

6-9-2007

# Nonverbal Evidence of Displaced Intergroup Affect

Patricia A. McCord

Follow this and additional works at: [http://scholarworks.gsu.edu/psych\\_theses](http://scholarworks.gsu.edu/psych_theses)

---

## Recommended Citation

McCord, Patricia A., "Nonverbal Evidence of Displaced Intergroup Affect." Thesis, Georgia State University, 2007.  
[http://scholarworks.gsu.edu/psych\\_theses/42](http://scholarworks.gsu.edu/psych_theses/42)

This Thesis is brought to you for free and open access by the Department of Psychology at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Psychology Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact [scholarworks@gsu.edu](mailto:scholarworks@gsu.edu).

# NONVERBAL EVIDENCE OF DISPLACED INTERGROUP AFFECT

by

PATRICIA A. McCORD

Under the Direction of Eric J. Vanman

## ABSTRACT

This study examined the effects of racial insult on the propensity to either categorize or individuate outgroup members. Reaction times and self-reports measures were employed to gauge reactions to an insulting video. White and African American participants heard an insult, and then completed the Go/No-Go Association Task (GNAT), as well as the Internal Motivation to Control Prejudice Scale (IMS) and the External Motivation to Control Prejudice Scale (IMS), the Motivation to Control Prejudice Scale (MCPRS) the Social Distance Scale (SDS), and made ratings on a feeling thermometer about the people in the insult video. African Americans showed more negative responses to outgroup members than Whites on the explicit measure, but Whites showed more negative responses to outgroup members than African Americans on the implicit measure.

INDEX WORDS: Displaced affect, Intergroup, Category-based responding, Prejudice

NONVERBAL EVIDENCE OF DISPLACED INTERGROUP AFFECT

by

PATRICIA A. McCORD

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

In the College of Arts and Sciences

Georgia State University

2006

Copyright by  
Patricia A. McCord  
2006

NONVERBAL EVIDENCE OF DISPLACED INTERGROUP AFFECT

by

PATRICIA A. McCORD

Major Professor: Eric J. Vanman  
Committee: Kelly Cate  
Tracie Stewart  
David Washburn

Electronic Version Approved:

Office of Graduate Studies  
College of Arts and Sciences  
Georgia State University  
May 2006

## TABLE OF CONTENTS

List of Tables .....	v
List of Figures .....	vi
Introduction.....	1
Three Models of the Effects of Affect .....	3
The Source of Affect: Incidental or Integral? .....	10
Anti-White Attitudes .....	11
Association and Generalization of Category-Based Responding .....	12
Method .....	19
Participants.....	19
Materials.....	19
Procedure.....	21
Results .....	23
Self-Report Measures .....	23
Main Analyses .....	26
Discussion .....	39
Contributions to the Study of Prejudice .....	49
References .....	51

## List of Tables

Table 1 .....	24
Table 2 .....	46

## List of Figures

Figure 1 .....	28
Figure 2 .....	29
Figure 3 .....	31
Figure 4 .....	32
Figure 5 .....	34
Figure 6 .....	35
Figure 7 .....	36
Figure 8 .....	38



## Introduction

Most people would probably prefer to think that their emotions do not cloud their judgments of other people. Unfortunately, whether these personal judgments are made about a stranger on trial for murder or a fellow classmate, one's feelings often shape how we view other people. In order to make the most fair judgments of others it would be best to engage in slow, thoughtful bottom-up processing every time we encounter someone new. However, that takes time, and we usually rely on shortcuts to help speed the process of making social judgments.

For the purposes of this paper, *category-based responding* refers to the classification of a person based on his or her group membership. *Stereotypes* refer to widely held beliefs that are specific to certain outgroups, and are generally negative. *Prejudice* refers to negative attitudes toward certain outgroup members. *Discrimination* refers to differential behaviors toward different outgroup members.

For many years, the role of affect in social categorization has been of interest to social psychologists. For instance, Fiske, Neuberg, Beattie and Milberg (1987) found that a person's likelihood of relying on category-based information as opposed to attribute-based or individuating information depends in part on the configuration of available information. The central question of this

thesis is, when making judgments about another who belongs to another social category, how does affect influence the extent to which a person will rely on more superficial information, instead of forming an individualized impression? Such superficial information could include mere ingroup/outgroup distinctions (e.g., “We must be better than them”), evaluative associations, (e.g., “They are dangerous”), or stereotypes (e.g., “People in group X drink too much”). Three different theoretical models have emerged from this line of research: the affect-and-information-processing model (Bodenhausen, 1993; Bodenhausen, Kramer, & Süsser, 1994) the mood-and-general-knowledge (MAGK) model (Bless, Schwarz, & Wieland, 1996) and the Affect Infusion Model (AIM) (Forgas, 1994). The first model emphasizes factors that affect processing capacity and lead to more or less stereotyping, the second deals more with a person’s reliance on general knowledge structures, and the third model emphasizes situational demands. Stereotyping is considered useful in terms of being a strategy that simplifies interactions within a complex social environment (Bodenhausen, 1993). To make sense of a world where one is constantly bombarded with social information, reliance on category information help facilitate decision-making. In any intergroup situation where a social judgment is to be made, stereotypes are automatically activated from memory (Devine, 1989). Thus, stereotyping has been the focus of many investigations on the effects of affect on superficial processing.

### *Three Models of the Effects of Affect*

*Affect-and-Information-Processing Model.* According to the affect-and-information-processing model, whether the perceiver chooses to rely on those categorizations to make a social judgment can be determined by a person's affect at the time (Bodenhausen, 1993). A person's mood can affect both motivation and processing capacity. If a person's processing capacity is compromised, the likelihood that he or she will rely on category information increases.

Before they examined the effects of specific mood states, researchers focused on the impact of arousal on the use of category-based responding. For example, Bodenhausen (1990) found that reliance upon social stereotypes is greater at the lower portions of the circadian arousal cycle. In that study, participants were identified as "morning types" or "evening types" and were instructed to judge the likelihood of a person's guilt in an allegation of student misconduct. Those who self-identified as morning types made more stereotypic judgments in the afternoon or evening, when their arousal levels were low, than they did in the morning, whereas those who self-identified as evening types made more stereotypic judgments in the morning, when their arousal levels were low. Conversely, Kim and Baron (1988) found that heightened arousal led to greater reliance on stereotypes. High arousal was induced through exercise, and highly aroused participants were more likely to overestimate the frequency of stereotypic word pairs. The findings that both too much and too little arousal decreases processing capacity and leads to more stereotyping is in line with

what is known from earlier work in cognitive psychology (e.g. Hasher & Zacks, 1979).

Given that both high and low arousal states have been demonstrated to lead to more stereotyping, let us consider affective valence more specifically. For negative affect, it is helpful to consider three types of emotion: fear or anxiety, anger, and sadness. Several studies have shown that anxiety reduces processing capacity and performance (Darke, 1988; Gur et al., 1988) and promotes less systematic thinking in the processing of persuasive arguments (Baron, Burgess, Kao, & Logan, 1990).

Although it seems intuitive to think that angry people are less rational and more likely to rely on stereotypes than systematic thought, there is very little evidence to support this idea (Bodenhausen, 1993). A few studies have examined the effects of anger caused by insult in intergroup situations. Baron (1979) found a link between insult and aggressive behavior. He found that when White participants were not insulted, African American targets received less aggression than White targets. However, when they were insulted, participants displayed similar levels of aggression toward both White and African American targets. Using a similar paradigm, Rogers and Prentice-Dunn (1981) showed that White participants who received no insult were less aggressive to African American than White targets. This pattern was reversed in the insult condition. Whites who had been insulted expressed more aggression against African American than White targets.

In much of the research involving the impact of sadness on performance, sad participants do not show performance deficits. Sad participants have been shown to be more accurate and show the least halo bias on a performance appraisal task compared to happy participants (Sinclair, 1988). Similarly, sad participants report more accurate detection of testimonial inconsistencies when compared to happy people (Semmler & Brewer, 2002). Gotlib, McLachlin, and Katz (1998) demonstrated that sad participants employed more systematic information-processing strategies in a visual attention task. Finally, sad people rely more on individuating information than happy people when performing an impression formation task (Bless, Schwarz, & Wieland, 1996). In light of the findings that too much arousal is related to reduced processing capacity, the findings for anxiety versus sadness make sense. Anxiety involves more physiological arousal than sadness, which has a disruptive effect on performance, which leads to the use of simpler strategies, and which may involve stereotypes (Bodenhausen, 1993). Additionally, Edwards and Weary (1993) found that nondepressed participants were more likely to rely on category membership information than depressed participants, who seemed to analyze the individuating information more carefully. However, Ellis and Ashbrook (1998) found that memory performance was impaired as a result of depressed mood states. They theorized that depressed individuals are more likely to ruminate about the causes of their sadness, and this rumination uses up processing capacity, leading these individuals to rely on heuristic strategies.

Unlike negative affect, it is not so useful to break down positive affect into different types. The prototypical positive emotion is happiness (Bodenhausen, 1993). Positive emotion has been shown to lead to less systematic thought in a number of studies. Bodenhausen et al. (1994) found that participants in a happy mood rated a male target more guilty when he was identified as a member of a group that is stereotypically associated with the offense than when he was not. In other research, people in a happy mood were found to be more likely to rely on heuristic group category information in low-relevance intergroup situations (Forgas & Fiedler, 1996).

When considering the proposition that dealing with social information that is inconsistent with stereotypes uses a great deal of cognitive resources (Fiske & Taylor, 1991), it follows that the reduction of processing capacity should lead to more superficial processing of category members. However, one also needs to consider the motivational component. If individuals are willing to allocate sufficient resources to process stereotype inconsistent information, the inconsistent information should be particularly salient (Bless, 2000). Forgas (1989) found that happy people relied on heuristics when the outcome of their decision was not personally relevant, but given proper motivation, they can become more systematic. Bless, Bohner, Schwarz, and Strack (1990) showed that happy people can scrutinize arguments if given specific instructions to do so, but without explicit instruction they generally choose not to. Finally, Mackie and Worth (1989) showed that happy participants examined persuasive arguments as systematically as neutral participants when they were given ample time to do so,

but not under time-limited conditions. Schwarz (1990) proposed that when a person is in a happy mood, it is a signal that things are going well and there is no pressing need to exert unnecessary cognitive effort. However, when a person is in a sad mood, it is a signal that the situation is problematic, and that motivates a person to try to change the situation. To bring about effective change, the person must get an accurate representation of the situation, which can be achieved by carefully processing incoming information.

With respect to the current study, eliciting negative affect that is related to a person's race should decrease processing capacity while simultaneously reducing a person's motivation to avoid relying on racial category information. Thus, I hypothesized that the reactions of the participants would be consistent with the Affect-and-information processing model. However, two other models should be considered as well. Both could provide a framework for explaining how people will react to a racial insult: the Mood and General Knowledge (MAGK) model, and the Affect Infusion Model (AIM).

*Mood and General Knowledge (MAGK) Model.* In contrast to the affect-and-information processing model, the MAGK model focuses less on processing capacity, but more on a person's knowledge about his or her environment. In Bless et al.'s (1996) original formulation of the model, the simplified processing strategies exhibited by happy people are not due to reduced-processing motivation or capacity but to increased confidence in their general knowledge structures. A person's general knowledge structures include stereotypic information that is activated automatically. The major difference between the

MAGK and the affect as information models is that in the MAGK, a person's mood does not affect a person's general motivation to engage in or to avoid cognitive processing. This theory posits that reliance on general knowledge structures is an antecedent of simplified processing, rather than a consequence.

Consistent with the MAGK model is research showing that happy people perform better than sad or neutral people on creativity or problem-solving tasks (Isen, 1987) and on concentration tasks (Bless, Clore et al., 1996). For example, in the latter study, participants completed a primary and secondary task simultaneously. The first task assessed reliance on stereotypes while the second task assessed concentration. The happy participants performed worse than sad participants on the primary task in that they had better recognition memory for stereotypical information. However, the happy participants also performed better than sad participants on the secondary concentration task. Because the happy people expended cognitive resources on the secondary task, the argument that happiness causes a reduction in processing capacity does not apply. According to Bless, Clore et al. (1996) a positive affective state signals a benign environment in which the simple reliance on general knowledge structures is adaptive and appropriate. Therefore, happy people will have greater confidence in their general knowledge structures. However, negative affect suggests a problematic situation in which reliance on general knowledge structures may be risky. Therefore, sad people will tend to focus on situational information instead.

*Affect Infusion Model.* A third way of organizing research findings about affect and processing capacity is the Affect Infusion Model (AIM), which was introduced



by Forgas (1994). The term *affect infusion* refers to the process whereby a person's affect influences a person's judgmental processes. This theory outlines certain situations where affect infusion is likely to occur. The strategies of *direct access* and *motivated processing* should not elicit affect infusion, whereas the strategies of *heuristic processing* and *substantive processing* should be more likely to produce affect infusion. In the case of direct access, the task at hand is well known and familiar, so a preexisting reaction based on stored information can be directly retrieved. Affective states are not likely to interfere with a person's judgments in this situation. According to Forgas (2000), motivated processing involves highly selective and targeted search strategies, which are guided by a specific motivational objective, and affect infusion is again not likely. Heuristic processing occurs when there is no stored information and no motivational goal to guide judgments. In this situation, affect infusion is more likely to occur, especially if the task is simple, is of low personal relevance, or if cognitive capacity is limited. Substantive processing occurs when people process novel information that is related to preexisting knowledge. In this situation, affect infusion may occur whereby affect can act as a prime which produces selective access to certain memories or thoughts. Like the other models, the AIM predicts that positive affect should lead to more top-down, heuristic processing, whereas negative affect should lead to more bottom-up, data driven processing. However, the major difference in the AIM is that the consequences of the type of affect being experienced are secondary to the demands of the situation.

### *The Source of Affect: Incidental or Integral?*

Bodenhausen (1993) made a distinction between two types of affect. *Integral* affect involves the emotions elicited by the social group itself and the usual conditions and contexts with which the group is associated. These are underlying emotions that are always present and become quickly activated by the imagined or actual presence of an outgroup member. *Incidental* affect involves emotions elicited by situations unrelated to the intergroup context, such as anxiety not elicited by the outgroup in question. Most of the literature discussed to this point employed incidental rather than integral affect.

In most studies that have examined whether mood states are artificially induced or not, the affective state is incidental. In other words, the moods of the participants were not induced by thinking about or having contact with an outgroup member. Perhaps part of the reason behind the muddled understanding of affect on social categorization effects is that researchers have not considered the effects of integral affect. The mood of the participants is generated by forces not relevant to the outgroup. Not all people in happy moods are happy for the same reason, and not all sad people are experiencing sadness for the same reasons. This variability in experiences might be contributing to the varied effects of affect on social categorization processing.

By turning attention to the effects of integral affect, the current study seeks to further demystify the processes underlying affect and social categorization. How does a person's mood affect processing of social categories if the mood was induced from the outgroup itself? Whereas it is true that incidental affect

alone is sufficient to produce increased reliance on superficial information, such as stereotypes, integral affect should provide a point of focus for participants. What happens when an outgroup member is responsible for someone's negative affect? Will a person's level of motivation to control prejudice affect whether integral affect leads to increased reliance on superficial processing? These are questions that the current study sought to answer.

### *Anti-White Attitudes*

Category-based responding can involve prejudice as well as stereotypes. Cacioppo and Berntson (2001) presented an explanation for racial prejudice that is different from the idea that it is a natural side effect of cognitive processing. They suggested that prejudice is classically conditioned from the time we are children. According to the authors, media presentations that pair minority group members with negative or frightening events serve to condition greater prejudice in majority group members. This explanation for prejudice suggests that negative affect is stored directly in memory, not through stereotypes. Because there are not many widely held negative stereotypes about White Americans, it seems reasonable to apply Cacioppo and Berntson's (2001) conditioning theory to explain negative feelings that African Americans hold toward whites. Although media images may account for prejudiced feelings Whites have toward African Americans, it does not explain the reverse effect. I would speculate that African Americans view White Americans as adversarial, concerned with preventing the advancement of African Americans in our society. Following from social psychological image theory (Alexander, Brewer, & Herrmann, 1999), African

Americans typically perceive Whites in terms of an “enemy” image, which is characterized by such qualities as hostility, untrustworthiness, and equal status. Alternatively, Whites could be perceived by African Americans in terms of a “barbarian” image, which is characterized by qualities like higher status, ruthlessness, and irrationality. If an African American child is exposed to these kinds of anti-white attitudes from family and social group, the classical conditioning explanation can still be more useful than an explanation that puts the focus on stereotypes.

#### *Association and Generalization of Category-Based Responding*

Studies by Stewart and her colleagues (Stewart, Doan, Gingrich, and Smith, 1998, Stewart, in preparation) examined conditions under which trait judgments made about a behavior were more likely to influence later judgments of the behavior. These studies demonstrated that a person’s chronic level of prejudice had an effect on whether he or she was prone to stereotype association or generalization. Participants viewed photographs that were paired with behaviors that were either stereotypical of African Americans or neutral at Time 1. At Time 2, photographs of the same and different individuals as Time 2 were presented, again with behavioral information. Response times were assessed for making a yes/no decision about whether the behavior was likeable. High prejudice Whites were the most likely to generalize stereotypic judgments from one African American at Time 1 to other African Americans at Time 2. Low prejudice Whites, however, made the fastest associations for the same person with the same behavior between Time 1 and Time 2. To explain these effects,

the authors suggested that low prejudice Whites are more likely to individuate African Americans, while high prejudice Whites rely on category representations. Results were mixed for African American participants. In the first set of experiments (Stewart et al., 1998), African Americans showed faster associations for repeated behaviors with the same person regardless of the race of the target. Similar to low prejudice Whites, African American participants were individuating both African American and White targets. However, in the second set of experiments (Stewart, in preparation), African Americans showed faster associations for repeated behaviors with the same person only with White targets. In this case, African Americans individuated White targets more than African American targets.

The present study applied Stewart et al.'s (1998) concepts of stereotype association and generalization within an insult paradigm. Angry mood was induced by a videotaped insult. Category-based responding was assessed by a cognitive reaction time measure. To assess implicit social evaluation the Go/No-Go Association Task (GNAT) was used. The GNAT is used to assess implicit attitudes, but unlike the Implicit Attitude Task (IAT), it is not necessary to have two contrasting categories. The GNAT has been shown to measure automatic preferences with more flexibility than the IAT (Nosek & Banaji, 2001). The current study also tried to clarify the conflicting results produced by African American participants in the Stewart studies. With the addition of a measure of anti-White attitudes, I hoped to determine whether African Americans who differed on this scale would differ on their propensity to individuate targets.

To incorporate Stewart et al.'s (1998) concepts in an affective insult framework, the current study followed up on a study that examined the role of displaced affect resulting from racial insult (McCord, Vanman, Rogers, Strong, & Anderson 2004). In that study, the authors looked at the effects of anger caused by insult on explicit behavioral indicators of prejudice. The purpose of the study was to see whether negative affect induced by an outgroup member would be displaced on a different target from the same outgroup. White and African American participants viewed one of two sets of videotaped segments. One set of segments served the purpose of evoking group anger relevant to prejudice. In that condition, students on the videotape who were not the same race as the participant made disparaging comments about people of the same race as the participant. The second set of videotaped segments served the purpose of evoking group anger not relevant to prejudice. In this second condition, students on the videotape who were presumably students from another university made disparaging comments about students who attended the university where the participants were enrolled. After viewing one of the two sets of videos, participants completed an interview with a second experimenter who was not the same race as the participant. Analyses revealed that Whites lower in motivation to control prejudice spoke longer, were less friendly and made more speech hesitations when in the race insult condition, whereas Whites high in motivation to control prejudice showed no difference in their behavior compared to the school insult condition. The authors speculated that these behaviors were indicative of the participant's discomfort. For instance, participants may have

talked longer because they were more uncomfortable about the insult and were trying to compensate for their feelings of discomfort. African American participants did not show any differences between the conditions in their behavior.

The current study also investigated differences between internal and external motivations to control prejudice in whether or not a person relies on category-based responding. The McCord et al. (2004) study relied on scores on Dunton and Fazio's (1997) Motivation to Control Prejudiced Reactions (MCPR) scale to determine whether White participants were low or high in their motivations to control their prejudice. This measure divides motivations to control prejudiced reactions into two subscales. The first is the concern with acting prejudiced. This involves the desire to distance oneself from actions that might be deemed prejudiced by oneself or others. The second is the restraint to avoid dispute. This is characterized by the desire to inhibit the expression of thoughts or feelings in order to avoid dispute with or about African Americans. However, Dunton and Fazio (1997) noted that the items may not have been sufficient in distinguishing internal and external motivations. In the present study, we intended to further illuminate the reactions of high and low prejudiced participants by examining scores on the subscales of the MCPRS. Plant and Devine (1998) created the internal motivation to respond without prejudice scale (IMS) and the external motivation to respond without prejudice scale (EMS). The IMS measures propensity to respond without prejudice because of personal beliefs that prejudice is wrong. The EMS, on the other hand, measures propensity to

respond without prejudice because of societal expectations from a culture that frowns upon prejudice. They found that Whites who scored high on the EMS but low on the IMS were more likely to endorse stereotypes about African Americans when responding privately as opposed to publicly. This suggests that people in this subgroup may hold prejudiced beliefs but do not want to be seen as prejudiced in an attempt to appear politically correct. Participants in McCord et al. (2004) who were shown on the Dunton and Fazio (1997) scale to be low in their motivation to control prejudice, yet talked longer than those found to be low prejudiced on the same scale, could actually be a part of this high external, low internal subgroup. Participants who scored high on both subscales were less likely to endorse stereotypes and did not change their response strategies whether reporting them publicly or privately. The people that comprise this subgroup are motivated both by internal beliefs that being prejudiced is wrong and external pressures to appear politically correct. This subgroup also spent the most time on a task that ostensibly would help alleviate covert bias (Devine et al. 2002). This finding suggests a lack of confidence in the actual ability to control their prejudice reactions. Participants who scored low on both subscales were more likely to endorse the stereotypes whether reporting them publicly or privately. These participants had prejudiced internal beliefs and were not motivated by social norms to hide them.

The fourth subgroup of people, those who scored high on the IMS and low on the EMS, was examined further in later studies (Devine et al., 2002). This group demonstrated the lowest levels of race bias on an implicit measure than



any other subgroup. Participants in this group also spent little time in the prejudice reduction task (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002), suggesting a greater confidence in their ability to control their prejudice. The authors suggest that the reason for this finding is that these people are more self-determined in that their reasons for responding without prejudice reflect more fully internalized motivations that are integrated into their self-concept. They score low on the EMS because they place very little emphasis responding without prejudice in order to gain approval from others. Instead, they act solely on their internal beliefs that being prejudiced is wrong, and thus are less likely to show bias on implicit measures of prejudice. Thus, to get a valid picture of participants' motivations to control prejudice, it is important that they complete both the MCPR and the IMS and EMS.

This thesis sought to build on prior research in two important ways. First, both White and African American participants were included. With the exception of Stewart et al. (1998), most studies on stereotyping and prejudice exclude African American participants. Perhaps this is a result of the difficulty in identifying stereotypes about Whites and the lack of measures to determine the prejudice level of African Americans. However, if one applies the conditioning theory by Cacioppo and Berntson (2001), then anti-White attitudes can still be measured regardless of whether stereotypes exist. Like White participants, I expected that African American participants would also be more likely to use category-based responding in some situations. To this end, I employed a modified version of Bogardus' (1933) Social Distance Scale (SDS) and Plant and

Devine's (1998) IMS and EMS, scales as well as Dunton and Fazio's (1997) MCPR scale for both White and African American participants.

The second way in which the current study builds on previous research is through the use of integral affect. Most studies rely on incidental affect to induce reliance on stereotypes. I believed that when negative affect is induced by the outgroup itself, people who differed on the IMS and EMS would show different response strategies. This was shown somewhat in the previous study by McCord et al. (2004), and the current study sought to further clarify the processes underlying the differential responses to insult.

The current study sought to understand the effect of integral affect created by insult on explicit and implicit measures of racial bias on people who differ in their motivations to control racial prejudice. To assess implicit bias, the GNAT was used. A feeling thermometer was included to assess explicit bias. I predicted that participants who are low on the IMS would be more likely to generalize stereotypic judgments from African Americans at Time 1 (video) to other African Americans at Time 2 (GNAT or EMG). I expected to see that in the insult condition, low IMS participants would show more negative affect toward all outgroup members on both explicit and implicit measures than low IMS participants. I also predicted that participants who are high on the IMS would not show this generalization effect. When insulted, I expected that high IMS participants would show stronger associations by displaying more implicit negative affect toward the insulter. I did not expect to find any differences between White and African American participants.

## Method

### *Participants*

Participants were 157 students at Georgia State University (63 male, 94 female, 56 African American, 101 White) who were recruited from an introductory psychology class and who received course credit for their participation. Students were told that the study was concerned with basic psychological and physiological processes involved when people look at photos and watch videotapes of other people.

### *Materials*

*Insult video.* One half of the participants viewed a tape with two insulting racial outgroup members and one neutral racial ingroup member. Each person spoke for 1-2 minutes, ostensibly about what they liked and disliked about being a student at the university. The racial outgroup members each made a comment insulting the participant's race (e.g. "One problem I have with all of the (White/Black) students here is that they seem to think that they are better than everybody else"). The other half of the participants viewed a neutral video with two racial outgroup members and one racial ingroup member. In this video, no insults or mention of race was present. All actors in the videotapes were female volunteers.

*GNAT implicit bias task.* Participants were asked to make category decisions about words and African American and White faces on a computer screen using a keyboard. Within each block, the participant had to press a key when they saw a stimulus that fit in either of two particular categories. For instance, in one block, they were asked to press the space bar if they saw a “good” (positive valence) word or an African American face. If the stimulus fit in neither of these categories, the participant was instructed to do nothing. In other blocks, the participant had to press the space bar if they saw a “bad” (negative valence) word or an African American face, a good word or a White face, and a bad word or a White face. The time it took to make these decisions was recorded. Each of the four blocks consisted of four photographs and four words. A total of 16 photographs were presented to each participant in this task. Participants in the insult condition saw two still photographs of each of the two outgroup insulters from the video. They also saw four photographs of a novel outgroup member. Four photographs of the neutral ingroup member from the video were presented. Four photographs of a novel ingroup member were also presented. Participants in the no insult condition saw two photographs each of the two neutral outgroup members from the video. They also saw four photographs of a novel outgroup member. Four photographs of the neutral ingroup member from the video were presented. Finally, four photographs of a novel ingroup member were shown.

*IMS and EMS.* These two scales were completed by participants to assess their motivations to respond without prejudice internally (e.g. “I attempt to

act in nonprejudiced ways toward Black people because it is personally important to me”) or externally (e.g. “Because of today’s PC standards I try to appear nonprejudiced toward Black people”). Ratings were made on a nine-point scale. *MCPR*. This scale was completed by participants to assess their concern with acting prejudiced (e.g. “It’s important to me that other people not think I’m prejudiced” and their restraint to avoid dispute (e.g. “If I were participating in a class discussion and a student of another race expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint”). Ratings were made on a seven-point scale.

*Feeling thermometer*. This scale assessed participants’ explicit attitude toward individual ingroup and outgroup members. For each photograph, participants were asked to rate that person on a thermometer that runs from 0 to 100 degrees. A rating above 50 means that the participant feels favorable and warm toward the person. A rating below 50 means that the participant feels unfavorable and cool toward the person. A rating right at the 50 degree mark means the participant doesn’t feel particularly warm or cold.

*SDS*. This scale assessed participants’ overall explicit race bias. Participants were asked to rate their willingness to have various social relationships with White or Black Americans (e.g. next-door neighbor, governor, romantic date). Ratings were made on a nine point scale.

### *Procedure*

Upon arrival to the laboratory, participants were asked to sign a consent form. Then they were told that the purpose of the study was to increase our

understanding of the differences in the reactions people have when they view photos of people versus when they see moving images and hear sound in a videotape. The participants then watched a video in which “Atlanta area students are talking about their experiences as a student in Atlanta.” The actual purpose of the videos was to induce anger relevant to prejudice for half of the participants. The other half watched a neutral videotape with no insult.

The participants completed the GNAT implicit bias computer task. This task was comprised of two blocks of 50 trials each. The participant was asked to quickly make a category decision about words or faces of both ingroup and outgroup members on a computer screen. Some of the photos were of the same person who delivered an insult on the video. The computer program measured the RT for making the judgment. The participant also rated the person in each photograph on the feeling thermometer.

After completing the implicit bias task, the participant completed the SDS, IMS, EMS, and MCPR scales.

Following the experiment, participants were fully debriefed and the true purpose of the experiment was revealed. The experimenter also explained why deception was necessary in this investigation. None of the participants indicated distress over being deceived by the experimenter.

## Results

For all analyses, alpha was .05, and two-tailed tests were used.

### *Self-Report Measures*

*Insult manipulation check.* Pilot testing of the insult video showed that those who watched the insult video were more angry, frustrated, annoyed and irritated than those who saw a no-insult video, as determined by their scores on an emotional response questionnaire (Table 1). Those who watched the insult video also rated the ambiguous actions of a fictional character, “Donald” from “The Donald Story” (Srull & Wyer, 1979), as more inconsiderate ( $M = 8.94$ ,  $SD = 1.21$ ) than those who saw a no insult video ( $M = 7.33$ ,  $SD = 2.12$ ),  $t(45.72) = -3.61$ ,  $p = .001$ .

*IMS and EMS scores.* Participants made ratings on the IMS ( $\alpha = .81$ ) and EMS ( $\alpha = .80$ ) on 9-point scales ranging from 1 (strongly disagree) to 9 (strongly agree). Appropriate items were reverse-scored. Consistent with Devine et al. (2002), participants’ scores on the IMS and EMS were averaged within each scale. Therefore, scores range from 1 to 9, with higher scores indicating higher levels of the motivation assessed by each scale. Participants were divided into high and low levels of each motivation based on median splits of the IMS ( $Mdn = 7.2$ ; high IMS,  $M = 8.03$ ; low IMS,  $M = 5.83$ ) and EMS ( $Mdn = 4.4$ ; high EMS,  $M = 5.93$ ; low EMS = 3.33). A race difference was found for the EMS, but not the IMS or MCPRS. White participants ( $M = 4.77$ ,  $SD = 1.57$ ) had higher scores on the EMS than African American participants ( $M = 4.21$ ,  $SD = 1.58$ ),  $t(155) = -2.14$ ,  $p$

Table 1

Pilot participants' responses to Emotional Response Questionnaire

Item	<i>M</i>		<i>SD</i>		Mean Diff.
	No insult	Insult	No insult	Insult	
Sad	1.50	1.48	.63	.81	.02
Angry	1.17	1.87	.46	.95	-.70*
Frustrated	1.50	2.23	.73	.92	-.73*
Gloomy	1.57	1.65	.73	.92	-.08
Down	1.40	1.65	.62	.91	-.25
Annoyed	1.13	2.45	.43	1.23	-1.32*
Irritated	1.27	2.32	.52	1.22	-1.05*

Notes: Responses were made on a scale from 1 to 5. Items marked with an asterisk (\*) were significant at the  $p < .01$  level.



= .034. The IMS and EMS scores of the participants in the insult condition did not differ from the scores of participants in the no-insult condition. African Americans' EMS scores had a reliability of Cronbach's  $\alpha = .76$ .

*MCPRS scores.* Participants made ratings on the MCPRS ( $\alpha = .76$ ) on a 7-point scale ranging from -3 (strongly disagree) to 3 (strongly agree). These scores were transformed to positive numbers and appropriate items were reverse-scored. Participants' scores were averaged, so that scores ranged from 1 to 7, with higher scores indicating a higher motivation to control prejudiced reactions. Participants were divided into high and low levels of motivation based on a median split ( $Mdn = 4.24$ ; high MCPRS,  $M = 4.85$ ; low MCPRS,  $M = 3.68$ ). The MCPRS scores of the participants in the insult condition did not differ from the scores of participants in the no-insult condition.

*SDS scores.* Participants made ratings on the SDS White ( $\alpha = .95$ ) and the SDS African American ( $\alpha = 1.00$ ) on a 9-point scale ranging from 1 (strongly disagree) to 9 (strongly agree). Scores for each item were totaled for each participant and higher scores indicate more willingness to interact with a person of the corresponding race.

Index scores were computed for Social Distance Scale scores. Social Distance Scale scores gauging willingness to interact with African Americans were subtracted from scores gauging willingness to interact with Whites. Higher scores indicated more bias toward Whites. The SDS index scores of the participants in the insult condition did not differ from the scores of participants in the no-insult condition.

### *Main Analyses*

A 2 (Race: African American or White) X 4 (IMS-EMS: High IMS-High EMS, High IMS-Low EMS, Low IMS-High EMS, or Low IMS-Low EMS) analysis of variance (ANOVA) was computed for Social Distance Scale index scores. There was a main effect of race on Social Distance Scale index scores  $F(1, 147) = 4.69, p = .03$ . African Americans ( $M = -36.25, SE = 14.08$ ) showed more bias toward African Americans, whereas Whites ( $M = 1.15, SE = 10.02$ ) showed less bias toward African Americans.

A significant Race X IMS-EMS interaction was also found for Social Distance Scale scores,  $F(3, 147) = 2.98, p = .03$ . In the High IMS, Low EMS subgroup, African Americans ( $M = -8.96, SE = 20.71$ ) showed more bias toward African Americans, whereas Whites ( $M = 4.35, SE = 21.18$ ) showed more bias toward Whites. A similar pattern of results was found for the Low IMS, Low EMS subgroup. African Americans in this group ( $M = -25.78, SE = 28.67$ ) showed more bias toward African Americans, whereas Whites ( $M = 11.08, SE = 19.87$ ) showed more bias toward Whites. For both High EMS subgroups, no significant differences were found between African American and White participants.

Preliminary analyses failed to show differences among the four IMS-EMS subgroups on either explicit feeling ratings or implicit reaction time responses to the photographs. This variable was subsequently excluded from further analyses. A 2 (Race: African American or White) X 3 (Target: Target, Outgroup or Ingroup) X 2 (Insult: Insult or No Insult) multiple analysis of variance (MANOVA) was computed for both explicit feeling ratings and implicit reaction time ratings.

There was a main effect of insult on explicit feeling ratings of the target,  $F(1, 152) = 15.94, p < .001$ . Higher ratings on the feeling thermometer indicate more warm or positive feelings about the person being rated. The no-insult group ( $M = 5.32, SD = 1.07$ ) rated all pictures on average (combining target, outgroup, and ingroup) significantly higher on the feeling thermometer than the insult group ( $M = 4.71, SD = 1.22$ )  $t(155) = 3.40, p = .001$ .

For feeling ratings, an Insult X Target interaction was found,  $F(2, 152) = 65.97, p < .001$ . As can be seen in Figure 1, those who were insulted rated the target ( $M = 3.94, SD = 1.96$ ) more negatively than those who were not insulted ( $M = 6.47, SD = 1.39$ )  $t(155) = 9.29, p < .001$ . Those who were insulted also rated the target more negatively than both the outgroup ( $M = 5.05, SD = 1.42$ )  $t(78) = -5.02$  and the ingroup ( $M = 5.13, SD = 1.47$ )  $t(78) = -4.86$ . Those who were not insulted rated the target more positively than both the outgroup ( $M = 4.76, SD = 1.36$ )  $t(77) = 9.77, p < .001$  and the ingroup ( $M = 7.73, SD = 1.93$ )  $t(77) = 8.01, p < .001$ .

For feeling ratings, an Insult X Race interaction was also found,  $F(1, 152) = 6.93, p = .01$ . As shown in Figure 2, when not insulted, African Americans and Whites rated all pictures the same overall. When insulted, Whites' and African Americans' overall ratings are not significantly different, but when insulted, Whites rate pictures more positively ( $M = 4.97, SD = 1.15$ ) than African Americans ( $M = 4.31, SD = 1.22$ )  $t(77) = -2.40 (p = .019)$ . Insulted African Americans rate the pictures less positively ( $M = 4.31, SD = 1.22$ ) than African Americans who were not insulted ( $M = 5.53, SD = 1.06$ )  $t(54) = 3.94, p < .001$ .

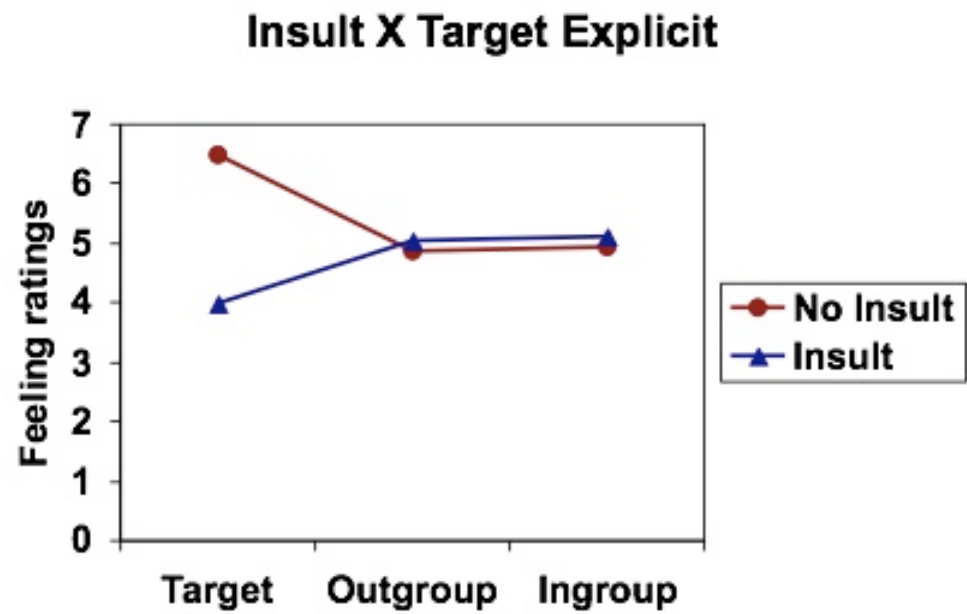


Figure 1

Figure 1 caption: Insult X Target interaction: Feeling ratings as a function of target and insult.

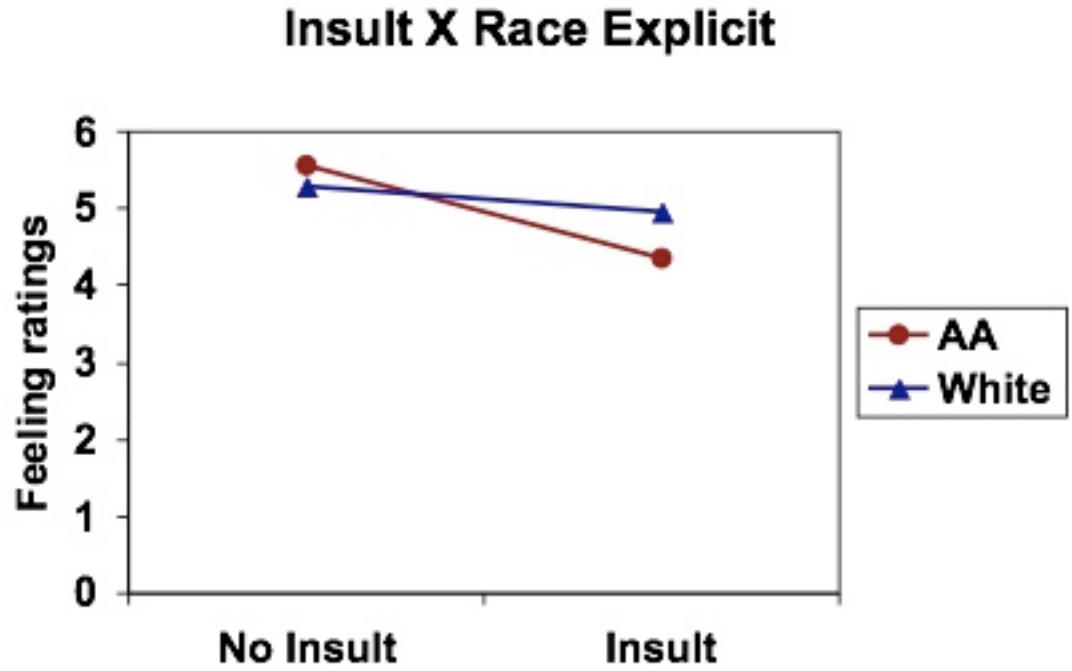


Figure 2

Figure 2 caption: Insult X Race interaction: Feeling ratings as a function of insult and race.

For feeling ratings, a Target X Race interaction was found  $F(2, 152) = 6.02, p = .003$ . As can be seen in Figure 3, Whites rated the target more positively ( $M = 5.54, SD = 1.93$ ) than did African Americans ( $M = 4.59, SD = 2.31$ )  $t(155) = -2.77, p = .006$ . White participants rated the target more positively than they rated both the outgroup ( $M = 4.92, SD = 1.35$ )  $t(100) = 2.90, p = .005$ , and the ingroup ( $M = 4.83, SD = 1.48$ )  $t(100) = 3.04, p = .003$ .

Reaction times were measured in milliseconds (ms). Index scores were computed for reaction times. For each group (target, outgroup and ingroup) the RT for that group paired with negative words was subtracted from the RT for that group paired with positive words. Higher (longer) RT index scores mean more negative associations for that group.

For RT index scores, a Target X Race interaction was found,  $F(2, 152) = 5.44, p = .005$ . As can be seen in Figure 4, Whites reacted more negatively to the target ( $M = 41.73, SD = 183.69$ ) than did African Americans ( $M = -33.29, SD = 196.27$ )  $t(155) = -2.39, p = .018$ . Whites also reacted more positively to the ingroup ( $M = -36.04, SD = 172.92$ ) than African Americans ( $M = 26.11, SD = 181.27$ )  $t(155) = 2.12, p = .036$ . For Whites, reactions to the target were more negative ( $M = 41.73, SD = 183.69$ ) than reactions to the ingroup ( $M = -36.04, SD = 172.92$ )  $t(100) = 3.21, p = .002$ , and reactions to the outgroup were more negative ( $M = 34.77, SD = 172.60$ ) than reactions to the ingroup  $t(100) = 2.73, p = .007$ .

*Gender Differences.* A 2 (Race: African American or White) X 3 (Target: Target, Outgroup or Ingroup) X 2 (Insult: Insult or No Insult) X 2 (Gender: Male or

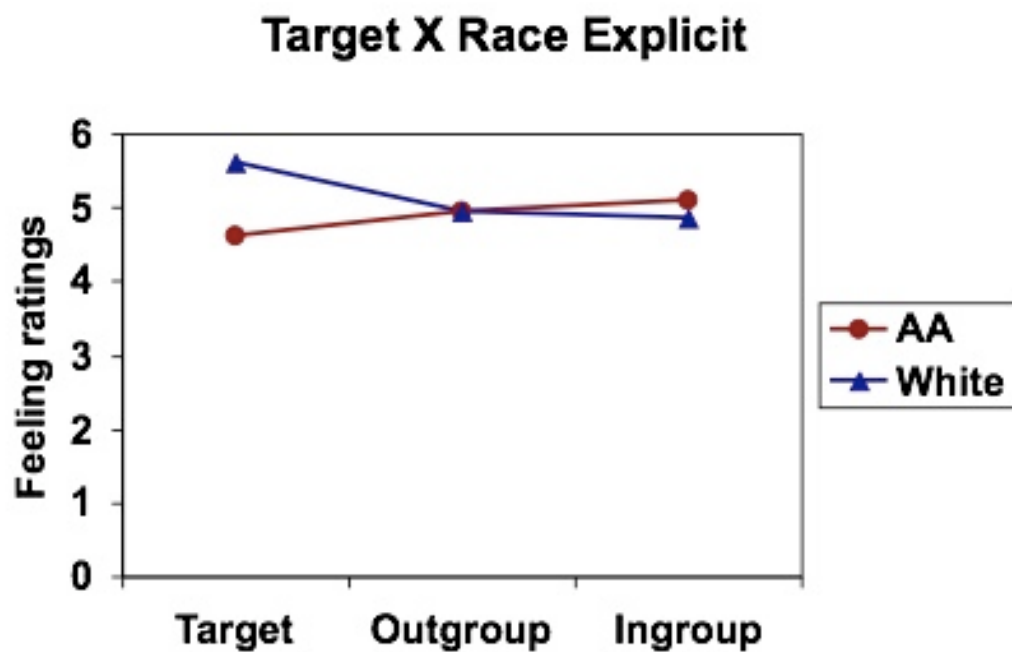


Figure 3

Figure 3 caption: Target X Race interaction: Feeling ratings as a function of Target and Race.

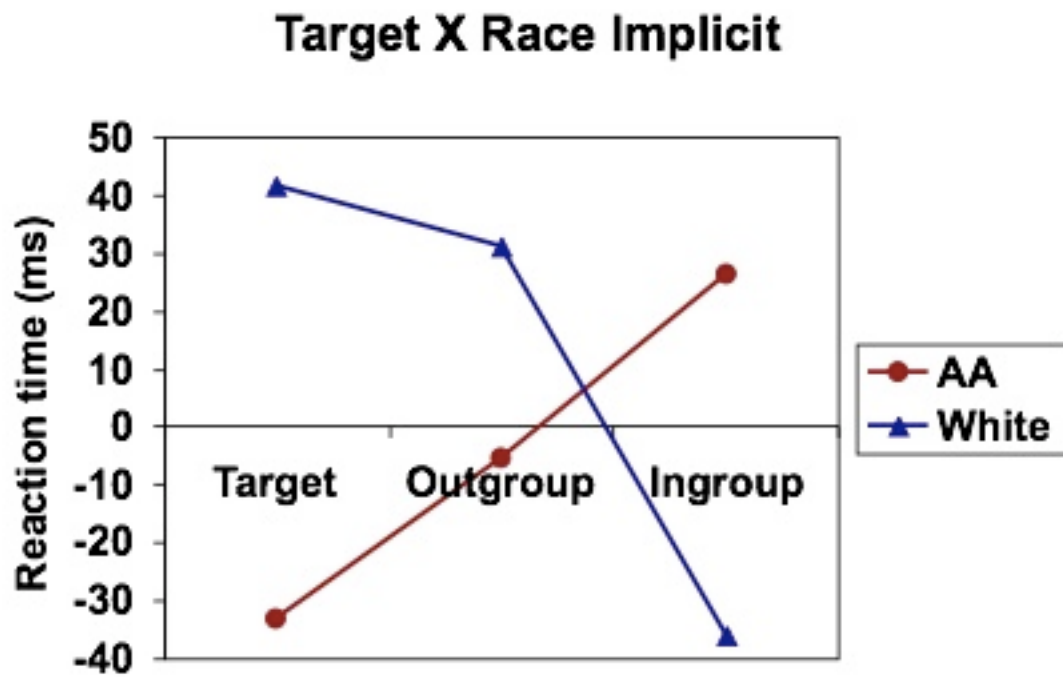


Figure 4

Figure 4 caption: Target X Race interaction: Reaction times as a function of target and race.



Female) MANOVA was computed for both explicit feeling ratings and implicit reaction times. A significant Insult X Gender interaction was found for implicit reaction time responses,  $F(1, 148) = 6.73, p = .01$ . As can be seen in Figure 5, Men who were insulted reacted more positively ( $M = -48.49, SD = 118.98$ ) than women who were insulted ( $M = 21.71, SD = 113.81$ ),  $t(77) = -2.64, p = .01$ . Men who were insulted also reacted more positively than men who were not insulted ( $M = 34.96, SD = 118.98$ ),  $t(61) = 2.87, p = .006$ . No significant gender differences were found for explicit feeling ratings.

*MCPR Differences.* A 2 (Race: African American or White) X 3 (Target: Target, Outgroup or Ingroup) X 2 (Insult: Insult or No Insult) X 2 (MCPR Level: Low or High) MANOVA was computed on RT scores. For RT index scores, an Insult X MCPR Level X Target interaction was found,  $F(2, 152) = 3.69, p = .026$ . As can be seen in Figure 6, in the high MCPR group, those who were insulted had more negative reactions to the outgroup ( $M = 31.83, SD = 209.05$ ) than the ingroup ( $M = -63.55, SD = 207.10$ ),  $t(39) = 2.42, p = .02$ . For those who were not insulted, people who had low MCPR ( $M = 79.89, SD = 183.86$ ) reacted more negatively to the outgroup than those who had high MCPR ( $M = -29.94, SD = 141.34$ ),  $t(76) = 2.84, p = .006$ .

*EMS Differences.* A 2 (Race: African American or White) X 3 (Target: Target, Outgroup or Ingroup) X 2 (Insult: Insult or No Insult) X 2 (EMS Level: Low or High) MANOVA was computed for explicit feeling ratings and implicit reaction time ratings. A significant Race X EMS Level X Target interaction was found for explicit feeling ratings,  $F(2, 148) = 4.38, p = .013$ . As can be seen in Figure 7,

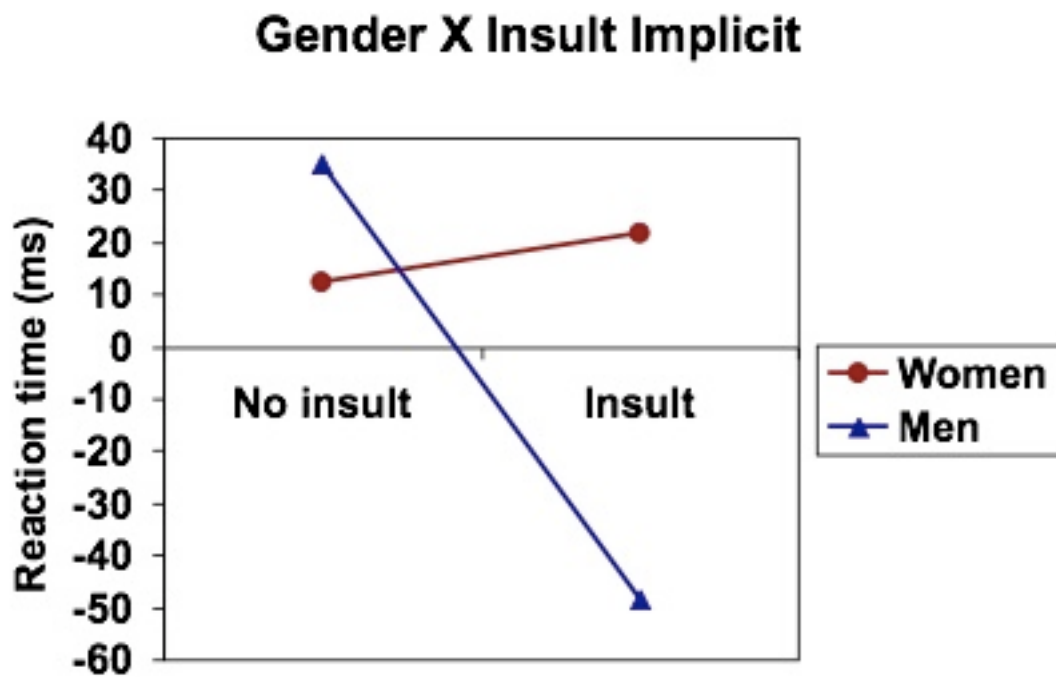


Figure 5

Figure 5 caption: Gender X Insult interaction: Reaction times as a function of gender and insult.

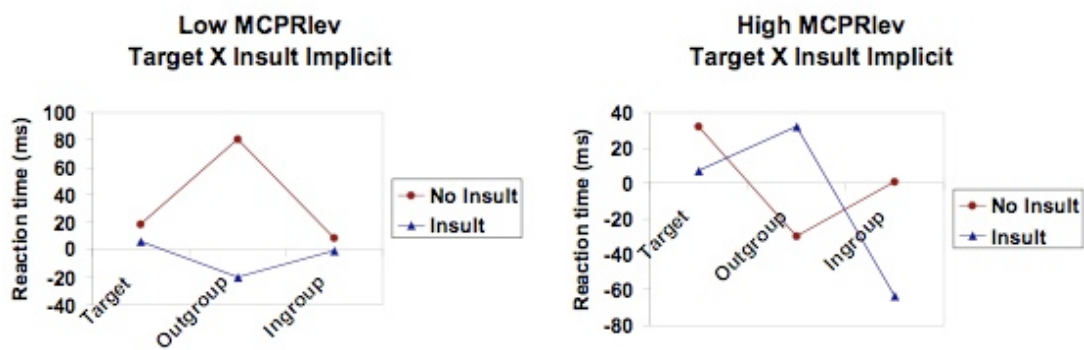


Figure 6

Figure 6 caption: Target X Insult X Motivation to Control Prejudice Level Interaction. Reaction time as a function of target, insult and MCPR level.

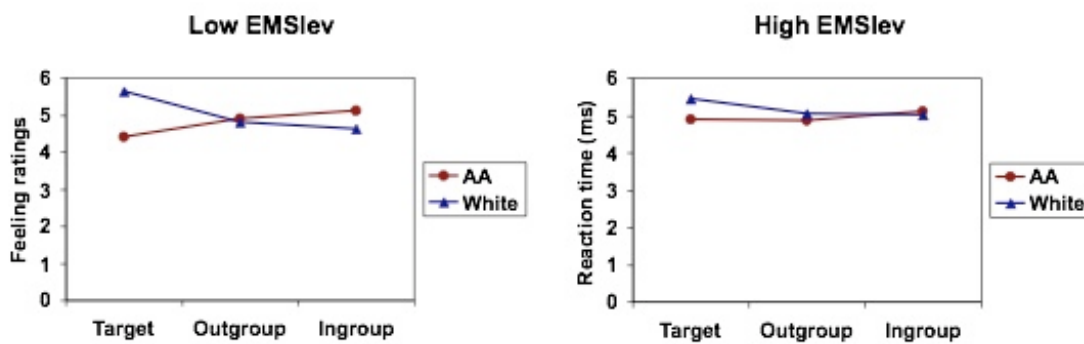


Figure 7

Figure 7 caption: Race X Target X EMS Level interaction: Feeling ratings as a function of race, target and EMS level.

Low EMS White participants rated the target significantly higher ( $M = 5.64$ ,  $SD = 1.94$ ) than Low EMS African American participants ( $M = 4.4$ ,  $SD = 2.30$ ),  $t(80) = -2.63$ ,  $p = .01$ . Low EMS White participants also rated the target higher than they rated both the outgroup ( $M = 4.79$ ,  $SD = 1.02$ ),  $t(46) = 2.93$ ,  $p = .005$ , and the ingroup ( $M = 4.62$ ,  $SD = 1.36$ ),  $t(46) = 2.99$ ,  $p = .005$ . No significant results were found for implicit reaction times in this analysis.

*IMS Differences.* A 2 (Race: African American or White) X 3 (Target: Target, Outgroup or Ingroup) X 2 (Insult: Insult or No Insult) X 2 (IMS Level: Low or High) MANOVA was computed for both explicit feeling ratings and implicit reaction time ratings. A significant Race X IMS Level interaction was found for explicit feeling ratings,  $F(1, 148) = 4.25$ ,  $p = .041$ . As can be seen in Figure 8, High IMS Whites rated all photographs on average more positively ( $M = 5.38$ ,  $SD = 1.18$ ) than High IMS African Americans ( $M = 4.83$ ,  $SD = 1.23$ ),  $t(80) = -2.04$ ,  $p = .045$ . In addition, African Americans with low IMS scores rated the photographs more positively ( $M = 4.90$ ,  $SD = 1.43$ ) than High IMS African Americans,  $t(99) = -2.46$ ,  $p = .016$ . No significant results were found for implicit reaction times in this analysis.

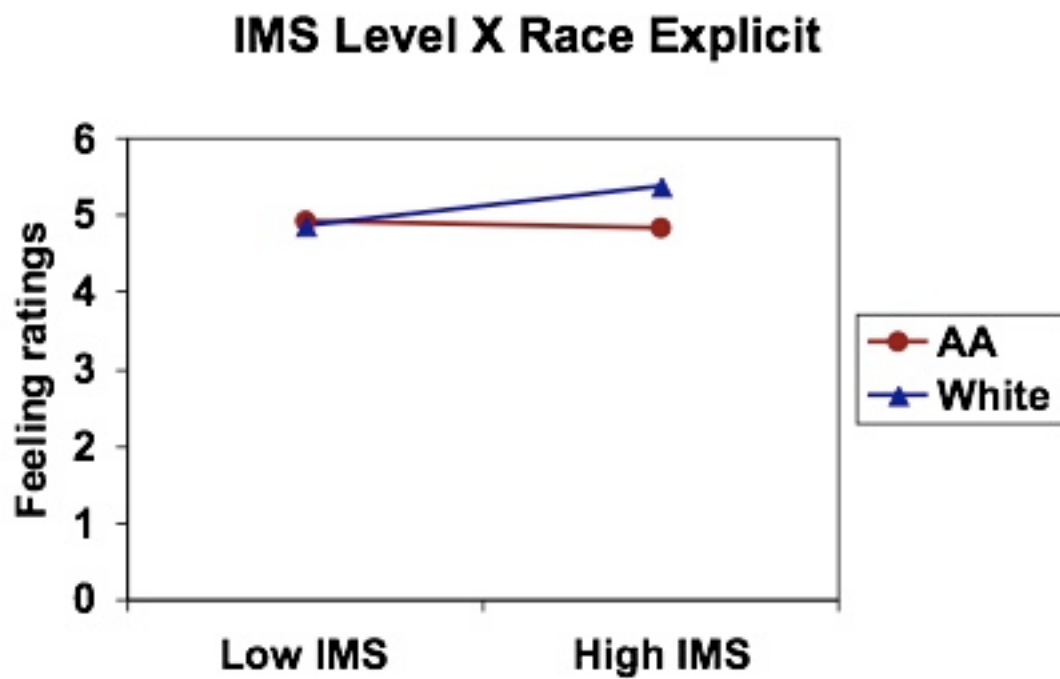


Figure 8

Figure 8 caption: IMS Level X Race Interaction: Feeling ratings as a function of IMS level and race

## Discussion

This study examined both explicit and implicit reactions to a prejudiced insult as heard by both White and African American participants.

Examining race differences on the explicit measure of the feeling ratings, I found that whereas both African American and White participants rated overall the pictures less positively after insult, African Americans rated the pictures even less positively than did Whites. This finding suggests that African Americans had a stronger explicit reaction to racial insults than Whites. Alternatively, this finding could point to the fact that Whites were trying to appear more egalitarian by not rating the African American target as negatively as they actually felt. In line with Gaertner and Dovidio's (1986) view of aversive racism, these White participants may have displayed ambivalence in this case, in that they believe it was wrong to rate a person negatively based on his race, yet due to cultural and cognitive forces, are not wholly able to separate negative feelings from their beliefs about African Americans.

Manipulation checks demonstrated that pilot study participants were affected by the insult video. Not surprisingly, insulted participants made much lower explicit feeling ratings for all pictures than participants who were not insulted. Insulted participants also rated the target lower than the outgroup and the ingroup others. Because the target is the person who delivered the insult, this suggests that participants were individuating the target by explicitly rating the person who insulted them lower on the feeling thermometer. That the participants

who were not insulted rated the target more positively than the outgroup and ingroup is a finding that is less easily explained. It is possible that because the target had been seen before, but the outgroup and ingroup pictures were novel, mere exposure to the same image of the target twice caused the higher ratings for that photo. In other words, familiarity with the subject of the photo was sufficient to create more positive explicit feelings about that person. Future investigations should include both novel and familiar photos of outgroup and ingroup members for explicit ratings to better understand this finding.

A race difference was found for scores on the EMS but not the IMS. Whites displayed a higher external motivation to control prejudice than African Americans. This finding was interesting because previous studies had not investigated responses by African Americans on either the EMS or IMS. The finding that African Americans report lower levels of motivation to control prejudice may be a reflection of differences in society's standards for the display of prejudice by Whites versus African Americans. Whereas Whites are discouraged from displaying prejudice, the same standards are perhaps not expected of African Americans.

Regardless of insult, African Americans rated the target more negatively than did Whites. Referring to the mere exposure effect mentioned earlier, this suggests that the mere exposure effect may only be happening for White subjects. However, when looking at the implicit reaction time measure, regardless of insult, Whites responded more negatively to the target than African Americans and more positively to the ingroup than African Americans. Here it



seems that Whites are relying on category information in judging the target. This is in direct contrast with what was found on the explicit measures. Perhaps the White subjects are overcompensating on the explicit measures by rating the target more positively, but reacting more slowly when making positive associations with the target on the GNAT. Meanwhile, the African Americans are probably more used to hearing insults against their own race, and thus did not show parallel negative responses to the target on the implicit measure. Yet, African Americans demonstrated more negative responses on the explicit measure. Judd, Park, Ryan, Brauer & Kraus (1995) found that African Americans rated Whites lower than Whites rated African Americans on a variety of explicit measures. This might explain the differences on the explicit measures reported here, as African Americans may have found that publicly expressing negative views about Whites to be acceptable. However, for Whites, the public expression of negative feelings for African Americans is not acceptable in American society, and thus they may have rated African Americans more positively, despite what they were feeling internally. Again, there is a disparity in the standards expected from Whites versus African Americans with regards to the display of prejudice.

Because African Americans seemed to have a less negative response on the implicit measures, it appears that African Americans do not seem to be affected by racial insult. Consistent with this interpretation is a study by D'Augelli and Hershberger (1993), which found that of the African American college students surveyed, 89% reported having heard disparaging racial remarks about African Americans on their campus (41% reported having heard them

occasionally, 28% reported having heard them often, and 28% reported having heard them frequently). In the same sample, 59% of the participants reported being the target of one or more of verbal insults. Given the prevalence of experiences that African Americans have with racial insult, it may be the case that they have had more practice developing coping strategies to deal with these situations. It could be the case that African Americans are employing a coping response by attributing the insult to prejudice, rather than to something about oneself (Crocker & Major, 1989). In so doing, perhaps African Americans are able to ignore the insult without letting it affect their subsequent psychological responses.

African Americans did not differ in their reactions to the target, outgroup, and ingroup, but Whites reacted more negatively to the outgroup than the ingroup. It appears that Whites were demonstrating category-based responding in this case. The target and outgroup were both members of the outgroup for White participants. Further analyses showed that High EMS Whites were not rating the target differently from the outgroup or ingroup, and thus were individuating the people in the pictures. However, low EMS Whites rated the target higher than African Americans rated the target, and also the low EMS Whites rated the target higher than the outgroup and ingroup. This may suggest that only low EMS Whites overcompensated by rating the target higher than other pictures. Of course, there is still the possibility that the mere exposure effect is in place when judging the targets, as this was the only photo that was

familiar. However, if this were the case, it is unclear why the mere exposure effect only affected White participants.

Race differences were found among the IMS-EMS subgroups on the Social Distance Scale. In both Low EMS subgroups (Low EMS, High IMS and Low EMS, Low IMS), African American and White participants showed a greater willingness to interact with their own race as opposed to the other race. Because the SDS is an explicit measure, and the EMS measures external motivation to control prejudice, it is not surprising that these measures were found to be related.

Further investigation is needed to understand why the implicit reactions of Whites suggested reliance on category information, whereas the African Americans did not. The behaviors of African Americans may have been consistent with the MAGK model, rather than the Affect-and-Information Processing model, as predicted. After being exposed to racial insult, these participants may have realized that they were not in a benign environment, and thus lacked confidence in their general knowledge structures, which may have included negative beliefs about Whites. Thus, the negative mood may have induced them to rely on more individuating information in their implicit responses to this particular situation. Explicit responses by African Americans, where they are lacking external pressure to have positive feelings about the outgroup, may have been strong enough to override reliance on individuating information, leading to the more negative explicit responses by African Americans toward Whites.

The behavior of White participants may have been more in line with the Affect Infusion Model. According to this model, substantive processing occurs when people are processing novel information, which has to be related to preexisting knowledge. In this situation, affect infusion may occur whereby affect can act as a prime that produces selective access to certain memories or thoughts. Negative affect that was created by the outgroup may have caused activation of memories of negative beliefs toward the outgroup, which resulted in the more negative implicit responses by Whites. Explicit responses by Whites showed the reverse effect of those of African Americans, in that the external pressure to show positive attitudes toward the outgroup overrides the activation of these negative beliefs, at least on explicit measures.

According to the continuum model of impression formation, there are several factors that help determine whether a person will make a judgment based on categorical or individuating information (Fiske, Lin, & Neuberg, 1999). Central to determining how much a person will individuate another person is how much attention is paid to the situation, as well as how they interpret the situation in line with their motivations. According to the model, to fully individuate a target, a person must first determine that the person is of minimal interest or relevance, and then must allocate attention to the attributes of the target. If the person interprets that the available information is inconsistent with category information, the person must recategorize the target into a new category, but if unable to do so, the person must then engage in piecemeal, attribute-by-attribute analysis of the target because that person is not easily categorizable. If the person does not

complete each of these stages in the model, the target will be judged according to his category membership. It is not known from this study which stage along this continuum White participants failed to complete, leading to categorical responding. Individual and situational differences can create wide variation at any one of these stages, and these differences were not sufficiently captured in this experiment by assessing each participant's Internal and External Motivations to control prejudice. For African American participants, it is not known whether this same model applies. If so, we can presume that African Americans were successful at each stage of the continuum, but it is unclear why African Americans would complete each stage whereas Whites did not.

Future experiments may examine effects of inducing either internal or external motivation to control prejudice in a situational context in order to control for the widely varying individual differences, and then attempt to see whether the expected results are found in the induced IMS/EMS subgroups.

Another factor that may have contributed to not finding the expected differences between the IMS/EMS subgroups is the difference in the population from which this sample was drawn as compared to Plant and Devine's (1998) population. As seen in Table 2, the EMS scores of both Whites and African Americans had a smaller range than the EMS scores found by Plant and Devine. Plant and Devine used only White participants at a university (i.e., the University of Wisconsin at Madison) that was not as diverse as Georgia State University. The racial composition of the two schools may be so different from each other that IMS and EMS scores may need to be treated differently in order to better

Table 2 Caption: IMS and EMS scores in the current study compared to scores found by Plant et al.

Table 2			
IMS and EMS Score Averages			
Score	African Americans	Whites	Plant
Low IMS	5.91	5.59	5.83
IMS Mdn.	7.40	7.00	7.20
High IMS	8.13	7.82	8.03
Low EMS	3.03	3.40	2.24
EMS Mdn	4.00	4.40	4.60
High EMS	5.46	5.96	7.03

understand how they apply to students at a very diverse university. In addition, the IMS and EMS have not been tested on African American populations, so it was not established whether a difference in IMS and EMS levels would even be found for African American participants.

Certain methodological limitations may have prevented the expected results from being found. For example, one limitation may have been in the way the photo stimuli were presented. Participants viewed one familiar photo of the target, and one each of a novel outgroup member and a novel ingroup member. Investigations should include stimuli representing both novel and familiar outgroup and ingroup members to control for effects of mere exposure.

An investigation of possible gender effects was not considered part of the primary analyses, but a gender difference was, indeed, found. On RT index scores, women's responses did not differ whether they were insulted or not, but men responded more positively when they had been insulted. This suggests that men perhaps were covering their negative responses and reporting inflated feeling ratings so as not to appear prejudiced. This finding could have also resulted from men not wanting to appear sexist, as in this experiment, women provided the insults. Alternatively, in Cohen, Nisbett, Bowdle, and Schwarz's (1996) experiments investigating the southern culture of honor, it was found that northern men were merely amused after they had been bumped into and insulted by another man, while southern men were angered. In the Cohen et al. (1996) study, men were the insulters, so perhaps it is the case that southern men might only be angered if an insult came from a man, but amused if the insult was dealt

by a women. The present study was conducted in the South, with women delivering the insults. Therefore, it may be the case that the men in this study were merely amused by the insult because it came from a woman instead of a man, which may have caused the inflated feeling ratings.

People who had high levels of motivation to control prejudice showed an interesting pattern of reaction time results. These participants reacted more negatively to the target than the outgroup when they were not insulted. In this instance, it seems that the mere exposure effect is operating in reverse, because the familiar target received a more negative response than the novel outgroup. Meanwhile, those with high MCPR who were insulted reacted more negatively to the outgroup than the ingroup, even though it was the target who insulted them. These participants, who are highly motivated to control their prejudice, might be transferring their negative reactions to the outgroup member. Perhaps their suppression of prejudice toward the target somehow “rebounds” when confronted with the novel outgroup member.

Regardless of insult, when looking at the average of the target, outgroup, and ingroup photos, High IMS African American participants made more negative ratings than both High IMS White participants and Low IMS African American participants. Because so little is known about African Americans’ responses on the IMS, it is difficult to speculate why this finding occurred. It may be the case that Low IMS African American are overcompensating and displaying inflated feeling ratings.



I did not find what I expected in terms of differences in association and generalization on explicit and implicit measures among the IMS-EMS subgroups. However, I did find unexpected race differences on the EMS, as well as race interactions with the IMS and EMS that previously had not been investigated. These results suggest that, despite what I predicted, on both implicit and explicit measures, African-Americans and Whites respond differently to racial insult. This is an important finding that should be explored further.

#### *Contributions to the Study of Prejudice*

This study involved Whites and African Americans both experiencing prejudice and exhibiting prejudiced responses, while most prior research has focused on Whites exhibiting prejudice and, to a lesser degree, African Americans experiencing prejudice. Even though the expected results were not detected, these topics deserve further attention to fully explain how racial insult affects the prejudiced responses of both Whites and African Americans. Even though a majority of the literature investigating prejudice and category-based responding has focused on the examination of the behaviors of Whites, the exhibition of these same types of behaviors by African Americans and other non-White populations should not be ignored. Further, in a society where there is a significant amount of racial mixing, the experience of anti-White prejudice is a reality, even if it is less common than anti-Black prejudice. To fully understand the phenomena of prejudice and discrimination, all forms of these types of behaviors should be investigated.

In addition to taking a broader and more inclusive approach to the study of behaviors related to discrimination and prejudice, this study also made use of integral affect, wherein the induced affect was caused by the social group itself. Prior research involving induced affect and social situations has typically employed incidental affect, wherein affect is induced via methods that are unrelated to the social group context. Because the study of social situations in a laboratory setting has an element of artificiality, the use of integral affect in these types of studies can make the situation seem more natural and realistic. Ultimately, a greater understanding of the nature of prejudice may help reduce its harmful effects in society. The examination of integral affect may prove very useful in achieving this goal.

## References

- Baron, R. A. (1979). Effects of victim's pain cues, victim's race, and level of prior instigation upon physical aggression. *Journal of Applied Social Psychology, 9*, 103-114.
- Baron, R. S., Burgess, M. L., Kao, C. F., & Logan, H. (1990, May). Mood and persuasion: A cognitive response analysis. Paper presented at the annual convention of the Midwestern Psychological Association, Chicago.
- Bless, H. (2000). The interplay of affect and cognition: The mediating role of general knowledge structures. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 201-222). New York: Cambridge University Press.
- Bless, H., Bohner, G., Schwarz, N., & Strack, F. (1990). Mood and persuasion: A cognitive response analysis. *Personality and Social Psychology Bulletin, 16*, 331-345.
- Bless, H., Clore, G. L., Schwarz, N., Golisano, V., Rabe, C., & Wölk, M. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness? *Journal of Personality and Social Psychology, 71*, 665-679.
- Bless, H., Schwarz, N., & Wieland, R. (1996). Mood and the impact of category membership and individuating information. *European Journal of Social Psychology, 26*, 935-959.

- Bodenhausen, G. V. (1990) Stereotypes as judgmental heuristics: Evidence of circadian variations in discrimination. *Psychological Science*, 1, 319-322.
- Bodenhausen, G. V. (1993). Emotions, arousal, and stereotypic judgments: A heuristic model of affect and stereotyping. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 13-37). San Diego, CA: Academic Press.
- Bodenhausen, G. V., Kramer, G. P., & Süsser, K. (1994). Happiness and stereotypic thinking in social judgment. *Journal of Personality and Social Psychology*, 66, 621-632.
- Bogardus, E. S. (1933). A social distance scale. *Sociology and Social Research*, 17, 265-271.
- Cacioppo, J. T., & Berntson, G. G. (2001). The affect system and racial prejudice. In J. A. Bargh and D. K. Apsley (Eds.), *Unraveling the complexities of social life: A festschrift in honor of Robert B. Zajonc* (pp. 95-110). Washington, D. C.: American Psychological Association.
- Cohen, D., Nisbett, R. E., Bowdle, B. F., & Schwarz, N. (1996). Insult, aggression, and the southern culture of honor: An “experimental ethnography.” *Journal of Personality and Social Psychology*, 70, 945-960.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608-630.
- Darke, S. (1988). Anxiety and working memory capacity. *Cognition & Emotion*, 2, 145-154.

- D'Augelli, A. R., & Hershberger, S. L. (1993). African American undergraduates on a predominantly White campus: Academic factors, social networks, and campus climate. *Journal of Negro Education, 62*, 67-81.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*, 5-18.
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L., (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality and Social Psychology, 82*, 835-848.
- Dunton, B. C. & Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin, 23*, 316-326.
- Edwards, J. A. & Weary, G. (1993). Depression and the impression-formation continuum: Piecemeal processing despite the availability of category information. *Journal of Personality and Social Psychology, 64*, 636-645.
- Ellis, H. C., & Ashbrook, P. W. (1988). Resource allocation model of the effects of depressed mood states on memory. In K. Fiedler & J. Forgas (Eds.), *Attitude structure and function* (pp. 153-179). Hillsdale, NJ: Erlbaum.
- Fiske, S. T., Lin, M., & Neuberg, S. L. (1999). The continuum model: Ten years later. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 231-254). New York, NY: Guilford Press.
- Fiske, S. T., & Taylor, S. E. (1991). *Social Cognition*. New York: McGraw-Hill.

- Fiske, S. T., Neuberg, S. L., Beattie, A. E., & Milberg, S. J. (1987). Category-based and attribute-based reactions to others: Some informational conditions of stereotyping and individuating processes. *Journal of Experimental Social Psychology, 23*, 399-427.
- Forgas, J. P. (1989). Mood effects on decision-making strategies. *Australian Journal of Psychology, 41*, 197-214.
- Forgas, J. P. (1994). The role of emotion in social judgments: An introductory review and an affect infusion model (AIM). *European Journal of Social Psychology, 24*, 1-24.
- Forgas, J. P. (2000). Affect and information processing strategies: An interactive relationship. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 253-280). New York: Cambridge University Press.
- Forgas, J. P., & Fiedler, K. (1996). Us and them: Mood effects on intergroup discrimination. *Journal of Personality and Social Psychology, 70*, 36-52.
- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61-89). San Diego: Academic Press, Inc.
- Gotlib, I. H., McLachlan, A. L., & Katz, A. N. (1988). Biases in visual attention in depressed and nondepressed individuals. *Cognition & Emotion, 2*, 185-200.
- Gur, R. C., Gur, R. E., Skolnick, B. E., Resnick, S. M., Silver, F. I., Chawluk, J., Muenz, L., Obrist, W. D., & Reivich, M. (1988). Effects of task difficulty on

- regional cerebral blood flow: Relationships with anxiety and performance. *Psychophysiology*, 24, 392-399.
- Hasher, L., & Zacks, R. T. (1979). Automatic and effortful processes in memory. *Journal of Experimental Psychology: General*, 108, 356-388.
- Judd, C. M., Park, B., Ryan, C. S., Brauer, M., & Kraus, S. (1995). Stereotypes and ethnocentrism: Diverging interethnic perceptions of African American and White American Youth. *Journal of Personality and Social Psychology*, 69, 460-481.
- Kim, H.-S., & Baron, R. S. (1988). Exercise and illusory correlation: Does arousal heighten stereotypic processing? *Journal of Experimental Social Psychology*, 24, 366-380.
- Mackie, D. M., & Worth, L. T. (1989). Processing deficits and the mediation of positive affect in persuasion. *Journal of Personality and Social Psychology*, 57, 27-40.
- McCord, P. A., Vanman, E.J., Rogers, T., Strong, L., & Anderson, C. (2004, January). Nonverbal Evidence of Displaced Intergroup Aggression. Poster presented at the 4<sup>th</sup> annual meeting of the Society for Personality and Social Psychology, Austin, TX.
- Nosek, B. A. & Banaji, M. R. (2001). The go/no-go association task. *Social Cognition*, 19, 625-664.
- Plant, E. A. & Devine, P. G., (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75, 811-832.

- Rogers, R. W., & Prentice-Dunn, S. (1981). Deindividuation and anger-mediated interracial aggression: Unmasking regressive racism. *Journal of Personality and Social Psychology, 41*, 63-73.
- Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition* (Vol.2, pp. 527-561). New York: Guilford.
- Semmler, C., & Brewer, N. (2002). Effects of mood and emotion on juror processing and judgments. *Behavioral Sciences and the Law, 20*, 423-436.
- Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology, 37*, 1660-1672.
- Stewart, T. L., Doan, K. A., Gingrich, B. E., & Smith, E. R. (1998). The actor as context for social judgments: Effects of prior impressions and stereotypes. *Journal of Personality and Social Psychology, 75*, 1132-1154.
- Sinclair, R. C. (1998). Mood, categorization breadth, and performance appraisals: The effects of order of information acquisition and affective state on halo, accuracy, information retrieval, and evaluations. *Organizational Behavior and Human Decision Processes, 42*, 22-46.
- Tassinari, L. G. & Cacioppo, J. T. (2000). The skeletomotor system: Surface electromyography. In J. T. Cacioppo, L. G. Tassinari, & G. G. Berntson



(Eds.), *Handbook of psychophysiology* (2<sup>nd</sup> ed., pp. 163-199). Cambridge, England: Cambridge University Press.

Vrana, S. R., & Rollock, D. (1998). Physiological response to a minimal social encounter: Effects of gender, ethnicity, and social context. *Psychophysiology*, 35, 462-469.

## Appendix A

## Emotion Manipulation Check

Please describe the extent to which you are currently experiencing each of the following emotions. Just circle the number that seems to best describe the amount of each emotion.

	Definitely Do Not Feel			Definitely Feel
Sad	1	2	3	4
Angry	1	2	3	4
Frustrated	1	2	3	4
Gloomy	1	2	3	4
Down	1	2	3	4
Annoyed	1	2	3	4
Irritated	1	2	3	4

## Appendix B

### The Donald Story

I ran into my old acquaintance Donald the other day, and I decided to go over and visit him, since by coincidence we took our vacations at the same time. Soon after I arrived, a salesman knocked at the door, but Donald refused to let him enter. He also told me that he was refusing to pay his rent until the landlord repaints his apartment. We talked for a while, had lunch, and then went out for a ride. We used my car, since Donald's car had broken down that morning, and he told the garage mechanic that he would have to go somewhere else if he couldn't fix his car that day. We went to the park for about an hour and then stopped at a hardware store. I was sort of preoccupied, but Donald bought some small gadget, and then I heard him demand his money back from the sales clerk. I couldn't find what I was looking for, so we left and walked a few blocks to another store. The Red Cross had set up a stand by the door and asked us to donate blood. Donald lied by saying he had diabetes and therefore could not give blood. It's funny that I hadn't noticed it before, but when we got to the store, we found that it had gone out of business. It was getting kind of late, so I took Donald to pick up his car and we agreed to meet again as soon as possible.

Now that you have read this story, please form an impression of Donald. Circle the number which best describes Donald on the following traits:

	Not at All					Extremely				
Boring	1	2	3	4	5	6	7	8	9	10
Unfriendly	1	2	3	4	5	6	7	8	9	10
Inconsiderate	1	2	3	4	5	6	7	8	9	10
Interesting	1	2	3	4	5	6	7	8	9	10
Likeable	1	2	3	4	5	6	7	8	9	10
Hostile	1	2	3	4	5	6	7	8	9	10
Dependable	1	2	3	4	5	6	7	8	9	10

Narrow-minded	1	2	3	4	5	6	7	8	9	10
---------------	---	---	---	---	---	---	---	---	---	----

Thoughtful	1	2	3	4	5	6	7	8	9	10
------------	---	---	---	---	---	---	---	---	---	----

Kind	1	2	3	4	5	6	7	8	9	10
------	---	---	---	---	---	---	---	---	---	----

Intelligent	1	2	3	4	5	6	7	8	9	10
-------------	---	---	---	---	---	---	---	---	---	----

Selfish	1	2	3	4	5	6	7	8	9	10
---------	---	---	---	---	---	---	---	---	---	----

## Appendix C

### **Internal Motivation to Respond Without Prejudice Scale (IMS) and External Motivation to Respond Without Prejudice Scale (EMS)**

Instructions: The following questions concern various reasons or motivations people might have for trying to respond in nonprejudiced ways toward people of a different race. Some of the reasons reflect internal-personal motivations whereas others reflect more external-social motivations. Of course, people may be motivated for both internal and external reasons; we want to emphasize that neither type of motivation is by definition better than the other. In addition, we want to be clear that we are not evaluating you or your individual responses. All your responses will be completely confidential. We are simply trying to get an idea of the types of motivations that students in general have for responding in nonprejudiced ways. If we are to learn anything useful, it is important that you respond to each of the questions openly and honestly. Please give your response according to the scale below.



Because of my personal values, I believe that using stereotypes about people of a different race is wrong.

1      2      3      4      5      6      7      8      9

Being nonprejudiced toward people of a different race is important to my self-concept.

1      2      3      4      5      6      7      8      9

Internal Motivation to Respond Without Prejudice Scale (IMS) and External Motivation to Respond Without Prejudice Scale (EMS)

#### External Motivation Items

Because of today's PC (politically correct) standards I try to appear nonprejudiced toward people of a different race.

1      2      3      4      5      6      7      8      9

I try to hide any negative thoughts about people of a different race in order to avoid negative reactions from others.



1        2        3        4        5        6        7        8        9

If I acted prejudiced toward people of a different race, I would be concerned that others would be angry with me.

1        2        3        4        5        6        7        8        9

I attempt to appear nonprejudiced toward people of a different race in order to avoid disapproval from others.

1        2        3        4        5        6        7        8        9

I try to act nonprejudiced toward people of a different race because of pressure from others.

1        2        3        4        5        6        7        8        9

Note: Participants were given the IMS and EMS items mixed together. The questionnaire was labeled "Personal Motivations Scale" for participants.

## Appendix D

## Motivation to Control Prejudiced Reactions Scale (MCPRS)

Directions: For each statement below, write a number in the blank that indicates the extent to which you agree or disagree with the statement. Please answer honestly, remembering that your answers will be kept confidential. Please use the following scale:

-3.....-2.....-1.....0.....+1.....+2.....+3

**strongly** **strongly**

**disagree** **agree**

\_\_\_\_\_ 1. In today's society it is important that one not be perceived as prejudiced in any manner.

\_\_\_\_\_ 2. I always express my thoughts and feelings, regardless of how controversial they might be.

\_\_\_\_\_ 3. I get angry with myself when I have a thought or feeling that might be considered prejudiced.

\_\_\_\_\_ 4. If I were participating in a class discussion and a student of another race expressed an opinion with which

I disagreed, I would be hesitant to express my own viewpoint.

\_\_\_\_\_ 5. Going through life worrying about whether you might offend someone is just more trouble than it's worth.

\_\_\_\_\_ 6. It's important to me that other people not think I'm prejudiced.

\_\_\_\_\_ 7. I feel it's important to behave according to society's standards.

\_\_\_\_\_ 8. I'm careful not to offend my friends, but I don't worry about people I don't know or don't like.

\_\_\_\_\_ 9. I think that it is important to speak one's mind rather than to worry about offending someone.

\_\_\_\_\_ 10. It's never acceptable to express one's prejudices.

\_\_\_\_\_ 11. I feel guilty when I have a negative thought or feeling about a person of a different race.

\_\_\_\_\_ 12. When speaking to a person of a different race, it's important to me that he/she not think I'm prejudiced.

- \_\_\_\_\_ 13. It bothers me a great deal when I think I've offended someone, so I'm always careful to consider other people's feelings.
- \_\_\_\_\_ 14. If I have a prejudiced thought or feeling, I keep it to myself.
- \_\_\_\_\_ 15. I would never tell jokes that might offend others.
- \_\_\_\_\_ 16. I'm not afraid to tell others what I think, even when I know they disagree with me.
- \_\_\_\_\_ 17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat.

Note: The questionnaire was labeled "Personal Attitudes Scale" for participants.

Appendix E  
Social Distance Scale

Sub# \_\_\_\_\_

The following questions ask about your perception of White Americans. You may have to put yourself in different roles for some of the items (i.e. parent, spouse). Please rate the following statement with each word listed below, using the 1-9 scale, 1=strongly disagree to 9=strongly agree.

I would be willing to have a White American as my:

STRONGLY  
DISAGREE

STRONGLY  
AGREE

Good Friend	1	2	3	4	5	6	7	8	9
Next Door Neighbor	1	2	3	4	5	6	7	8	9
Co-worker	1	2	3	4	5	6	7	8	9
Roommate	1	2	3	4	5	6	7	8	9
Child's Friend	1	2	3	4	5	6	7	8	9
Sibling's spouse	1	2	3	4	5	6	7	8	9
Romantic Date	1	2	3	4	5	6	7	8	9
Family physician	1	2	3	4	5	6	7	8	9
U.S. President	1	2	3	4	5	6	7	8	9

Governor	1	2	3	4	5	6	7	8	9
Wife or Husband	1	2	3	4	5	6	7	8	9
Child's teacher	1	2	3	4	5	6	7	8	9
Dance partner	1	2	3	4	5	6	7	8	9
Fellow church or social club member	1	2	3	4	5	6	7	8	9

The following questions ask about your perception of Black Americans. You may have to put yourself in different roles for some of the items (i.e. parent, spouse). Please rate the following statement with each word listed below, using the 1-9 scale, 1=strongly disagree to 9=strongly agree.

I would be willing to have a Black American as my:

STRONGLY  
DISAGREE

STRONGLY  
AGREE

Good Friend	1	2	3	4	5	6	7	8	9
Next Door Neighbor	1	2	3	4	5	6	7	8	9
Co-worker	1	2	3	4	5	6	7	8	9
Roommate	1	2	3	4	5	6	7	8	9
Child's Friend	1	2	3	4	5	6	7	8	9

Sibling's spouse	1	2	3	4	5	6	7	8	9
Romantic Date	1	2	3	4	5	6	7	8	9
Family physician	1	2	3	4	5	6	7	8	9
U.S. President	1	2	3	4	5	6	7	8	9
Governor	1	2	3	4	5	6	7	8	9
Wife or Husband	1	2	3	4	5	6	7	8	9
Child's teacher	1	2	3	4	5	6	7	8	9
Dance partner	1	2	3	4	5	6	7	8	9
Fellow church or social club member	1	2	3	4	5	6	7	8	9

Note: The questionnaire was labeled "Social Survey" for participants.