both right" is considered reconciliation and (without the child's knowledge) he or she receives a point for each such response. (Thus, scores can range from 0 [no reconciliation] to 2 [reconciliation for both targets].) While an assessment of prejudice might be extractable from this task, Aboud believes the Racial Reconciliation Test is "not a measure of prejudice, but rather of the young child's inability to reconcile different perspectives (e.g., of a white person and a black person who might have different preferences)" (F. E. Aboud, personal communication, August 30, 2007). This belief is based on the pattern of findings for this task reported in Doyle and Aboud (1995, footnote 1). Only 2 of the 47 children in their sample showed a pattern of responding that could be construed as prejudiced (i.e., saying that the other-race peer was wrong but a same-race peer was right when each peer showed the same arrangement to the child).

One task for children that is universally considered a racial prejudice measure is the perceptual discrimination task (P. Katz and Zalk, 1978). In this task, children attempt to differentiate individuals in the racial ingroup and a racial outgroup (or sometimes just the latter) by remembering their names. P. Katz and Zalk (1978) found that children harboring negative intergroup attitudes had more difficulty discriminating faces of racial outgroup

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<sup>6</sup> It should be noted that the Racial Reconciliation Test is a modified version of the original Reconciliation Test used in Aboud (1981). This modified version appears in the Doyle and Aboud (1995) investigation along with the Multi-response Racial Attitude Measure.

members. This lack of perceiving differences within an outgroup can promote inappropriate generalizations (Robinson and Hall, 1999). To counteract such tendencies, the use of exercises to increase perceptual differentiation, such as learning to observe more carefully, or to associate names to stimuli, has been shown to reduce children's negative racial attitudes (e.g., Aboud and Fenwick, 1999; Hohn, 1973; P. Katz, 1973a, 1973b, 1976; P. Katz and Zalk, 1978). This task has an admittedly applied focus (i.e., to identify and reduce racial prejudice), but it, nonetheless, can be used to ascertain a child's level of racial prejudice.

Adult tasks are more varied. In some tasks, participants are asked to give their impressions of their actual interactions with racial outgroups in the laboratory setting (e.g., Shelton, Richeson, Salvatore, and Trawalter, 2005b), while others involve coding actual behaviors during interactions (e.g., McConnell and Leibold, 2001). Still other tasks involve measuring the activation of stereotypes via lexical decisions and the subsequent use of those activated constructs on decisions or hypothetical behavior (e.g., Gaertner and McLaughlin, 1983; Wittenbrink, Judd, and Park, 2001) or assessing whether activated stereotypes from the categorization of photographs affect decision-making (e.g., Correll, Park, Judd, and Wittenbrink, 2002). The above forms are not an exhaustive list; rather, they are used to illustrate the idea that many tasks involve a choice among a set of behaviors or associations – some of which indicate bias against a racial outgroup.

### **Implicit Measures of Racial Prejudice**

In response to some of the difficulties of directly asking participants to respond to statements on scales, many researchers have opted for implicit (presumably unconscious) or unobtrusive measures of prejudice (e.g., Fazio, Jackson, Dunton, and Williams, 1995; Wittenbrink, Judd, and Park, 1997). Such measures are currently used with children (e.g., Baron and Banaji, 2006) as well as adults. The hope of these measures is that they might provide a bonafide pipeline to participants' true racial attitudes (Fazio et al., 1995), which may be concealed when they respond to items on explicit racial prejudice scales. The logic of implicit measures is to use behavioral responses (e.g., button-presses in response to supraliminal presentations; e.g., Fazio et al., 1995; Judd, Wittenbrink, and Park, 1999), heart-rate (e.g., Blascovich, Mendes, Hunter, Lickel and Kowai-Bell, 2001; Mendes, Blascovich, Lickel, and Hunter, 2002), facial electromyography (EMG) (e.g., Brown, Bradley, and Lang, 2006; Vanman, Saltz, Nathan, and Warren 2004), or brain imaging using fMRI (e.g., Phelps et al., 2000; Richeson et al., 2003; Wheeler and Fiske, 2005) to assess prejudice because these responses are presumably not as easily concealable as responding to statements on a scale.

While physiological data collection may be the most valid of the approaches, behavioral responses, such as the Implicit Association Test (IAT) (Greenwald, McGhee, and Schwartz, 1998) have become very popular (Ashburn-Nardo, Knowles, and Monteith, 2003; Cunningham, Preacher, and Banaji, 2001; Dasgupta, 2004; Richeson, Trawalter, and Shelton, 2005; Richeson and Shelton, 2003). The basic logic of the IAT is to measure both GOOD and BAD associations with different targets (e.g., "Black" and "White"). Thus, the assignment of evaluative attributes (e.g., "pleasant," "good" [GOOD] or "unpleasant," "bad" [BAD]) to target groups is the focus. The IAT has been criticized for its original, rather simplistic subtraction method (which may have created confounds; Greenwald, Nosek, and Banaji, 2003), for being too sensitive to supraliminal primes (e.g., Dasgupta and Greenwald, 2001; Foroni and Mayr,

2005), and for not sufficiently dealing with other confounds such as cognitive skill (McFarland and Crouch, 2002) and the salience of response options (Rothermund and Wentura, 2004).

Blanton and colleagues have recently called into question the use of the IAT based on statistical and criterion validity concerns (e.g., Blanton, Jaccard, Christie, and Gonzales, 2007; Blanton, Jaccard, Gonzales, and Christie, 2006). Briefly, Blanton et al. (2006) argued, in part, that the theoretical model of the IAT is causally restrictive because it predicts an interaction between the evaluations of “White” and “Black” targets but this interaction is assessed using an additive statistical model (i.e., the difference score method). Additionally, in Blanton et al. (2006, Study 2) participants showed small, but significant, correlations between positive items across racial targets (i.e., “Black/positive” and “White/positive”) and between negative items across racial targets (i.e., “Black/negative” and “White/negative”). These correlations suggest that the underlying logic of complementary scores for the IAT (i.e., an implicit association is the function of the difference between compatible and incompatible trials) is belied by a tendency for participants to respond positively or negatively to any presented racial group. These substantive critiques have weakened an argument for this method providing a bonafide pipeline to “true” attitudes. The IAT scoring method was adjusted to lessen confounds (Greenwald et al., 2003) and to create a better measure of ingroup and outgroup constructs (e.g., bias, favoritism) (see Richeson et al., 2005), yet some theorists remain unconvinced as to the usefulness of the IAT even with these modifications (see Blanton et al., 2006, 2007). Despite the controversy, the most useful piece of information from the IAT may simply be the use of reaction times as an unobtrusive measure in the assessment of racial prejudice, which adds a new dimension of interpretation to the data by allowing researchers to focus on speed of response as well as choices. Reaction times may indicate the intensity or extremity of prejudice (when examined with respect to specific choices).

Although different in the kind of data collected, the logic of the behavioral (versus physiological) implicit measures is not very different from the task assessments of racial prejudice summarized above. The implicit measure attempts to uncover who is prejudiced and to what degree by recording patterns of responses to pre-determined stimuli. In the interpretation of the data, some patterns indicate strong prejudiced attitudes, while other patterns indicate comparatively less prejudiced attitudes, using subtraction methods in the form of adjusted *D* scores (Greenwald et al., 2003), or subsequent task performance on unrelated measures, such as executive function (e.g., Richeson et al., 2003; Richeson and Shelton, 2003). Tasks also rely on recording the patterns of responses to pre-determined stimuli (usually without assessing response latency), and the patterns of responses are evaluated (given the structure of the presentation) as indicating varying degrees or different forms of racial prejudice.

### **Commonality Among Explicit, Task, and Implicit Approaches**

Aside from the obvious focus on the same topic and interest in deriving the same information about the direction and extent of prejudice, explicit, task, and implicit racial prejudice assessments to date have largely focused on prejudice in one dimension. Specifically, these approaches use a single target group and single perceiver group as the



underlying method of assessment. That is, most of the scales concern “Black” individuals (e.g., “African-American,” “Black-Canadian,” etc.) as targets and “White” individuals (e.g., “European-American,” “White-Canadian,” etc.) as perceivers (see Shelton, 2000). Shelton (2000) recently argued that such a focus allows researchers to see only part of the picture when it comes to racial prejudice.

A number of theorists have endeavored to include parameters other than “White” to “Black” comparisons (Bobo and Hutchings, 1996; Brigham, 1977, 1993; Shelton, 2000). For example, researchers have focused on the prejudice of “Whites” against: “Hispanics” (e.g., Weyant, 2005); Arabs (e.g., Dambrun, Guimond, and Michinov, 2003; Pratto et al., 1994); Aboriginal Australians (e.g., Pedersen and Walker, 1997); and “Asians” (Johnson, Terry, and Louis, 2005). Likewise, focusing largely on implicit measures, Richeson and Shelton and colleagues have recently endeavored to show that “Blacks” harbor prejudice against “Whites” (Richeson et al., 2003, 2005; Richeson and Trawalter, 2005; Shelton and Richeson, 2005, 2006; Shelton, Richeson and Salvatore, 2005a; Shelton et al., 2005b). Johnson and Lecci (2003) and Brigham (1977) also have investigated Black-to-White prejudice using questionnaire-based scales. Yet, as these citations indicate, the inclusion of more parameters besides “White” to “Black” prejudice was accomplished largely in the extant single-target group, single-perceiver group set-up, rather than as a multiple-target, multiple-perceiver configuration. Only occasionally (e.g., Lin, Kwan, Cheung, and Fiske, 2005) are multiple racial groups used as perceivers (e.g., “White” and “people of color”) to assess prejudice against one outgroup (e.g., “Asian-Americans”). A similarly small number of studies have examined prejudice from one racial group as perceivers to multiple outgroup targets (see Cummings and Lambert [1997] for an exploration of the prejudice of “African-Americans” toward both “Hispanics” and “Asian-Americans”; Walker [1994] for the prejudice of “White Australians” toward “Aborigines” and “Asians”; and Wilson [1996] for the prejudice of “Whites” against “Blacks,” “Hispanics,” “Asians,” and “Jews” in the United States). However, almost all of these studies use single items from public opinion research, not explicit scales, tasks, or implicit measures. Virtually no research, to date, has expanded existing methods of studying racial prejudice to a multiple-perceiver, multiple-target configuration.<sup>7</sup>

## **BENEFITS OF A MULTIPLE-PERCEIVER, MULTIPLE-TARGET CONFIGURATION**

It is clear that researchers are branching out and studying multiple, discrete configurations of pairwise prejudice. Yet, the very *discrete, unidimensional* assessment of perceivers and targets in most of the studies does not allow researchers to fully explore many important constructs in the prejudice literature.<sup>8</sup> For example, concepts such as ingroup

<sup>7</sup> While not focused on racial prejudice, it should be noted that Herek and colleagues have conducted research using the feeling thermometer to compare levels of prejudice toward bisexual men and bisexual women (targets) using heterosexual men and women as perceivers (Herek, 2002) and toward lesbians and gay men (targets) using heterosexual men and women as perceivers (Herek and Capitanio, 1999). This method can be viewed as a very rudimentary form of the method we endorse.

<sup>8</sup> Certain concepts such as outgroup homogeneity, ingroup heterogeneity (e.g., Park and Rothbart, 1982) and ingroup homogeneity (e.g., Lee and Ottati, 1993, 1995) can be easily studied in the single-perceiver group,

favoritism/preference and outgroup bias/derogation (e.g., Brewer, 1979) are difficult to study in this paradigm (see Cameron et al., 2001). Of course, these concepts have been studied using pairwise comparisons of one racial ingroup (perceiver) and one racial outgroup (target) for decades, but there is (and always has been) a flaw in the logic of interpretation. Strictly speaking, if one is able to demonstrate that “White” participants show derogation of “Blacks,” and the latter is the only outgroup included in the study, then the logical question becomes: Is this derogation *selective* to “Blacks” or *generalized* against all racial outgroups (including “Blacks”)? A generalized prejudice account would make the same predictions about patterns of results as the selective prejudice account. That is, if “White” participants have a generalized prejudice against all “Non-Whites” then they will downrate *any* outgroup. If only one racial group is included as a target, then a researcher cannot obtain affirmative evidence for either effect—selective or generalized derogation.

It appears prudent to include *multiple racial outgroups as targets* in prejudice studies in order to answer this and other fundamental issues regarding possible differential perceptions of racial groups (see Bobo and Hutchings, 1996). For example, one could examine the repudiated hierarchical ordering of racial groups that some theorists posit (see Gold [2004] for a review). Additionally, implications from colorblind racism theory (Bonilla-Silva, 2003) also can be investigated by allowing researchers to examine multiple target groups simultaneously to explore to what extent those who endorse colorblind ideology actually show racial bias and toward whom.

## **A NEW MULTIDIMENSIONAL ARCHITECTURE AND APPROACH DELINEATED**

It should be noted that by 2010 in the United States the largest racial group after “European-Americans” (“Whites”) is projected to be “Hispanic-Americans” (“Latinos”). Moreover, the “Asian-American” (“Asian”) population is growing at a faster rate than the “African-American” (“Blacks”) population (U.S. Census Bureau, 2004). Ironically, most of the racial prejudice research continues to focus on prejudice from Whites-to-Blacks and the newest research focuses on prejudice from Blacks-to-Whites while prejudice toward the soon-to-be second largest racial group in the U.S. is understudied. Our solution to this quandary is to not simply urge more research on “Hispanic-American” and “Asian-American” targets using familiar methods; instead, our proposed solution is to study the groups simultaneously as both targets and as perceivers. The multi-dimensional method that we propose can be organized as three separate but interrelated facets—response options, targets, and perceivers—all of which can (and should) be integrated into a single instrument, as outlined below.

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single-target group paradigm because they theoretically rely on the perception of a single perceiver group and can be applied to any number of similar target groups. For instance, one could demonstrate that outgroup homogeneity happens for facial recognition using “Blacks” as the outgroup for “Whites” and imagine that this effect could extend to “Asians” as an outgroup (Bernstein, Young, and Hugenberg, 2007).

## The First Facet: Multiple Response Options

Cameron et al. (2001) have noted the difficulty in the child literature with utilizing the familiar binary forced-choice response options. The KZPP and the PRAM II both ask children to attribute positive and negative attributes (separately) to *either* the ingroup *or* outgroup — there are no other options. This binary choice is flawed because it does not sufficiently disentangle *ingroup favoritism* from *outgroup derogation* (Cameron et al., 2001). That is, children could choose the ingroup in the KZPP or PRAM II only because they want positive adjectives to be attributed to the ingroup and negative adjectives not to be attributed to the ingroup, thereby showing favoritism for one group not derogation of the other. Yet, in a binary choice situation, negative adjectives can only be attributed to the non-ingroup response option, the outgroup, *even if* the child has no particular negative feelings toward the outgroup.

An analogous problem exists in the adult prejudice literature. As stated previously, the original IAT methodology used a simple subtraction method (between WHITE/DESIRABLE and BLACK/UNDESIRABLE responses), making it virtually impossible for older versions of the IAT to disentangle ingroup favoritism from outgroup derogation (Blanton et al., 2006). The improved scoring algorithm of calculating *D* scores supposedly ameliorates this problem (e.g., Richeson et al., 2005). However, some confounds, such as salience asymmetry in response pairings, are not eliminated simply by using the modified *D* score method (see Greenwald, Nosek, Banaji, and Klauer, 2005; Rothermund and Wentura, 2004). Additionally, using the IAT and the modified scoring method, Blanton et al. (2006, Study 2) showed a significant, positive correlation between WHITE/NEGATIVE and BLACK/POSITIVE responses but a near zero correlation between WHITE/POSITIVE and BLACK/NEGATIVE responses. This pattern suggests that the argument for incompatible judgment as the assessment of prejudice only works for one set of responses (not both as the theory contends), and thereby may illustrate that the IAT cannot meaningfully disentangle favoritism and derogation.

We agree with the Cameron et al. (2001) assessment of the methodological issues for children's measures, argue that the same principles can be extended to adult work with the IAT, and propose that future work on racial prejudice provide and examine multiple, discrete response options. One of the only racial prejudice instruments to include more than two response options is the MRA for children (Doyle and Aboud, 1995, which was based on a previous version of an inter-ethnic prejudice assessment [Doyle, Beaudet, and Aboud, 1988]). The MRA allows children to choose either: (a) ingroup (provided that the child is identified as one of the presented groups), (b) outgroup, or (c) both groups. Cameron et al. (2001) have noted that even while the "both" response option is a good addition, a "none" (neither) response option also would be prudent to disentangle whether there really is favoritism or derogation. Interestingly, as Cameron et al. (2001) report, usages of the MRA and its prototype measure (Doyle et al., 1988) usually do not include the "both" response in analyses, opting instead to analyze the familiar difference score between ingroup-positive and outgroup-negative responses.

To fully appreciate the argument made by Cameron et al. (2001), consider, for instance, that with three response options — ingroup, outgroup, and both — if a child is truly showing ingroup favoritism, the problem of interpretation remains for the negative attributions. As the "both" response option *includes the ingroup* this option may not be chosen for negative attributes when a child wants to show preference for the ingroup. Thus, the child would

simply choose the outgroup for the negative attributes *because it is the only option that does not include the ingroup*. Yet, if a child were allowed to choose “neither” for negative attributes, researchers would be able to clearly interpret this result. In effect, ingroup favoritism would be a particular constellation of responses: only the positive items would be assigned to the ingroup and the negative items would be assigned to neither group (i.e., neither ingroup nor outgroup). This pattern would clearly show that children favor the ingroup but do not derogate the outgroup (by not assigning negative attributes to that group). In effect, in a four-option space (neither, ingroup, outgroup, both), a participant is allowed to not choose any group; a three-option space (using “both”) does not provide that option.

Beyond the argument provided by Cameron et al. (2001), we believe that the “neither” option as part of a four-response set (neither, ingroup, outgroup, both) allows another layer of interpretation. As we noted earlier, virtually the only measure to assess nonprejudice among adults is Universal Orientation (Phillips and Ziller, 1997). Consequently, it appears that children are assumed to show some level of bias (either ingroup preference or outgroup derogation; see Cameron et al. [2001] for a review), as are adults using IAT methods or prejudice scales. It is possible, however, that some children and adults show no ingroup preference and no outgroup derogation. If such an attitude configuration existed, then the four-response space would allow researchers to see it as well. That is, participants who were nonprejudiced would likely show one of two response patterns. One pattern would include “both” responses for positive attributes and “neither” responses for negative attributes. This pattern might be a universal positive orientation toward people (ingroup and outgroup). The other pattern would include “neither” responses to both positive and negative items. In this case, the participant is reporting that neither the ingroup nor the outgroup is good or bad. While the second may not be the paradigmatic case of nonprejudice, it is a nonprejudiced pattern in that neither group is preferred nor derogated over the other, making it one kind of egalitarian perception.

The merits of adding a “neither” (none) response notwithstanding, we propose another response option—one that provides yet another level of interpretive sophistication. A four-response forced-choice set has several merits, as we and Cameron et al. (2001) have argued. Nevertheless, the forced-choice nature of such a response set would provide interpretational problems of its own. It may be that a participant (especially a child) does not understand how to make such an assessment between or among targets, or the participant (especially an adult) does not see how to legitimately make such a choice given the information provided. Therefore, we believe that the participant should be given the option to state “I don’t know,” “I can’t tell” or something similar. Although some researchers may decry the use of an opt-out response, it seems prudent that children or adults be given this opportunity. If the interpretation of a response is that it reflects a child’s or adult’s actual beliefs or feelings, then it would be inadvisable to force a participant to make a decision when she or he does not feel comfortable with the question asked or the responses provided. In this case, the data quality is compromised because the participant was forced to respond. Consequently, a “don’t know” or “can’t tell” option theoretically allows a researcher to interpret the four other responses (neither, both, ingroup, outgroup) as statements of *relative certainty* because the participant has the option of not answering the question.

## The Second Facet: Multiple Targets

As we discussed at the outset and as others have noted (e.g., Shelton, 2000), virtually all existing measures of racial prejudice for children and adults focus uni-dimensionally on one group as the target and another as the perceiver. However, we believe there is a serious problem with only using one group as the target—namely, one cannot really assess the locus of the negative or positive attitudes. For instance, once negative attributes have been assigned to the outgroup (e.g., via the KZPP or IAT) the question becomes, is this derogation *specific* to that particular outgroup? Or, would this participant show the same level of derogation toward all racial outgroups if given the opportunity?

It is tempting but, ultimately, incorrect to interpret negativity toward the presented outgroup as negativity toward that specific group. The problem lay in the stimulus presentation. The KZPP, PRAM II and the IAT methods present only two targets: (a) the ingroup and (b) a single outgroup (and usually “White” and “Black”).<sup>9</sup> With the binary forced-choice method that each type of measure uses, the participant must choose one or the other target. In this two-response, two-target space, the logical counterpart of the ingroup favoritism problem is at play. Focusing only on the outgroup choice, if a participant chooses negative attributes for the outgroup, there are (at least) two potential psychological causes: (a) the participant dislikes the specific racial outgroup presented, but not other racial outgroups, and (b) the participant dislikes all racial outgroups equally. In the second case, the presented racial outgroup is simply a “stand-in” for all racial outgroups. In effect, the participant uses an INGROUP/NOT-INGROUP logic to respond. Accordingly, the interpretation that the specific, presented racial outgroup is *selectively* disliked may or may not be the case.

Notice, however, that adding the five-option response set to the two-target presentation does not resolve this problem. If only two targets are presented then even if the outgroup is chosen for a negative attribute (when the participants could have chosen “neither” or “both” as responses), then one only knows that there is definite outgroup derogation, but the specificity of derogation—selective or generalized—is unknown because there is not a comparison racial outgroup available to provide affirmative evidence for a specific derogation. Thus, like multiple response options, one needs multiple racial outgroups as targets to clearly argue for a specific bias against any one outgroup.

Presenting multiple outgroup targets brings with it important methodological considerations. Two general classes of presentation architecture are possible with multiple targets: (a) exhaustive pairwise and (b) all groups simultaneously. The former allows the five response options to remain unchanged (i.e., neither, ingroup, outgroup, both, don’t know), but requires more presented items than the latter. The latter requires a change to the labels of the five response options (but their general meaning is the same) as well as new responses to capture all possible patterns (i.e., none [neither], ingroup, outgroup-1, outgroup-2, [etc.], all groups [both], all outgroups [new response], some subset of outgroups but not all [*a set* of new responses], and don’t know).

While the simultaneous presentation method might be tempting, we argue that the exhaustive pairwise stimulus presentation should be preferred. The reasons rest on both the clarity of interpretation and the simplicity of the response category construction. Take, for

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<sup>9</sup> Of course this statement assumes that a participant self-identifies as one of the two presented groups, which is not always the case.

example, the simultaneous presentation of one exemplar from 4 target groups — “White,” “Black,” “Asian,” and “Hispanic” — when the participant identifies as “White.” In this case, the response categories go from 5 (exhaustive pairwise) to 17 (simultaneous) to give all possible combinations and thus present no systematic bias in the provided responses. The 17 categories would be: (a) “none,” (b) “White” [ingroup], (c) “Black” [outgroup-1], (d) “Asian” [outgroup-2], (e) “Hispanic” [outgroup-3], (f) “all” [all four groups], (g) “Black, Asian, and Hispanic” [all outgroups], (h) “Black and Asian,” [outgroup pair-1], (i) “Asian and Hispanic” [outgroup pair-2], (j) “Black and Hispanic” [outgroup pair-3], (k) “White and Black” [ingroup/outgroup pair-1], (l) “White and Asian” [ingroup/outgroup pair-2], (m) “White and Hispanic” [ingroup/outgroup pair-3], (n) “White, Black, and Asian” [ingroup/outgroup trio-1], (o) “White, Asian, Hispanic” [ingroup/outgroup trio-2], (p) “White, Black, and Hispanic” [ingroup/outgroup trio-3] and (q) “I don’t know.” Presenting 17 or more response categories is far too complex for either children or adults to fully comprehend and would probably result in the creation of response artifacts, such as participants using response heuristics (e.g., only viewing the first five options). Thus, the exhaustive pairwise presentation method would be preferred because it keeps the response space at 5 options.

The exhaustive pairwise method requires similar diligence in the presentation of the total number of items. For the exhaustive pairwise presentation method, one needs to be mindful of presenting all combinations of targets in pairs (hence, the “exhaustive” title). As a result, there will be ingroup-outgroup pairs and outgroup-outgroup pairs. Nonetheless, the combinations of the exhaustive pairwise presentation are not complex. Using the four-target example from above — “Black,” “White,” “Asian,” and “Hispanic” — we can see that all pairwise comparisons would result in 6 initial pairings (i.e., Black-White, Black-Asian, Black-Hispanic, White-Asian, White-Hispanic, and Asian-Hispanic), see Figure 1. If a two-dimensional valence factor (e.g., positive and negative) were added, then the initial stimulus set is multiplied by 2 for a total of 12 items. If one were interested in controlling for the specific content of valenced attributes across all the pairings, one need only multiply by the number of unique attributes.

In the simplest case, let us use 2 unique attributes for each valence level — that is, 2 positive attributes (e.g., “easy-going” and “beautiful”) and 2 negative attributes (e.g., “violent” and “ugly”). In the case of two unique attributes for each valence level, we need only multiply 12 by 2 (because valence is also included in our 12-item running total) to get 24 items. Adding three unique attributes for each would make our total 36 items ( $12 \times 3$ ), adding four unique attributes would give us 48 items ( $12 \times 4$ ), and so forth. Recall, that each item only has 5 response options (not 17 or more), and even a 48-item measure might be easily administered to children. Finally, considering children in particular, it may be useful to simply present pictures of the actors to be judged without names and develop the response options consistent with a purely graphically presentation. This method avoids the problems of literacy levels and unwanted confounds, such as familiarity or other associations with names themselves.

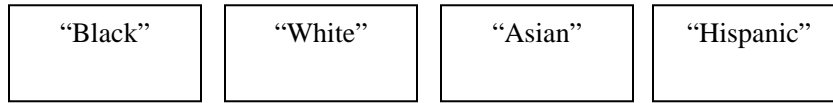
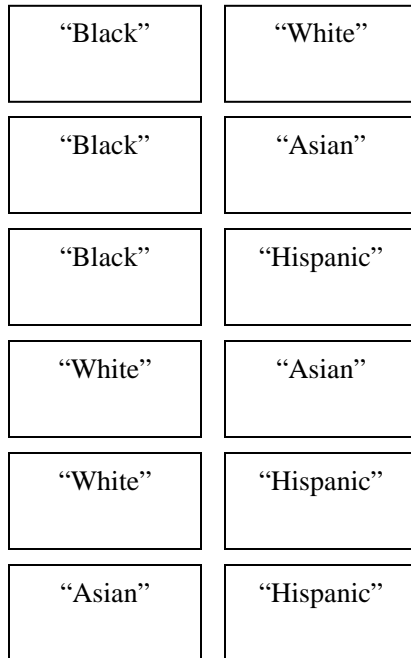
*Target Groups**Exhaustive Pairwise Presentation of the Target Groups*

Figure 1. A graphical depiction of the exhaustive pairwise presentation strategy. Four targets are presented: “Black,” “White,” “Asian,” and “Hispanic.” The labels are meant to be broad enough to include any national instantiations (e.g., “African-American,” “Black-Canadian” for “Black”). The pairwise comparisons are depicted within the rows. As the figure indicates, any single target group is presented with every other target group. For research, order of presentations and position of targets (left, right) may be counterbalanced.

As we display in Figure 2, one might use a picture-story methodology (similar to the KZPP) to present the scenario and question via audio (“Here are two girls in the same class. Who will get a good grade on the next test?”), then use pictures as response options: each target singly, both targets, neither target (using a cross-out over both targets), and a question mark (?), see Figure 2.

### **The Third Facet: Multiple Perceivers Using a Single Instrument**

Our proposal of using multiple response options and multiple targets is also quite amenable to using multiple perceivers of different racial identities. If the five-response

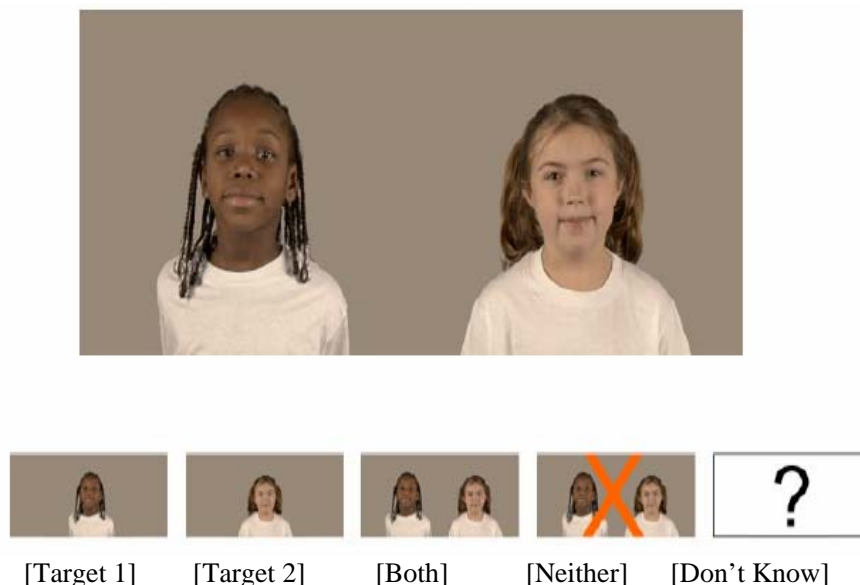


Figure 2. Possible stimulus and response option presentation for a single instrument with multidimensional architecture for children. Consistent with the mock display, one could present children with pictures of the response options (rather than providing words and names of characters to avoid any biases associated with remembering names, matching names to faces, and literacy). A question that might be asked for this presentation is, “Who will get a good grade on the next test?” In this case, (with the aid of pointers) “this girl” (i.e., target 1 *or* target 2), “both girls,” “neither girl,” and “I don’t know” all make logical and grammatical sense as answers.

options and use of multiple targets were integrated in a single instrument (as outlined above) the structure of the single instrument would allow the comparisons to be calibrated to the racial identity of the perceiver. Thus, a single instrument could provide a simultaneous measure of Black-to-White prejudice, White-to-Black prejudice, as well as any other form.

This breadth of interpretation and use is possible because of the exhaustive pairwise stimulus presentation and nature of the response options. As described above, when a participant identifies as “White,” these targets become the ingroup and all other targets are racial outgroups. Likewise, when a participant identifies as “Black,” these targets are the ingroup, all other targets are racial outgroups, and so forth. The same response options can be used because they conceptually represent the ingroup and various outgroups (in addition to both, neither, and don’t know) for presented pairs and therefore require no adjustment (see Figure 2). One simply needs to record the participant’s racial self-identity to assess which group counts as the ingroup.

The foregoing is a new concept when compared to traditional scales used to assess racial prejudice whose items indicate a single target group and assume that the perceiver does not identify with that group (e.g., Ard and Cook, 1977; Brigham, 1977, 1993; McConahay, 1986; Sidanius et al., 1991). Other methods of assessing racial prejudice such as the KZPP, PRAM II and IAT do not encounter the same problem because they present at least two target groups (usually “Black” and “White”). Yet, if participants identify as a race other than “Black” or “White,” no ingroup information can be assessed using the KZPP, PRAM II or the Black/White IAT versions.



## IS A SINGLE INSTRUMENT FOR ASSESSING RACIAL PREJUDICE USEFUL OR NEEDED?

Despite the merits of the multi-faceted approach we outlined, one might question whether a single instrument designed to assess racial prejudice is useful or needed. Given the constructs uncovered by more than 70 years of racial prejudice research, can a single instrument hope to capture core aspects of this phenomenon? While taking nothing away from the variegation of constructs associated with racial prejudice and progress made to this point, we believe that a single instrument using a multidimensional architecture can capture and even refine many of the existing constructs associated with racial prejudice. This argument is developed in more detail in the next section. Here, we draw the reader's attention to similar single-instrument projects already used to assess other types of prejudice (e.g., sexism and prejudice against homosexuality) to underscore the idea that a single instrument can capture various aspects of prejudice.

For example, it is common for study protocols to have both men and women as participants complete the Ambivalence toward Men Inventory (AMI) (Glick and Fiske, 1999) or the Ambivalent Sexism Inventory (ASI) (Glick and Fiske, 1996), both complementary scales designed to measure a participant's level of hostile and benevolent sexism toward men (AMI) and toward women (ASI). Each scale by itself uses multiple perceivers (in this case, men and women as participants) and assesses their endorsement of multiple constructs (in this case, hostile and benevolent sexism). Two complementary scales are needed because the contents of both benevolent and hostile sexism differ based on the target group – men or women. Thus, the single-instrument aspect of these sexism measures is restricted to one instrument for measuring ambivalent sexism toward women or toward men (but not both simultaneously). Accordingly, the ASI and AMI lack multiple target groups in their single-instrument approach.

An example much closer to the proposal in this chapter is the Attitudes toward Lesbians and Gay Men Scale (ATLG) (Herek, 1988). The ATLG simultaneously assesses participants' attitudes toward lesbian women and gay men as target groups (i.e., assesses multiple targets), making it possible to explore whether participants have equally prejudicial attitudes toward either target group, or whether one target group is viewed more negatively than another. Furthermore, any differences based on the gender of the participant (in this case, heterosexual men and women [multiple perceivers]) also can be examined. This method was used to argue that heterosexual men (as compared to heterosexual women) tend to have more favorable views of lesbian women versus gay men (Herek, 1988). (Heterosexual women tend to show equal levels of prejudice toward both target groups.)

While the ATLG is not exactly comparable to the measure we propose creating for racial prejudice (e.g., the ATLG does not assess nonprejudice and the items concerning lesbians and gay men are not exactly the same, and thus not directly comparable), we urge social scientists interested in racial prejudice to take inspiration from the ATLG to explore direct comparisons among multiple target groups to more fully map the contours of racial bias and explore any differences in response profiles on the basis of participants' ascribed racial identities. For instance, are "Whites" and "Blacks" similar in their prejudice toward "Asians"? Or does one group show more favoritism or derogation toward "Asians" than the other?

One important difference between the analogous methods of the ASI, AMI, and ATLG and our method is that we propose a measure that is closer to the task and behavioral implicit measures rather than a questionnaire-based scale. We propose the development of inventory that is based on a task, such as responding to questions in a picture-story structure, which is also amenable to response latency measurement, rather than the development of a new scale or series of scales for racial prejudice. Below, we discuss the theoretical constructs that can be refined and uncovered by our proposed instrument to elucidate its position with respect to the current landscape of measuring racial prejudice.

### **ANTICIPATED OUTCOMES FROM A SINGLE INSTRUMENT WITH MULTIDIMENSIONAL ARCHITECTURE**

Integrating the three above-described facets (five response options, multiple targets, and multiple perceivers) into a single instrument would not be particularly difficult using extant computer technology. Aside from the methodological clarity that using such an instrument would provide (as argued above), new concepts would be at the disposal of theorists and researchers, while existing constructs would benefit from the added precision of measurement. These existing and new concepts are summarized in Table 1 and described in detail below in terms of response patterns on the multiple-response, multiple-target single-instrument methodology proposed in this chapter. In order to clearly understand the constructs below, one should assume that participants must assign negative attributes and positive attributes separately to either a single target group, both target groups, neither target group, or else indicate that they “don’t know” to whom to assign an attribute.

#### **Ingroup Favoritism**

This is a familiar construct, also known as ingroup preference, in both the child and adult literature on racial prejudice (e.g., Aboud, 2003; Brewer, 1979, 2001; Doyle and Aboud, 1995). As Cameron et al. (2001) have argued, this construct is ideally a preference for ingroup members with no negativity toward outgroup members. In terms of the stimulus presentation and response-option architecture presented in this chapter, this construct could be assessed unambiguously by examining the pattern of assigning most positive attributes to the ingroup and failing to assign negative attributes to any outgroup or to the ingroup (assigning them instead to the “neither” or “don’t know” response options).

#### **Outgroup Favoritism**

This construct also is known as outgroup preference and has been identified within the implicit prejudice literature using the IAT (Ashburn-Nardo et al., 2003; Dasgupta, 2004; Rudman, Feinburg, and Fairchild, 2002). In terms of a response pattern, outgroup favoritism is the identical pattern of responding as ingroup favoritism but switching the ingroup and the

**Table 1. Theoretical Constructs Extractable from a Single Instrument that Presents Multiple Racial Groups to Multiple Perceiver Groups**

| <b>Construct Description</b>                |   |
|---|---|
| <b>1. Ingroup favoritism</b>                | A preference for the ingroup with little or no negativity toward at outgroups   |
| <b>2. Outgroup favoritism</b>               | A preference for one outgroup (or multiple outgroups) with little or no negativity toward the ingroup   |
| <b>3. Generalized outgroup favoritism</b>   | An equal preference for all outgroups with little or no negativity toward the ingroup   |
| <b>4. Selective outgroup favoritism</b>     | A preference for one outgroup (or a subset but not all outgroups) with little or no negativity toward the ingroup and the remaining outgroups |
| <b>5. Outgroup derogation</b>               | A negativity toward one outgroup (or multiple outgroups) with little or no positivity toward the ingroup                                      |
| <b>6. Generalized outgroup derogation</b>   | A negativity toward all outgroups with little or no positivity toward the ingroup   |
| <b>7. Selective outgroup derogation</b>     | A negativity toward one outgroup (or a subset but not all outgroups) with little or no positivity toward the ingroup and remaining outgroups  |
| <b>8. Ingroup derogation</b>                | A negativity toward the ingroup with little or no positivity toward any outgroup  |
| <b>9. Traditional prejudice</b>             | A combination of preference for the ingroup and derogation of one or more outgroups   |
| <b>10. Inverse prejudice</b>                | A combination of preference for one or more outgroups and negativity toward the ingroup   |
| <b>11. Ambivalence</b>                      | Equal positivity and negativity to any group (including the ingroup)  |
| <b>12. Ingroup ambivalence</b>              | Equal positivity and negativity directed at the ingroup alone   |
| <b>13. Generalized outgroup ambivalence</b> | Equal positivity and negativity directed at all outgroups   |
| <b>14. Selective outgroup ambivalence</b>   | Equal positivity and negativity directed at one outgroup (or a subset of, but not all, outgroups)   |
| <b>15. Concomitant ingroup and outgroup</b> | Equal positivity and negativity directed at the ingroup and at any or all outgroups   |
| <b>16. Ambivalence</b>                      |   |
| <b>17. Nonprejudice</b>                     | No clear preference for any group (ingroup or outgroup) in the absence of derogation of any group   |

outgroup. Accordingly, this construct could be assessed by examining the pattern of assigning most positive attributes to the outgroups and failing to assign negative attributes to the outgroups or to the ingroup (assigning them instead to the “neither” or “don’t know” response options). Also, with the inclusion of multiple outgroups as targets in a single instrument,

outgroup favoritism can be more precisely assessed as either generalized or selective. Each is described below.

*Generalized Outgroup Favoritism.* This construct indicates that a participant favors all racial outgroups equally. The unambiguous pattern of responding that would indicate generalized outgroup favoritism would be assigning all positive attributes across the outgroups equally and the concomitant failure to assign negative attributes to any outgroups or to the ingroup (assigning them instead to the “neither” or “don’t know” response options). In this case, racial outgroups are not differentiated in terms of positive attributes.

*Selective Outgroup Favoritism.* This construct indicates that a participant favors one outgroup (or a subset of, but not all, outgroups) over other outgroups. As a response pattern, participants would assign positive attributes to one outgroup or a subset of outgroups. The remaining outgroups are not assigned positive attributes and also are not assigned negative attributes. Finally, the ingroup is assigned neither positive nor negative attributes.

## **Outgroup Derogation**

Outgroup derogation is another familiar construct within the prejudice literature, also called outgroup bias or outgroup prejudice (e.g., Aboud, 1988, 2003; Brewer, 1979, 2001; Brigham, 1977, 1993; Cameron et al., 2001; McConahay, 1986; Tajfel, 1982). This construct is, as it sounds, negativity toward an outgroup. Yet, previous interpretations of this phenomenon, especially for children, were problematic due to the confounding of response categories with other constructs (e.g., ingroup favoritism) (Cameron et al., 2001). With the methods presented in this chapter, one can now more cleanly assess outgroup derogation as the response pattern wherein most negative attributes are assigned to outgroups while most positive attributes are assigned to neither outgroups nor to the ingroup. As with outgroup favoritism, if one includes multiple racial outgroups as targets, outgroup derogation can be further parsed into generalized or selective.

*Generalized Outgroup Derogation.* As the name indicates, generalized outgroup derogation is equally derogating all racial outgroups. In terms of a response pattern, unambiguous generalized outgroup derogation would be assigning negative attributes equally to all presented outgroups while assigning positive attributes to neither the outgroups nor to the ingroup.

*Selective Outgroup Derogation.* This construct is based on the specificity of derogation. The unambiguous response pattern indicating selective outgroup derogation would be: one outgroup or a subset of outgroups (but not all outgroups) is assigned negative attributes but the remaining outgroups are not assigned these negative attributes. Additionally, positive attributes are not assigned to the specific outgroup(s) that received negative attributes and also are not assigned to the remaining outgroup(s) or to the ingroup.

## **Ingroup Derogation**

This construct is the logical counterpart to ingroup favoritism. If it is possible to favor the ingroup while not derogating the outgroups, then it is theoretically possible to derogate the ingroup while not favoring outgroups. The unambiguous response pattern for such a construct

would involve assigning most negative attributes to the ingroup, assigning no negative attributes to any outgroup, and finally assigning positive attributes to neither the ingroup nor the outgroups. Individuals who harbor negative attitudes toward ingroup members but show no preference for or bias against any racial outgroup would show this pattern.

### **Traditional Prejudice (or Pro-Ingroup/Anti-Outgroup Prejudice)**

This pattern of responding is a combination of ingroup favoritism and some form of outgroup derogation. That is, the ingroup is assigned positive attributes, while the outgroups are assigned negative attributes. In this way, traditional prejudice is distinguishable from ingroup favoritism and outgroup derogation (as described above) because it is the combination of these response sets, rendering the outcome ingroup favoritism *together with* outgroup derogation. Moreover, the anti-outgroup aspect of traditional prejudice can be further examined as generalized or selective. We term this construct “traditional prejudice” because it captures the paradigmatic scientific and non-scientific belief that prejudice is the combination of pro-ingroup attitudes and anti-outgroup attitudes.

### **Inverse Prejudice (or Anti-Ingroup/Pro-Outgroup Prejudice)**

The logical flipside of traditional prejudice is inverse prejudice. For this construct, participants would assign most positive attributes to outgroups and most negative attributes to the ingroup thereby inverting the pattern of traditional prejudice. This construct is reminiscent of the Clark and Clark (1947) investigation wherein the researchers found that children identified as “African-American” had negative attitudes toward dolls designed to represent “African-Americans” and positive attitudes toward dolls designed to represent “Whites.” With the methods proposed in this chapter, this phenomenon can be examined over a set of racial outgroups, not just one, to explore different expressions of pro-outgroup attitudes (e.g., generalized or selective).

### **Ambivalence**

Ambivalence refers to equally positive and negative attitudes toward particular attitude objects. In the case of racial prejudice, ambivalence has been examined with respect to at least one target group, “Blacks” (I. Katz and Haas, 1988), using a questionnaire-based explicit scale. However, with our proposed single instrument using a multidimensional architecture, ambivalence can be examined with respect to both the ingroup and outgroups as the attitude objects. Using the framework developed in this chapter, there can be at least four broad kinds of ambivalence: (a) ingroup ambivalence, (b) generalized outgroup ambivalence, (c) selective outgroup ambivalence, and (d) concomitant ingroup and outgroup ambivalence.

*Ingroup Ambivalence.* This construct refers specifically to ambivalent attitudes directed only at the ingroup. As a result, an unambiguous response pattern indicating ingroup ambivalence would be assigning all the positive and all the negative attributes to the ingroup while not assigning any negative or positive attributes to any outgroup.

*Generalized outgroup ambivalence.* This construct refers specifically to ambivalent attitudes directed equally at all outgroups. An unambiguous response pattern that would indicate generalized outgroup ambivalence is one in which all the positive and all the negative attributes are assigned to each and every outgroup while not assigning any negative or positive attributes to the ingroup.

*Selective Outgroup Ambivalence.* This construct is a narrower application of generalized outgroup ambivalence to specific outgroups or to one outgroup (not equally toward all). A response pattern that would indicate selective outgroup ambivalence is one in which a specific outgroup or a subset of outgroups is assigned all the positive and all the negative attributes while not assigning any negative or positive attributes to the remaining outgroups or to the ingroup.

*Concomitant Ingroup and Outgroup Ambivalence.* This construct is, in effect, the combination of each type of ambivalence, ingroup-directed and outgroup-directed. As such, it can encompass both generalized and selective outgroup ambivalence. Concomitant ambivalence involves both positive and negative attributes assigned to both the ingroup and to either a single outgroup, to multiple outgroups, or to all presented outgroups.

## Nonprejudice

It appears prudent that any measure of racial prejudice should also include the ability to assess its logical opposite, nonprejudice. As we noted earlier, most existing racial prejudice measures do not include such a possibility. However, the proposed construction of a single instrument using multiple response options and multiple targets does allow for the assessment of nonprejudice in addition to the various types of prejudice detailed above. As indicated previously, a nonprejudice response pattern could be of two kinds. One kind would be not assigning positive or negative attributes to any group — ingroup or outgroups. This pattern would essentially be a series of “neither” responses, indicating that the participant has no clear favoritism or derogation toward any group, including the ingroup. Another pattern would be responding with “neither” to any pair for negative attributes and responding “both” to any pair (i.e., ingroup-outgroup or outgroup-outgroup) for positive attributes. In this case, the participant appears to show only positivity toward any group and no negativity toward any group.<sup>10</sup>

## SUMMARY

The racial prejudice constructs presented above are purposefully listed as unambiguous or appear as non-overlapping because these are the logical possibilities that a single instrument constructed in the manner described can generate. Of course, combinations of the above constructs are also possible and we have detailed at least three instances of such combinations (i.e., traditional prejudice, inverse prejudice, and concomitant ingroup/outgroup

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<sup>10</sup> Because this pattern of responding is universal positivity, it is different from positive prejudice (i.e., assigning positive attributes based on group membership) because all groups are treated equally. In this case, group membership is a zero predictor of positive associations.

ambivalence). Although complex and varied, these constructs represent the theoretical space possible for the assessment of racial prejudice. The actual patterns evinced by participants are an empirical question and researchers would need to define the specific criteria for the presence or absence of these constructs based on percentage of responses, extent of responses, or some other measure. Nevertheless, we wanted to detail that which is possible to underscore the idea that racial prejudice can be meaningfully assessed via a single instrument for any set of racial identities as perceivers using multiple response options and multiple targets simultaneously.

Additionally, the multi-response, multi-target single-instrument architecture is completely amenable to the use of response latencies as a way to further assess levels of prejudice. The use of latencies with this instrument would make it parallel in some respects to existing behavioral implicit measures such as the IAT while the structure of response options and presented stimuli would allow for more precise differentiations between and among constructs using both overt choice and reaction time data. Reaction times could add a dimension of interpretability to the constructs listed above by allowing researchers to examine the extent or intensity of derogation, favoritism or ambivalence by measuring how quickly people respond when assigning positive or negative attributes to groups. Moreover, current multivariate statistical techniques can be employed to reduce the space of observed (*vs.* theoretical) constructs. Depending on the construction of the response scale (*i.e.*, continuous *vs.* categorical), techniques such as profile analysis, multidimensional scaling, conjoint analysis and correspondence analysis can be used to provide a systematic picture of the actual response space and the appropriate constructs that can be derived.

## CONCLUSION

To date, the literature on racial prejudice has largely focused on the phenomenon as it relates to a single perceiver group and single target group. While the historical motivations for this situation are understandable, we argue that it is time to advance our knowledge of the processes underlying and constructs associated with racial prejudice by constructing new measures that allow researchers to assess multiple target groups via multiple response options. Moreover, the same methods can be used to assess prejudice in children and adults (with presumed content changes for developmentally appropriate-language).

The thrust of this chapter is not to decry the existing techniques as much as supplement them with new ideas. While a single instrument designed to measure racial prejudice as delineated above is encouraged, the principles of the existing measures remain central to the proposed single instrument. The current focus of explicit scales, tasks and implicit measures on assessing negative attitudes toward a particular outgroup can be explored via the constructs of selective or generalized outgroup derogation, while positive attitudes can be explored via favoritism, and both can be explored via ambivalence. The reaction time methodology employed by behavioral implicit measures (*e.g.*, IAT) can also be retained in the single instrument by recording latencies from initial stimulus presentation until a response is indicated (see Figure 2 for a template of the stimulus presentation we envision). Furthermore, if the merits of the single instrument are demonstrated empirically with respect to distinguishing the different forms of racial prejudice detailed in the previous section, then

existing scales, tasks and implicit measures can be evaluated with reference to the constructs they assess. For example, using the single instrument proposed as a benchmark, one might find that the IAT can reliably assess outgroup favoritism (or lack thereof) but no other construct. In this case, researchers can use the IAT in the appropriate manner, knowing what construct(s) it can and cannot assess.

Additionally, current measures that are not directly focused on racial prejudice, such as motivation to control prejudice (e.g., Dunton and Fazio, 1997; Plant and Devine, 1998) and social dominance orientation (Pratto et al., 1994) are completely amenable to use with the proposed single instrument to advance our understanding of prejudice. One can, for example, explore whether traditional prejudice (as we have termed and defined it) correlates with a social dominance orientation, or whether outgroup derogation by itself is more strongly correlated. Similarly, researchers can explore which constructs identified above correlate with high or low motivation to control prejudiced responses to further define how racial prejudice functions with motivation.

The urgency of this issue is that as we continue to increase our understanding of what it means to live in a world in which people identify as different races, our methods to assess racial prejudice ought to become increasingly complex so that we may understand and explain the contours, nuances and associated motivations for racial prejudice in order to effectively address it. Therefore, it behooves us to figure out better ways to study racial prejudice in a multiracial world than we are currently using because the current methods only give a piecemeal picture of prejudice rather than a holistic view. We might take the lead from Thistlethwaite (1950) and other theorists of that era who intimated that what we now call “racial prejudice” is a system of attitudes and beliefs that connects all relevant groups. Yet, until we develop methods of studying these perceptions of multiple groups using a single, standardized instrument, we will be left with imprecise comparisons and imprecise conclusions.

Even without constructing a single instrument to measure racial prejudice, it is our hope that this chapter provokes a deeper consideration of the constructs associated with racial prejudice (see Table 1). It is not a logical necessity that a single instrument be developed to discover and assess the constructs that we have described here. In principle, these constructs could be assessed using multiple instruments.<sup>11</sup> In any event, we believe it prudent to explore these constructs and, in so doing, acquire a more sophisticated understanding of racial prejudice.

In sum, we have provided a detailed outline of the theory and methods that we believe can supplement and advance our knowledge about processes involved in racial prejudice. It also should be noted that the ideas presented here are applicable to other forms of prejudice such as sexual orientation prejudice, gender prejudice, as well as ethnic prejudice. Concepts such as favoritism, derogation and ambivalence, and the selective or generalized nature of them for multiple outgroups, can logically be examined for other social categories besides race. Finally, we urge theorists who study other forms of prejudice to query the depth of assessment in their respective fields, using the constructs presented here as starting points to advance our understanding of attitudes and social perception in general.

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<sup>11</sup> The use of multiple instruments would, admittedly, present some difficulties such as length of the measures, participant fatigue, and possible carry-over effects from responding to 4 to 6 measures at one time (depending on the number of target groups assessed).



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## REFERENCES

- Aboud, F. E. (1981). Egocentrism, conformity, and agreeing to disagree. *Developmental Psychology, 17*, 791-799.
- Aboud, F. E. (1988). *Children and prejudice*. New York: Blackwell.
- Aboud, F. E. (2003). The formation of ingroup favoritism and outgroup prejudice in young children: Are they distinct attitudes? *Developmental Psychology, 39*, 48-60.
- Aboud, F. E., and Fenwick, V. (1999). Exploring and evaluating school-based interventions to reduce prejudice. *Journal of Social Issues, 55*, 767-786.
- Allport, G. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- American Anthropological Association. (1998). American Anthropological Association statement on "race." *American Anthropologist, 100*(3). Retrieved from [www.aaanet.org/stmts/racepp.htm](http://www.aaanet.org/stmts/racepp.htm)
- Ard, N., and Cook, S. W. (1977). A short scale for the measurement of change in verbal racial attitude. *Educational and Psychological Measurement, 37*, 741-744.
- Ashburn-Nardo, L., Knowles, M. L., and Monteith, M. J. (2003). Black Americans' implicit racial associations and their implications for intergroup judgment. *Social Cognition, 21*, 61-87.
- Banton, M. (1977). *The idea of race*. Boulder, CO: Westview Press.
- Baron, A. S., and Banaji, M. R. (2006). The development of implicit attitudes: Evidence of race evaluation from ages 6 to 10 and adulthood. *Psychological Science, 17*, 53-58.
- Bernstein, M. J., Young, S. G., and Hugenberg, K. (2007). The cross-category effect: Mere social categorization is sufficient to elicit an own-group bias in face recognition. *Psychological Science, 18*, 706-712.
- Biernat, M., and Crandall, C. S. (1999). Racial attitudes. In J. P. Robinson, P.R. Shaver, and L.S. Wrightsman (Eds.), *Measures of political attitudes* (pp. 297-411). San Diego, CA: Academic Press.
- Blanton, H., Jaccard, J., Christie, C., and Gonzales, P. M. (2007). Plausible assumptions, questionable assumptions and post hoc rationalizations: Will the real IAT, please stand up? *Journal of Experimental Social Psychology, 43*, 399-409.
- Blanton, H., Jaccard, J., Gonzales, P., and Christie, C. (2006). Decoding the implicit association test: Perspectives on criterion prediction. *Journal of Experimental Social Psychology, 42*, 192-212.
- Blascovich, J., Mendes, W. B., Hunter, S. B., Lickel, B., and Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology, 80*, 253-267.
- Blumer, H. (1958). Race prejudice as a sense of group position. *Pacific Sociological Review, 1*, 3-7.
- Bobo, L., and Hutchings, V. L. (1996). Perceptions of racial group competition: Extending Blumer's theory of group position to a multiracial social context. *American Sociological Review, 61*, 951-972.
- Bogardus, E. (1928). *Immigration and race attitudes*. Boston, MA: Heath.
- Bogardus, E. (1933). A social distance scale. *Sociology and Social Research, 17*, 265-271.
- Bogardus, E. (1959). *Social distance*. Yellow Springs, OH: Antioch Press.

- Bonilla-Silva, E. (1997). Rethinking racism: Toward a structural interpretation. *American Sociological Review*, 62, 465-480.
- Bonilla-Silva, E. (2003). *Racism without racists: Colorblind racism and the persistence of racial inequality in the United States* (2nd ed.). Oxford: Rowman and Littlefield.
- Brewer, M. B. (1979). Ingroup bias in the minimal intergroup situation: A cognitive motivational analysis. *Psychological Bulletin*, 86, 307-324.
- Brewer, M. B. (2001). Ingroup identification and intergroup conflict: When does ingroup love become outgroup hate? In R. D. Ashmore, L. Jussim, and D. Wilder (Eds.), *Social identity, intergroup conflict, and conflict resolution* (pp. 17-41). New York: Oxford.
- Brigham, J. C. (1977). The structure of racial attitudes of blacks. *Personality and Social Psychology Bulletin*, 3, 658-661.
- Brigham, J. C. (1993). College students' racial attitudes. *Journal of Applied Social Psychology*, 23, 1933-1967.
- Brown, L. M., Bradley, M. M., and Lang, P. J. (2006). Affective reactions to pictures of ingroup and outgroup members. *Biological Psychology*, 71, 303-311.
- Cameron, J. A., Alvarez, J. M., Ruble, D. N., and Fuligni, A. J. (2001). Children's lay theories about ingroups and outgroups: Reconceptualizing research on prejudice. *Personality and Social Psychology Review*, 5, 118-128.
- Cavalli-Sforza, L. L., and Cavalli-Sforza, F. (1995). *The great human diasporas: The history of diversity and evolution* (S. Thorne, Trans.). New York: Helix.
- Clark, K. B., and Clark, M. P. (1947). Racial identification and preference in negro children. In T. M. Newcomb and E. L. Hartley (Eds.), *Readings in social psychology* (pp. 169-78). New York: Holt.
- Correll, J., Park, B., Judd, C., and Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, 83, 1314-1329.
- Cummings, S., and Lambert, T. (1997). Anti-Hispanic and anti-Asian sentiments among African-Americans. *Social Science Quarterly*, 78, 338-353.
- Cunningham, W. A., Preacher, K. J., and Banaji, M. R. (2001). Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science*, 12, 163-170.
- Dambrun, M., Guimond, S., and Michinov, N. (2003). Les composantes automatique et contrôlée des préjugés ethniques [Automatic and controlled components of ethnic prejudice]. *Revue Internationale de Psychologie Sociale*, 16, 71-96.
- Dasgupta, N. (2004). Implicit ingroup favoritism, outgroup favoritism, and their behavioral manifestations. *Social Justice Research*, 17, 143-169.
- Dasgupta, N., and Greenwald, A. G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology*, 81, 800-814.
- Davis, F. (1991). *Who is black? One nation's definition*. University Park: The University of Pennsylvania Press.
- Doyle, A. B., and Aboud, F. E. (1995). A longitudinal study of white children's racial prejudice as a social-cognitive development. *Merrill-Palmer Quarterly*, 41, 207-228.
- Doyle, A. B., Beaudet, J., and Aboud, F. E. (1988). Developmental patterns in the flexibility of children's ethnic attitudes. *Journal of Cross-Cultural Psychology*, 19, 3-18.
- Dunton, B. C., and Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin*, 23, 316-326.

- Farley, R., Steeh, C., Krysan, M., Jackson, T., and Reeves, K. (1994). Stereotypes and segregation: Neighborhoods in the Detroit area. *American Journal of Sociology*, *100*, 750-80.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., and Williams, C. J. (1995). Variability in automatic activation as an obtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology*, *69*, 1013-1027.
- Feroni, F., and Mayr, U. (2005). The power of a story: New automatic associations from a single reading of a short scenario. *Psychonomic Bulletin and Review*, *12*, 139-144.
- Gaertner, S. L., and McLaughlin, J. P. (1983). Racial stereotypes: Associations and ascriptions of positive and negative characteristics. *Social Psychology Quarterly*, *46*, 23-30.
- Glick, P., and Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, *70*, 491-512.
- Glick, P., and Fiske, S. T. (1999). The Ambivalence toward Men Inventory: Differentiating hostile and benevolent beliefs about men. *Psychology of Women Quarterly*, *23*, 519-536.
- Gold, S. J. (2004). From Jim Crow to racial hegemony: Evolving explanations of racial hierarchy. *Ethnic and Racial Studies*, *27*, 951-968.
- Goldberg, D.T. (1993). *Racist culture: Philosophy and the politics of meaning*. Oxford: Blackwell.
- Greenwald, A. G., McGhee, D. E., and Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association task. *Journal of Personality and Social Psychology*, *74*, 1464-1480.
- Greenwald, A. G., Nosek, B. A., and Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. Improved scoring algorithm. *Journal of Personality and Social Psychology*, *85*, 197-216.
- Greenwald, A. G., Nosek, B. A., Banaji, M. R., and Klauer, K. C. (2005). Validity of the salience asymmetry interpretation of the implicit association test: Comment on Rothermund and Wentura (2004). *Journal of Experimental Psychology: General*, *134*, 420-425.
- Haga, S. B., and Venter, J. C. (2003). Genetics: FDA races in the wrong direction. *Science*, *301*, 446.
- Herek, G. M. (1988). Heterosexuals' attitudes toward lesbians and gay men: Correlates and gender differences. *Journal of Sex Research*, *25*, 451-477.
- Herek, G. M. (2002). Heterosexuals' attitudes toward bisexual men and women in the United States. *Journal of Sex Research*, *39*, 264-274.
- Herek, G. M., and Capitano, J. P. (1999). Sex differences in how heterosexuals think about lesbians and gay men: Evidence from survey context effects. *Journal of Sex Research*, *36*, 348-360.
- Hirschfeld, L. A. (1996). *Race in the making: Cognition, culture, and the child's construction of human kinds*. Cambridge, MA: MIT Press.
- Hohn, R. (1973). Perceptual training and its effect on racial preferences of kindergarten children. *Psychological Reports*, *32*, 435-441.
- Jacobson, C. (1985). Resistance to affirmative action: Self interest or racism? *Journal of Conflict Resolution*, *29*, 306-329.

- Johnson, J. D., and Lecci, L. (2003). Assessing anti-white attitudes and predicting perceived racism: The Johnson-Lecci scale. *Personality and Social Psychology Bulletin*, 29, 299-312.
- Johnson, D., Terry, D. J., and Louis, W. R. (2005). Perceptions of the intergroup structure and anti-Asian prejudice among White Australians. *Group Processes and Intergroup Relations*, 8, 53-71.
- Jones, J. M. (1997). *Prejudice and racism* (2nd ed.). New York: McGraw-Hill.
- Judd, C. M., Wittenbrink, B., and Park, B. (1999). Les préjugés raciaux aux niveaux implicites et explicites [Explicit and implicit racial prejudices]. *Psychologie Française*, 44, 179-188.
- Katz, I., and Haas, R. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893-905.
- Katz, P. A. (1973a). Perception of racial cues in preschool children: A new look. *Developmental Psychology*, 8, 295-299.
- Katz, P. A. (1973b). Stimulus predifferentiation and modification of children's racial attitudes. *Child Development*, 44, 232-237.
- Katz, P. A. (1976). The acquisition of racial attitudes in children. In P. Katz (Ed.), *Towards the elimination of racism* (pp. 125-154). New York: Pergamon Press.
- Katz, P. A., and Zalk, S. R. (1978). Modification of children's racial attitudes. *Developmental Psychology*, 14, 447-461.
- Kinder, D. R., and Sanders, L. M. (1996). *Divided by color*. Chicago: University of Chicago Press.
- Lee, Y., and Ottati, V. (1993). Determinants of in-group and out-group perceptions of heterogeneity: An investigation of Sino-American stereotypes. *Journal of Cross-Cultural Psychology*, 24, 298-318.
- Lee, Y., and Ottati, V. (1995). Perceived in-group homogeneity as a function of group membership salience and stereotype threat. *Personality and Social Psychology Bulletin*, 21, 610-619.
- Lepore, L., and Brown, R. (1997). Category and stereotype activation: Is prejudice inevitable? *Journal of Personality and Social Psychology*, 72, 275-287.
- Lewontin, R. C. (1972). The apportionment of human diversity. *Evolutionary Biology*, 6, 381-398.
- Lin, M. H., Kwan, V. S. Y., Cheung, A., and Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied group: Scale of Anti-Asian American stereotypes. *Personality and Social Psychology Bulletin*, 31, 34-47.
- Marks, J. (1995). *Human biodiversity: Genes, race, and history*. New York: de Gruyter.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. Dovidio and S. J. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91-125). New York: Academic Press.
- McConnell, A. R., and Leibold, J. M. (2001). Relations among the implicit associations test, discriminatory behavior, and explicit measures of racial prejudice. *Journal of Experimental Social Psychology*, 37, 435-442.
- McFarland, S. G., and Crouch, Z. (2002). A cognitive skill confound on the implicit association test. *Social Cognition*, 20, 483-510.

- Meertens, R., and Pettigrew, T. (1997). Is subtle prejudice really prejudice? *Public Opinion Quarterly*, 61, 54-71.
- Mendes, W.B., Blascovich, J., Lickel, B., and Hunter, S. (2002). Challenge and threat during social interaction with white and black men. *Personality and Social Psychology Bulletin*, 28, 939-952.
- Park, B., and Rothbart, M. (1982). Perception of out-group homogeneity and levels of social categorization: Memory for superordinate attributes of in-group and out-group members. *Journal of Personality and Social Psychology*, 42, 1051-1068.
- Pedersen, A., and Walker, I. (1997). Prejudice against Australian Aborigines: Old-fashioned and modern forms. *European Journal of Social Psychology*, 27, 561-587.
- Peffley, M., Hurwitz, J., and Sniderman, P. (1997). Racial stereotypes and whites' political views of blacks in the context of welfare and crime. *American Journal of Political Science*, 41, 30-60.
- Phelps, E. A., O'Connor, K. J., Cunningham, W. A., Funayama, E. S., Gatenby, J. C., Gore, J. C., and Banaji, M. R. (2000). Performance on indirect measures of race evaluation predicts amygdala activation. *Journal of Cognitive Neuroscience*, 12, 729-738.
- Phillips, S. T., and Ziller, R. C. (1997). Toward a theory and measure of the nature of nonprejudice. *Journal of Personality and Social Psychology*, 72, 420-434.
- Plant, E. A., and Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832.
- Pratto, F., Sidanius, J., Stallworth, L. M., and Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Ponterotto, J. G., Burkard, A., Reiger, B. P., Grieger, I., D'Onofrio, A., Dubuisson, A., Heenehan, M., Millstein, B., Parisi, M., Rath, J. F., and Sax, G. (1995). Development and initial validation of the Quick Discrimination Index (QDI). *Educational and Psychological Measurement*, 55, 1016-1031.
- Richeson, J. A., Baird, A. A., Gordon, H. L., Heatherton, T. F., Wyland, C. L., Trawalter, S., and Shelton, J. N. (2003). An MRI investigation of the impact of interracial contact on executive function. *Nature Neuroscience*, 6, 1323-1328.
- Richeson, J. A., and Shelton, J. N. (2003). When prejudice does not pay: Effects of interracial contact on executive function. *Psychological Science*, 14, 287-290.
- Richeson, J. A., and Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology*, 88, 934-947.
- Richeson, J. A., Trawalter, S., and Shelton, J. N. (2005). African Americans' implicit racial attitudes and the depletion of executive function after interracial interactions. *Social Cognition*, 23, 336-352.
- Robinson, W. R., and Hall, G. (1999). The role of mediated conditioning in acquired equivalence. *The Quarterly Journal of Experimental Psychology*, 52, 335-350.
- Rothermund, K., and Wentura, D. (2004). Underlying processes in the implicit association test: Dissociating salience from associations. *Journal of Experimental Psychology: General*, 133, 139-165.
- Rudman, L. A., Feinberg, J., and Fairchild, K. (2002). Minority members' implicit attitudes: Automatic ingroup bias as a function of group status. *Social Cognition*, 20, 294-320.

- Shelton, J. N. (2000). A reconceptualization of how we study issues of racial prejudice. *Personality and Social Psychology Review*, 4, 374-390.
- Shelton, J. N., and Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology*, 88, 91-107.
- Shelton, J. N., and Richeson, J. A. (2006). Ethnic minorities' racial attitudes and contact experiences with white people. *Cultural Diversity and Ethnic Minority Psychology*, 12, 149-164.
- Shelton, J. N., Richeson, J. A., and Salvatore, J. (2005a). Expecting to be the target of prejudice: Implications for interethnic interactions. *Personality and Social Psychology Bulletin*, 31, 1189-1202.
- Shelton, J. N., Richeson, J. A., Salvatore, J., and Trawalter, S. (2005b). Ironic effects of racial bias during interracial interactions. *Psychological Science*, 16, 395-402.
- Sidanius, J., and Pratto, F. (1993). The inevitability of oppression and the dynamics of social dominance. In P. M. Sniderman, P. E. Tetlock, and E. G. Carmines (Eds.), *Prejudice, politics, and the American dilemma* (pp. 173-211). Stanford, CA: Stanford University Press.
- Sidanius, J., Pratto, F., Martin, M., and Stallworth, L. M. (1991). Consensual racism and career track: Some implications of social dominance theory. *Political Psychology*, 12, 691-721.
- Smedley, A., and Smedley, B. D. (2005). Race as biology is fiction, racism as a social problem is real: Anthropological and historical perspectives on the social construction of race. *American Psychologist*, 60, 16-26.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1-39.
- Tate, C., and Audette, D. (2001). Theory and research on 'race' as a natural kind variable in psychology. *Theory and Psychology*, 11, 495-520.
- Teo, T. (2004). The historical problematization of 'mixed-race' in psychology and human scientific discourses. In A. S. Winston (Ed.), *Defining difference: Race and racism in the history of science* (pp. 79-108). Washington, DC: American Psychological Association.
- Thistlethwaite, D. (1950). Attitude and structure as factors in the distorting of reasoning. *Journal of Abnormal and Social Psychology*, 45, 442-458.
- U.S. Census Bureau (2004). U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin. Retrieved from <http://www.census.gov/ipc/www/usinterimproj>
- Vanman, E. J., Saltz, J. L., Nathan, L. R., and Warren, J. A. (2004). Racial discrimination by low-prejudiced whites. *Psychological Science*, 15, 711-714.
- Walker, I. (1994). Attitudes toward minorities: Survey evidence of Western Australians' attitudes to Aborigines, Asians, and women. *Australian Journal of Psychology*, 46, 137-143.
- Weyant, J. M. (2005). Implicit stereotyping of Hispanics: Development and validity of a Hispanic version of the implicit association test. *Hispanic Journal of Behavioral Sciences*, 27, 355-363.
- Wheeler, M. E., and Fiske, S. T. (2005). Controlling racial prejudice: Social-cognitive goals affect amygdala and stereotype activation. *Psychological Science*, 16, 56-63.
- Williams, J. E., Best, D. L., and Boswell, D. A. (1975). Children's racial attitudes in the early school years. *Child Development*, 46, 494-500.

- Williams, J. E., Morland, J. K. and Associates (1975). *Preschool racial attitudes measure II and color meaning test: General information and manuals of directions*. Wake Forest: Wake Forest University Press.
- Wilson, T. C. (1996). Cohort and prejudice: Whites' prejudice toward Blacks, Hispanics, Jews, and Asians. *Public Opinion Quarterly*, 60, 253-274.
- Wittenbrink, B., Judd, C. M., and Park, B. (1997). Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. *Journal of Personality and Social Psychology*, 72, 262-274.
- Wittenbrink, B., Judd, C. M., and Park, B. (2001). Evaluative versus conceptual judgments in automatic stereotyping and prejudice. *Journal of Experimental Social Psychology*, 37, 244-252.
- Woodmansee, J. J., and Cook, S. W. (1967). Dimensions of racial attitudes: Their identification and measurement. *Journal of Personality and Social Psychology*, 7, 240-250.
- Zack, N. (2003). *Philosophy of science and race*. New York: Routledge.
- Zalk, R. S., and Katz, P. (1976). The Katz-Zalk Projective Prejudice Test: A measure of racial attitudes in children. *JSAS Catalog of Selected Documents in Psychology*, 6, 37.