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# Choosing Social Situations: The Relation Between Automatically Activated Racial Attitudes and Anticipated Comfort Interacting With African Americans

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*This research explored how White students' automatically activated racial attitudes and motivations to control prejudiced reactions (MCPR) related to their self-reported comfort and willingness to interact with Black partners in a variety of situations. Participants completed the MCPR scale and a priming task that provides an unobtrusive measure of automatically activated racial attitudes. In a later session, participants rated their comfort and willingness to enter eight situations varying in their degree of intimacy and scriptedness and then rerated each situation while imagining different interaction partners, including a Black individual. When the situations were scripted or participants were low on the restraint to avoid dispute factor of the MCPR scale, participants expressed willingness to interact with Black partners. When the situation was unscripted and participants were characterized by higher restraint scores, anticipated comfort varied as a function of automatically activated racial attitudes and the concern with acting prejudiced factor of the MCPR scale.*

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**Keywords:** *prejudice; discrimination; race; attitudes; situation*

**P**ast research has shown that automatically activated attitudes and stereotypes can exert powerful effects on judgments and behavior (e.g., Banaji, Hardin, Rothman, 1993; Bargh, Chen, & Burrows, 1996; Devine, 1989; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio, Jackson, Dunton, & Williams, 1995; Gilbert & Hixon, 1991; Greenwald & Banaji, 1995; Perdue & Gurtman, 1990). Especially relevant for the present purposes are those investigations that have examined behavior toward African Americans. For example, Fazio and his colleagues (1995) found that participants who held

more negative automatically activated racial attitudes behaved in a less friendly, less interested manner toward an African American experimenter. Dovidio and his colleagues (1997) explored the effects of automatically activated attitudes on nonverbal behavior and found that when participants held more negative attitudes toward African Americans, they blinked more and maintained less eye contact while interacting with an African American (also see Dovidio, Kawakami, & Gaertner, 2002). Such findings indicate that automatically activated racial attitudes can affect behavior when White individuals are interacting with African Americans.

What is missing from this discussion, however, is the role that automatically activated attitudes might play in determining whether people choose to interact at all and in which kinds of situations they might be willing to do so. The present study takes a first step toward answer-

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ing this question. The research seeks to identify how some individual characteristics (i.e., automatically activated racial attitudes and motivations to control prejudiced reactions) combine with some situational characteristics (such as the degree to which situations are scripted and intimate) to predict who will tend to avoid interracial interactions and the circumstances in which they will do so.

As other researchers have noted, people actively choose many situations in which they find themselves and, when possible, they tend to navigate themselves toward situations and interaction partners that suit their personal preferences and characteristics (see Ickes, Snyder, & Garcia, 1997, for a review). One obvious implication is that automatically activated attitudes might predispose participants to approach or avoid a person in a situation that involves interaction with the person. A long-standing tenet of attitude theory and research maintains that attitudes guide appraisals of objects and, hence, provide information as to whether approach or avoidance behavior is more warranted (e.g., Fazio, 2000; D. Katz, 1960; Smith, Bruner, & White, 1956). This reasoning suggests that individuals with negative automatically activated attitudes toward African Americans might be expected to avoid interacting with them.

Participants' automatically activated attitudes toward African Americans were measured by an unobtrusive priming technique referred to as the "bona fide pipeline" (Fazio et al., 1995).<sup>1</sup> The attitude estimates yielded by this technique have been shown to predict race-related judgments and behaviors, such as the earlier-noted quality of an interaction with an African American experimenter. Racial attitudes as measured by this procedure also have been found to predict participants' judgments of the quality of an essay attributed to an African American student (Jackson, 1997), the credentials of an African American candidate to the Peace Corps (Olson & Fazio, 1999), and emotional reactions to a seemingly prejudiced response (Fazio & Hilden, 2001).

On a theoretical level, these findings provide support for the MODE (Motivation and Opportunity as Determinants) (Fazio, 1990; Fazio & Towles-Schwen, 1999) model's description of a spontaneous attitude-to-behavior process—one in which behavior is directly influenced by the attitudes that are automatically activated from memory when the attitude object is encountered. By having directly assessed the evaluation that was automatically activated upon exposure to Black stimulus persons and then used that information as an individual difference measure to predict behavior, these studies demonstrate the critical importance of automatically activated racial attitudes and, hence, elucidate the attitude-to-behavior process.

The MODE model also maintains, however, that judgments and behaviors can be jointly affected by automatically activated attitudes and relevant motivational factors. That is, motivational concerns may moderate the influence of automatically activated attitudes. This theoretical postulate regarding "mixed" attitude-to-behavior processes (processes that involve both spontaneous and deliberative components), forms the major conceptual basis for our consideration of approach or avoidance tendencies with respect to interracial interaction situations.

#### *Motivation to Control Prejudiced Reactions*

The methodology used in the present research was guided by previous studies concerned with people's choosing of social situations. These studies have presented participants with hypothetical situations and asked them to report how comfortable and willing they would be to enter the situation (Snyder & Gangestad, 1982) or to rate their preference for interacting with each potential partner in several situations (Glick, 1985). The current research also presented participants with hypothetical situations and asked them to report how comfortable they would be in each situation with varying interaction partners. In contrast to the assessment of racial attitudes, then, the dependent measure in the present study relied on participants' self-reports. Therefore, it was possible that participants would exaggerate their reports of comfort and willingness to interact with African Americans. Although the unobtrusive priming technique used to assess automatically activated racial attitudes overcame this problem for the independent variable of interest, the possibility that participants would try to respond in a socially desirable manner remained a problem when measuring comfort and willingness to interact with African Americans.

Our solution to this problem was to measure participants' motivation to control prejudiced reactions using a scale developed by Dunton and Fazio (1997). The 17-item Motivation to Control Prejudiced Reactions (MCPR) scale consists of two stable and orthogonal factors. Individuals with high scores on the "concern with acting prejudiced" factor tend to agree with such statements as "It is important to me that other people not think I'm prejudiced" and "I get angry with myself when I have a thought or feeling that might be considered prejudiced." The other type of motivation identified by the MCPR scale is "restraint to avoid dispute." Examples of items that load highly on this factor include the following: "If I were participating in a class discussion and a Black student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint" and "I always express my thoughts and feelings,

regardless of how controversial they may be" (reverse coded).

Both the concern and restraint factors have been shown to moderate the relation between automatically activated racial attitudes and the expression of prejudice, just as suggested by the MODE model's depiction of a "mixed" attitude-to-behavior process. For example, Dunton and Fazio (1997) observed moderating effects of the concern factor with respect to participants' completion of the Modern Racism Scale (MRS) and moderating effects of the restraint factor on self-reported feelings about the "typical Black male undergraduate." When participants held negative automatically activated attitudes as measured by the bona fide pipeline technique, only those who were relatively unmotivated to control prejudiced reactions reported greater prejudice on the MRS and more negative feelings about the "typical Black male undergraduate." Those with negative attitudes but who were highly motivated to control prejudiced reactions did not express more prejudice than those with positive attitudes; to the contrary, they tended to express more favorability. Thus, self-reports and automatically activated racial attitudes were more correspondent among those relatively less motivated to control prejudice (see also Olson & Fazio, *in press*), suggesting that the self-reports of individuals relatively unmotivated to control prejudiced reactions are more trustworthy than those of more motivated individuals.

A brief review of known correlates of the two motivational factors will permit a more detailed consideration of how the factors might relate to individuals' appraisals of their willingness to enter interracial interactions. In fact, these correlates provide reasons for believing that concern and restraint might relate very differently to anticipated comfort in interracial interaction situations. The concern factor is strongly associated with the endorsement of egalitarian values, as measured by Katz and Hass's (1988) humanitarian-egalitarianism scale (see Towles-Schwen & Fazio, 2001, Note 1). It also is related to reports of a parental emphasis on egalitarianism and relatively positive interactions with Blacks during elementary school and middle school (Towles-Schwen & Fazio, 2001). Restraint to avoid dispute, on the other hand, bears no relation to egalitarian values. The desire to avoid conflict with or about Blacks appears to stem, at least in part, from a general lack of experience with interracial interactions. Individuals with higher restraint scores report having had relatively infrequent early interactions (in elementary and middle school) with Blacks, admit that their exposure to Blacks during childhood was primarily through TV and the media, and report lower intimacy with the African American with whom they are most familiar. They also rate their own

parents as more prejudiced (Towles-Schwen & Fazio, 2001).

Given that scores on the restraint factor reflect the extent of experience at interacting with Blacks, the factor may prove predictive of individuals' anticipated comfort in interracial social situations. Lacking experience, those with higher restraint scores may be somewhat reluctant to enter such situations, especially if their automatically activated racial attitudes promote negative construals of interacting with Blacks. The more experienced individuals with lower restraint scores, on the other hand, may believe themselves to be capable of negotiating interracial interaction, regardless of the implications of their automatically activated racial attitudes.

Concern with acting prejudiced, on the other hand, is not related to the frequency of past interaction with Blacks. Hence, this factor is likely to have the same sort of effects that were apparent in the earlier study regarding responses to the MRS. Greater concern should motivate more positive appraisals of the interracial interaction situations. Moreover, and consistent with the predictions offered by the MODE model, concern scores should moderate the relation between automatically activated attitudes and willingness to enter such situations. The relation between attitudes and anticipated comfort should become less positive as concern increases. However, our reasoning regarding the restraint factor suggests that this interaction between attitudes and concern may itself be moderated by restraint. The two-way interaction may hold more true for people with relatively little interracial experience, such as those characterized by high scores on the restraint factor. The more experienced, lower restraint individuals may believe that they can accommodate interracial situations, and their experience may be sufficient to mitigate even the effects of any automatically activated negativity that they exhibit.

#### *Situational Variables*

So far, we have discussed how individual differences might predispose a person to approach or avoid interracial interactions. Research on the moderating role of situations on the attitude-behavior relation suggests that the picture may be even more complicated. Situations themselves vary in terms of the extent to which relevant attitudes influence approach/avoidance tendencies. Scripts and norms have long been recognized as important influences on behavior. In more scripted situations, consensus exists about the behaviors that are expected and about the sequence in which they will be performed (Abelson, 1981; Pryor & Merluzzi, 1985; Schank & Abelson, 1977). By definition, scripted situations involve patterns of interaction that vary little from person to person. When interactions are highly scripted, the norm is

to follow the script, and subjective norms also are known to moderate the attitude-behavior relation (e.g., Schofield, 1975). Thus, individual attitudes may not strongly influence behavior when situations are highly scripted. One would know in advance how the other person will act and how one is expected to respond. If negative attitudes toward members of minority groups make one uncomfortable partially because one expects negative behaviors from minorities, the availability of scripts may alleviate some of this discomfort by altering those expectations. Likewise, to the extent that individuals who are highly restrained to avoid dispute expect awkward interactions, because they have little experience interacting with Blacks, the presence of a script also may alleviate discomfort by letting them know what to expect. In other words, scripts not only affect individuals' behavior once they are already in a situation but also may influence appraisals of the situation before individuals choose to enter it. We might speculate, then, that even a person with a negative attitude or a person who is inexperienced at interracial interaction may feel relatively comfortable about interacting with an African American in a well-scripted situation.

The intimacy of a situation also may be important. Even individuals with negative racial attitudes may be willing to enter situations involving African Americans if the interactions required are relatively minimal and trivial. For example, Glick (1985) found that compared to participants who were attracted to a potential interaction partner, those who were not attracted avoided interacting with that partner in romantic situations. However, no such relation was observed when the situation was not romantic in nature. We might then expect that individuals for whom negativity is automatically activated in response to Blacks would be more likely to avoid interracial interaction as the intimacy required in a given situation increases.

These speculations prompted us to ask participants to consider their anticipated comfort in interpersonal situations that varied along the dimensions of scriptedness and intimacy. In sum, then, the present research considers how willingness to interact with African Americans might vary as a function of characteristics of the situation (scriptedness and intimacy) and characteristics of the individual (automatically activated racial attitudes, concern with acting prejudiced, and restraint to avoid dispute). Of major interest is the relation between attitudes and anticipated comfort, as well as how this relation might vary as a function of concern, restraint, and the situational dimensions. The reports of those participants who were less concerned with acting prejudiced were expected to be most informative regarding the impact of attitudes on the construal of interracial situations.

#### PILOT STUDY

Before the relations of interest could be explored, it was necessary to select situations for inclusion in the study. As a first step, a list of 23 social situations was created, with the situations varying in their apparent degrees of intimacy and the extent to which there was a highly consensual script for them. Twenty-four participants were asked to "rate the degree to which you would feel intimate (close) to the person mentioned in each of the following social relationships" on a  $-3$  (*not at all intimate*) to  $+3$  (*very intimate*) scale. Thirty-seven other participants were asked to

rate the extent to which there is a clear script that defines what behaviors are to be performed in each of the following social relationships (e.g., the extent to which you would know what you are supposed to do from the type of relationship).

The endpoints of the scale represented *not at all scripted* ( $-3$ ) and *very scripted* ( $+3$ ).

The mean intimacy and "scriptedness" ratings were calculated for each of the 23 social situations. A scatterplot of these means, with intimacy and scriptedness as the axes, was used to categorize the social situations into four types: less intimate, less scripted; less intimate, more scripted; more intimate, more scripted; and more intimate, more scripted. Two situations of each type were chosen for further study; these situations were chosen to be maximally extreme on both dimensions. The descriptions and means for each type of situation are reported in Table 1. The four situations identified as more intimate were, in fact, judged to be significantly more intimate,  $t(23) = 12.29, p < .001, M_s = 0.47$  vs.  $-2.17$ ; likewise, those categorized as more scripted were indeed significantly more scripted,  $t(36) = 6.95, p < .001, M_s = 1.34$  vs.  $-0.28$ .<sup>2</sup> The ratings of intimacy and scriptedness for the selected situations were uncorrelated,  $r(6) = .06$ .<sup>3</sup> Furthermore,  $2$  (intimacy)  $\times$   $2$  (scriptedness) ANOVAs examining the intimacy and scriptedness of the selected situations verified that scripted and unscripted situations were judged equivalently intimate,  $M_s$  of  $-1.02$  and  $-.68$ , respectively,  $F < 1$ , and more and less intimate situations were equally scripted, both  $M_s = .53$ .

#### MAIN STUDY

##### *Method*

##### *PARTICIPANTS*

Undergraduates enrolled at a Midwestern university participated for partial fulfillment of an introductory psychology course requirement or money. Participants included 119 White participants (21 men and 98



**TABLE 1: Mean Ratings of Intimacy and Scriptedness for Each Situation Selected for Further Study**

| <i>Description of Situation ("Imagine You . . .")</i>  | <i>Intimacy</i> |      | <i>Scripted</i> |      |
|--|-----------------|------|-----------------|------|
|  | M               | SD   | M               | SD   |
| Are about to sit down in a crowded library at a table where another person is already seated | -2.58           | 0.83 | -0.22           | 1.75 |
| Need to arrange to "hitch" a 200-mile car ride through the "ride board"                      | -1.58           | 1.50 | -0.57           | 1.69 |
| Are working as waitstaff in a restaurant and you need to serve a customer                    | -1.71           | 1.20 | 1.97            | 1.04 |
| Are asked to give a maintenance person access to your home                                   | -2.79           | 0.59 | 0.92            | 1.34 |
| Are signed up to share a small dorm room   | 1.08            | 1.56 | -0.16           | 1.89 |
| Are about to go out on a first date  | 0.37            | 1.24 | -0.19           | 1.61 |
| Need to visit a doctor for a chronic medical condition                                       | 0.42            | 1.50 | 1.41            | 1.36 |
| Need to get help during office hours from a professor  | 0.00            | 1.41 | 1.05            | 1.10 |

women) who were recruited from among 517 undergraduates who completed a mass survey given at the beginning of the semester. The MCPR scale (Dunton & Fazio, 1997) was included in the mass survey. Participants were recruited without regard to their scores on this (or any other) scale.

#### FIRST SESSION

During the initial recruitment, students were asked to commit to two ostensibly unrelated experimental sessions in which they would complete a diverse set of tasks. The ultimate purpose of the first laboratory session was to obtain data on the participants' latencies of responding to adjectives connoting "good" or "bad" after being primed with Black or White faces. These scores were then reduced to a single index that provided an estimate of students' automatically activated attitudes toward Black relative to White persons in general. The procedure and materials used to obtain this attitude estimate are the same as described by Fazio et al. (1995), to which the interested reader is referred for details.

Students were greeted by a White female experimenter unaware of participants' scores on the MCPR scale. Students were told that they would perform a variety of tasks designed to assess the extent to which judging word meaning was an automatic skill. Only the first and the fourth tasks in the series were truly of interest. The other phases were included merely to support the cover story.

The first phase was conducted to obtain individuals' baseline data. On each trial, a row of asterisks was immediately replaced by an adjective with a clear positive or negative connotation. Participants were asked to indicate its meaning ("good" vs. "bad") as quickly and as accurately as possible by pressing one of two buttons. The computer recorded the time between the onset of the adjective and the participant's response. In Phase 2, participants were presented with a series of faces that they were to remember for a later, Phase 3, recognition test.

The fourth phase involved the task of interest. Participants were told that if responding to word meaning was truly an automatic skill, they should be able to perform the adjective connotation task just as efficiently as they did in Phase 1, even if they were given a second task to do simultaneously. They were told that faces would appear in place of the asterisks and their secondary task was to study these faces for a later recognition test while judging the valence of the adjective. During this phase, 48 photographs (head shots of Black, White, Asian, and Hispanic male and female undergraduates) were each presented four times, twice followed by positive adjectives and twice by negative adjectives. Each of the 16 Black faces was paired with a same-sex White face, in that the pairs were followed by the same four adjectives. The trials involving these pairs ultimately provided the data for the estimate of automatically activated racial attitude.

In the fifth phase, participants were presented with the expected recognition task involving the faces they had seen. Finally, the last phase consisted of the participants judging the attractiveness of the photos. Again, the purpose of these tasks was simply to bolster the cover story.

#### SECOND SESSION

Approximately 2 weeks later, participants returned for a second laboratory session. At the beginning of this session, participants were told that the purpose of the experiment was "to understand better the features of the social situation that influence our willingness to engage others in conversation; sometimes it may depend upon the characteristics of the other person or the situation itself." Participants were then presented with a version of each of the eight social situations that did not contain racial information about the particular interaction partner involved. For each type of situation, participants were asked to

imagine that you are on the verge of entering an interaction with each person, but that it is still possible to avoid the situation. Use the following scale to indicate the

degree to which you would be willing to enter the situation and the degree to which you would be comfortable in the situation (*not at all willing* and *not at all comfortable* = 1 and *very willing* and *very comfortable* = 9).

When all participants had finished responding, these materials were collected and participants were given a new questionnaire.

The second questionnaire contained the same eight situations (presented in random order), but this time participants also were provided with information about the specific characteristics of potential interaction partners. Consequently, participants imagined they were about to enter each situation with each of seven different interaction partners. For example, in the first questionnaire, participants were asked to rate their degree of comfort and willingness to enter the situation in which they "need to arrange to 'hitch' a 200-mile car ride through the ride board." In the second questionnaire, participants were asked to "imagine you need to arrange to 'hitch' a 200-mile car ride through the ride board with a person who is \_\_\_\_ (each of seven specific characteristics)." The seven specific characteristics were as follows: in a wheelchair, obviously wealthy, obese, thirty-something, Asian, Black, Hispanic. Participants were told they were receiving only a small subset of the total number of items in which we were interested and that these characteristics and situations had been selected randomly from that pool. In truth, we were interested only in their responses to the situation in which no interaction partner was specified and when the interaction partner was "Black." The other six characteristics were included to support the cover story.

## Results

### UNOBTRUSIVE ESTIMATE OF RACIAL ATTITUDES

The data from the bona fide pipeline procedure were employed to arrive at an estimate of each participant's automatically activated racial attitude. The ultimate goal of this set of analyses was to reduce a participant's many response latencies to a single index of that person's racial attitudes. The first step was to create facilitation scores for every adjective associated with each of the critical 16 Black or 16 White paired photographs seen by a participant. This was accomplished by subtracting the baseline latency that was obtained during the first phase of the procedure (latency of responding to the adjective when preceded by a row of asterisks) from the latency of responding to each adjective when it was preceded by a photograph.

As noted earlier, 16 Black and 16 White photos were paired with the same sets of adjectives (two positive and two negative). The facilitation scores for each of the two

positive and two negative adjectives for each photograph were averaged, and then difference scores were created by subtracting the mean facilitation score for the negative adjectives from the mean facilitation score for the positive adjectives for every face. Because the Black and White photos were paired, a pairwise *t* test was conducted on these difference scores. The *t* value was transformed to a correlation coefficient, which was then transformed to *z* through Fisher's *r*-to-*z* transformation. This index, which represents the effect size of the Race of Photo  $\times$  Valence of Adjective interaction for each participant, forms the estimate of automatically activated attitude toward Blacks; more negative scores indicate more negative attitude toward Black relative to White persons (see Fazio et al., 1995). A single-sample *t* test on the entire sample for whom scores were available revealed that this mean, although negative ( $M = -.02$ ,  $SD = .21$ ), was not significantly different from zero,  $t < 1$ .<sup>4</sup>

### MOTIVATION TO CONTROL PREJUDICED REACTIONS

A factor analysis involving varimax rotation was conducted on the entire sample of people who completed the MCPR scale in the mass survey ( $N = 517$ ); this analysis replicated the findings of Dunton and Fazio (1997). Scale items involving concern with acting prejudiced loaded on one factor, whereas variables involving restraint to avoid dispute loaded orthogonally on the other. The factor score coefficients were used to calculate the two factor scores for each individual in the present sample. Neither the concern factor,  $r(117) = .02$ , *ns*, nor the restraint factor,  $r(117) = -.12$ ,  $p = .20$ , correlated with the estimate of participants' automatically activated racial attitudes, as derived from the priming procedure. Thus, as in earlier research (e.g., Dunton & Fazio, 1997; Fazio & Hilden, 2001; Towles-Schwen & Fazio, 2001), these three aspects of prejudice were unrelated in this sample.

### SOCIAL SITUATIONS

The variables of interest were those that related to respondents' comfort and willingness to enter social situations when the race of the interaction partner was not provided or was specified as Black. The analyses will focus first on participants' reactions to the situations in general and then on how their reactions differ when the interaction partner was specified as Black.

*No specified interaction partner.* The two dependent variables, degree of willingness to enter the social interaction and comfort in the social interaction, were highly correlated in all situations in which no interaction partner was specified ( $Mean r = .67$ , all  $r_s > .43$ , all  $p_s < .001$ ). Consequently, the mean ratings for these variables were used in all analyses.

Recall that the situations were chosen so that they were maximally extreme on both dimensions of intimacy and scriptedness (see Table 1). Each situational scenario could thus be classified as more or less intimate and more or less scripted. A 2 (intimacy)  $\times$  2 (scriptedness) repeated-measures ANOVA was performed on the mean ratings of comfort and willingness to enter the situation (when no race was specified). This analysis revealed main effects for both the intimacy and the scriptedness of the situation, as well as an interaction between intimacy and scriptedness (see the top row of Table 2 for the means). When no race was specified, participants generally were more comfortable and willing to enter a situation when it was more intimate,  $F(1, 118) = 76.36, p < .001$ , and when it was more scripted,  $F(1, 118) = 65.70, p < .001$ . The interaction between intimacy and scriptedness was also significant,  $F(1, 118) = 12.45, p = .001$ . Paired-sample  $t$  tests revealed that intimate, scripted situations were more preferred than all other situations, and less intimate, less scripted situations were rated as less comfortable than all other situations (all  $ps < .001$ ). The two "mixed" situations (intimate, less scripted and less intimate, more scripted situations) were rated as moderately comfortable and were not significantly different from each other.

*Black interaction partner.* The two dependent variables, degree of willingness to enter the social interaction and comfort in the social interaction, also were highly correlated in all situations in which the interaction partner was specified as Black ( $Mean r = .83$ , all  $rs > .63$ , all  $ps < .001$ ). Consequently, the mean ratings for these variables were used in all analyses. Although our main interest was in how participants' ratings of comfort and willingness to interact differed when the target was Black compared to when the target was unspecified, a separate analysis was performed on the ratings of the Black target alone. A 2 (intimacy)  $\times$  2 (scriptedness) ANOVA revealed a main effect of scriptedness,  $F(1, 118) = 87.20, p < .001$ , and a significant interaction between intimacy and scriptedness,  $F(1, 118) = 55.74, p < .001$  (see the middle row of Table 2 for the means). In general, participants reported greater comfort with Black persons in more scripted situations. However, the degree to which a situation was scripted most strongly predicted participants' comfort and willingness to interact when the situation was also relatively intimate.

*Black interaction partner relative to the unspecified interaction partner.* Because the present research was concerned with how participants' reactions to social situations would differ when the interaction partner was Black compared to when race was unknown, the dependent measure in the following analyses was a difference score for each situation. Participants' mean ratings of comfort

**TABLE 2: Mean Rating of Comfort and Willingness to Interact With Unspecified and Black Partners**

| Race of Partner | Less Scripted |               | More Scripted |               |
|-----------------|---------------|---------------|---------------|---------------|
|                 | Less Intimate | More Intimate | Less Intimate | More Intimate |
| Unspecified     | 5.16          | 6.47          | 6.36          | 6.97          |
| Black           | 6.59          | 5.93          | 6.88          | 7.71          |
| Difference      | 1.43          | -0.55         | 0.52          | 0.74          |

and willingness to enter the situation when no race was specified were subtracted from their mean ratings of comfort and willingness to enter the same situation when the interaction partner was Black. Thus, higher ratings indicated relatively more comfort with hypothetical Black partners than partners for whom no race was specified. (It should be noted that because the participants in this study were White and were attending a university whose student population is overwhelmingly White, most individuals are likely to have assumed a White interaction partner.) A  $t$  test on these difference scores revealed that participants reported relatively more comfort with hypothetical Black partners, ( $M = 0.53, SD = 1.09$ ),  $t(118) = 5.34, p < .001$ .

A 2  $\times$  2 repeated-measures ANOVA revealed that this expressed preference for hypothetical Black partners varied as a function of the intimacy and the scriptedness of the situation (see the bottom row of Table 2 for the mean difference scores). Recall that when no race was specified, participants anticipated more comfort as the situation became more intimate. When the interaction partner was Black, however, participants anticipated relatively less comfort when the situation required relatively more intimacy ( $Ms$  of 0.10 vs. 0.97),  $F(1, 118) = 49.16, p < .001$ . Moreover, the effect of intimacy was especially pronounced if the situation was also relatively unscripted, as revealed by the Intimacy  $\times$  Scriptedness interaction,  $F(1, 118) = 93.16, p < .001$ . For less scripted interaction, participants reported much more comfort when the situation involved little intimacy than when it required more intimacy. Intimacy of the situation mattered little, however, when the situation was also scripted. Of interest, then, the participants anticipated less comfort when the interaction partner was specified as Black, compared to when unspecified, only when the situation was both unscripted and required intimacy,  $t(118) = 3.05, p = .003$ . For the three other classes of situations, participants claimed that they would be more comfortable with hypothetical Black partners (all  $ps < .001$ ).

#### INDIVIDUAL DIFFERENCE MEASURES

The major goal of the present research is to examine how anticipated comfort while interacting with a Black

partner might vary as a function of automatically activated racial attitudes, concern with acting prejudiced, and restraint to avoid dispute. We also wish to examine whether any such relations themselves depend on the characteristics of the situations involved. The three individual difference measures are continuous in nature. Dichotomizing such predictor variables has been argued to increase the likelihood of obtaining spurious interactions among the variables (e.g., MacCallum, Zhang, Preacher, & Rucker, 2002; Maxwell & Delaney, 1993). Hence, to preserve the continuous nature of the three individual difference measures, as well as examine their potential interactions with the two within-subject variables regarding the intimacy and scriptedness of the situation, we pursued the approach recommended by Darlington (1990) for conducting a mixed-model multiple regression analysis involving two-level repeated measures. After centering each of the three predictor variables, we first examined how these variables related to the total amount of comfort that participants reported collapsed across the four classes of situations (i.e., the between-subject variance). Later, we considered how the effects of the two within-subject variables might vary as a function of the individual difference measures.

*Anticipated comfort as a function of attitude and motivation.* Following Darlington (1990), we summed each participant's four scores regarding anticipated comfort while interacting with a Black partner (i.e., their ratings for situations involving high vs. low intimacy crossed by high vs. low scriptedness). This total was then predicted in a multiple regression involving each of the three individual difference variables as well as their interactions.<sup>5</sup> The higher their concern with acting prejudiced, the more likely participants were to anticipate greater comfort interacting with Blacks,  $b = .903$ ,  $t(110) = 2.01$ ,  $p < .05$ . Although the relation did not attain a conventional level of significance, the analysis also revealed a tendency for individuals with lower scores on the restraint to avoid dispute factor to report greater comfort,  $b = -.659$ ,  $t(110) = 1.64$ ,  $p = .104$ . As mentioned earlier, lower restraint individuals report having had more experience interacting with Blacks than do higher restraint individuals. Hence, it appears likely that this relation reflects this differential experience with interracial interactions.

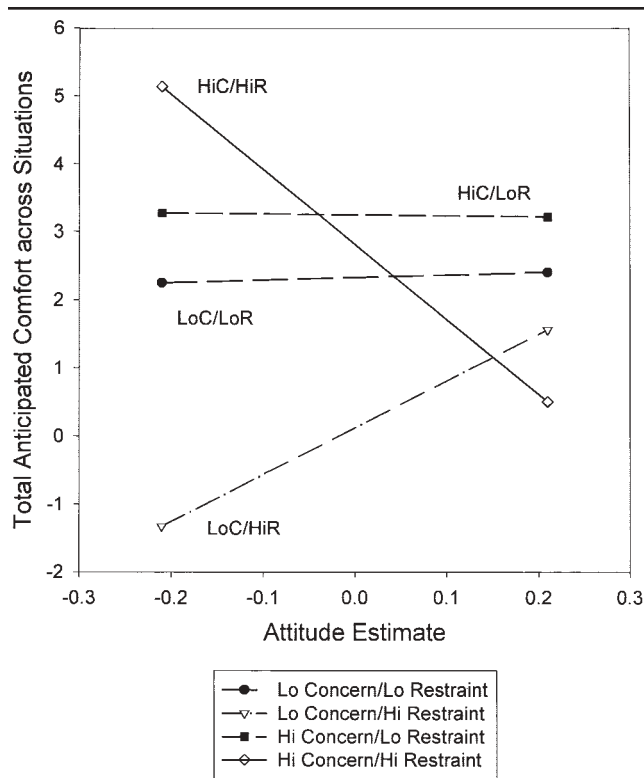
The regression also revealed an interaction between attitude and concern scores,  $t(110) = 1.98$ ,  $p < .05$ , which was itself qualified by a three-way interaction also involving the restraint factor,  $t(110) = 2.12$ ,  $p = .037$ . To consider the nature of this interaction, we examined the regression weight associated with attitude when the concern and restraint variables were set to factor scores of +1 and -1 (i.e., 1 standard deviation above and below the mean within the mass survey sample from which factor scores were computed). Figure 1 displays the relevant

regression lines. Attitudes mattered little when restraint was low, regardless of whether concern was high ( $b = .165$ ) or low ( $b = .186$ ), both  $t$ s  $< 1$ . Apparently, the greater experience that lower restraint individuals have had with interracial interaction led them to anticipate feeling comfortable, regardless of their attitudes. Among individuals characterized by higher restraint scores, however, attitudes did matter, and they mattered differentially as a function of concern. The simple slope for attitude was 7.081 when restraint was high and concern low,  $t(110) = 1.66$ ,  $p = .099$ ; the more positive the attitude, the greater the anticipated comfort. However, the regression weight was -10.152 when restraint was high and concern high,  $t(110) = 2.35$ ,  $p = .021$ . In other words, among those highly concerned about acting prejudiced, those with more negative attitudes actually reported anticipating greater comfort interacting with Blacks than did those with more positive attitudes. Thus, these high-concern individuals, especially when they lack experience with Blacks, seem to overcorrect for the effects of their automatically activated negative attitudes.

*Effects of the situation variables.* We already have seen that the intimacy and scriptedness of the situations affected participants' anticipated comfort while interacting with a Black partner. Does intimacy and/or scriptedness of the situation interact with the individual difference measures? Again, following Darlington (1990), to address these issues we computed difference scores representing the effect of intimacy (the sum of the two high intimacy cells minus the sum of the two low intimacy cells), the effect of scriptedness (the sum of the two high scripted cells minus the sum of the two low scripted), and the interaction (the sum of the high/high and the low/low cells minus the sum of the low/high and high/low cells). Each of these variables was then predicted in a multiple regression involving the individual difference variables and their interactions. Within any given equation, any significant effect represents the interaction between the predictor variable and the within-subjects variable for which the difference score was computed. In what follows, we report each such interaction that proved statistically significant.

The effect of intimacy was found to vary as a function of both attitude,  $t(110) = 2.03$ ,  $p = .045$ , and restraint,  $t(110) = 2.69$ ,  $p = .008$ . Although anticipated comfort generally decreased as intimacy increased, this relation was stronger when the attitude score was negative (i.e., a value 1 standard deviation below the mean),  $b = -2.324$ ,  $t(110) = 6.52$ ,  $p < .001$ , than when the attitude was positive (i.e., 1 standard deviation above the mean),  $b = -1.303$ ,  $t(110) = 3.70$ ,  $p < .001$ . Similarly, the inverse relation between intimacy and comfort was stronger given high restraint,  $b = -2.435$ ,  $t(110) = 7.21$ ,  $p < .001$ , than low restraint,  $b = -1.111$ ,  $t(110) = 3.11$ ,  $p = .002$ . Thus, higher





**Figure 1** Mean ratings of comfort and willingness to interact with a Black partner (relative to one whose race was unspecified) as a function of the participant's automatically activated racial attitude at varying levels of the concern with acting prejudiced and restraint to avoid dispute factors.

restraint individuals were more adversely affected as intimacy increased, presumably, according to the reasoning that we provided earlier, because they lack experience at interracial interactions.

Consideration of the effect of scriptedness revealed a Concern  $\times$  Scriptedness interaction,  $t(110) = 2.21$ ,  $p = .029$ , such that comfort increased as scriptedness increased given low concern,  $b = .972$ ,  $t(110) = 2.56$ ,  $p = .012$ , but varied little given high concern,  $b = -.217$ ,  $t < 1$ . However, this interaction was qualified by a four-way interaction involving scriptedness, attitude, concern, and restraint,  $t(110) = 2.49$ ,  $p = .014$ . Given that this represents a moderating effect of scriptedness on the three-way interaction reported earlier involving the three individual difference measures, the four-way interaction is most readily interpreted by noting that the three-way interaction was not at all evident for the relatively scripted situations,  $t < 1$ , but was very strong for the relatively unscripted situations,  $t(111) = 2.86$ ,  $p = .005$ . The pattern of the three-way interaction within these unscripted situations was very similar to what had been reported earlier collapsed across scriptedness (see Figure 1). Once again, attitudes mattered little when

restraint was low, regardless of whether concern was high ( $b = -1.19$ ) or low ( $b = -.447$ ), both  $t$ s  $< 1$ . Among individuals characterized by higher restraint scores, however, the relation between attitudes and anticipated comfort in unscripted situations varied as a function of concern. The simple slope for attitude was 5.732 when restraint was high and concern low,  $t(110) = 2.13$ ,  $p = .035$ ; the more positive the attitude, the greater the anticipated comfort. However, the regression weight was  $-8.232$  when restraint was high and concern high,  $t(110) = 3.01$ ,  $p = .003$ , again suggesting that those highly concerned with acting prejudiced overcorrected for any automatically activated negativity.<sup>6</sup>

### Discussion

Most research on the relation between automatically activated attitudes and behavior toward African Americans has focused on the quality and nature of interactions once participants were already interacting, usually in a situation created within a laboratory. In contrast, the present study explored factors that might affect the strength of the relation between participants' automatically activated attitudes and their willingness to interact with African Americans at all. This study demonstrated that not only are negative attitudes frequently associated with more negative behaviors and judgments, but they are also associated with less willingness to interact with African Americans, at least for some people in some situations.

Moreover, both the degree to which a person is restrained to avoid dispute and the extent to which a situation is unscripted play important roles in moderating the relation between attitudes and comfort. When individuals were relatively low on the restraint factor, which is associated with a greater frequency of past experiences with African Americans, they reported being relatively comfortable with interracial interaction regardless of their attitudes. Likewise, greater comfort was anticipated when participants faced a situation for which there was a strong script, again regardless of their attitudes. When individuals were more restrained and imagined an unscripted situation, however, their automatically activated racial attitudes and their concern with acting prejudiced affected their reported levels of comfort and willingness to interact with a Black person.

The degree to which a situation is scripted and the degree to which a person is experienced with interracial interaction are thought to moderate the relation between attitudes and comfort mainly because they change expectations about the imagined interaction. If one generally expects hostility from African Americans, but both parties are bound by a subjective norm to follow a script, then the presence of a strong script may mitigate the expectation of hostility. The same general logic may

be applied to persons who are characterized by low levels of restraint to avoid dispute. As a result of their greater experience interacting with African Americans, such individuals may be buffered from feelings of discomfort and anxiety; they are more likely to expect smooth interactions and are more certain of how to act, regardless of their automatically activated racial attitudes. Thus, both scripts and previous experience could lead to more positive and defined expectations about the imagined interaction, which could in turn result in greater willingness to interact with an African American.

The present research also suggests that the intimacy of a situation affects White participants' comfort with African Americans. Situations that require intimacy seem to be viewed as especially awkward by individuals for whom negativity is automatically activated in response to African Americans. The self-disclosure that typifies intimate situations is likely to be perceived as relatively threatening by such individuals. Moreover, their negativity would lead them to doubt that such a "high-stakes" relationship could be at all satisfying.

Although the present research has focused on the dimensions of intimacy and scriptedness, it is important to recognize that situations may differ in any number of ways, including their anticipated duration and the power and status of the interaction partner. Many of these situational dimensions may naturally covary. For example, highly scripted situations may typically involve a relatively short interaction. It was not our intent here to identify the specific, micro-level causal determinants of anticipated comfort, but only to call attention to intimacy and scriptedness (and all their inherent covariates) as dimensions that play a role in people's construal of situations.

#### *MOTIVATED CORRECTION*

Of interest, the positive relation between comfort and automatically activated racial attitudes among highly restrained individuals was observed only among those individuals who also had relatively low scores on the concern with acting prejudiced factor of the MCPR scale. Especially in less scripted situations, concerned but restrained people with negative attitudes tended to report greater comfort than those with positive attitudes. We believe that such individuals' concerns about the possible expression of prejudice led them to overcorrect for the influence of their automatically activated negativity when expressing their judged level of comfort with an African American partner (Wegener & Petty, 1997). This overcorrection is consistent with previous findings that many White participants respond more favorably to Black persons than to Whites when race is salient (Biernat & Vescio, 1993) or when the appropriate

unprejudiced course of action is unambiguous (Gaertner & Dovidio, 1986).

According to the MODE model, whether a motivated attempt to correct for the influence of negativity proves successful is likely to depend on the degree to which the behavioral response can be controlled (Fazio & Towles-Schwen, 1999). Verbal expressions of one's expected degree of comfort in a situation involving interaction with an African American are relatively easy to control. However, the present findings may overestimate the likelihood that such individuals will control their actual approach behavior successfully in naturalistic settings. One might even argue that the responses of the participants for whom negativity was automatically activated but who were highly concerned about acting prejudiced are not genuine. That is, their reports of anticipated comfort while interacting with an African American cannot necessarily be trusted. Such a possibility is suggested by the findings of Carver, Glass, and Katz (1978), who compared White participants' differential judgments of a White versus a Black target when the participants were or were not attached to a bogus pipeline instrument. The participants displayed more favorability toward the Black target on traditional self-report measures, but less favorability when physiological measurements were presumably revealing their true feelings. Clearly, further research is needed to determine whether those who are highly concerned about acting prejudiced would anticipate as much comfort if they were actually in the various settings as they report.

One might wonder why the two different types of motivation to control prejudiced reactions, concern with acting prejudiced and restraint to avoid dispute, appeared to play such different roles in moderating the relation between automatically activated attitudes and behavior. It is our contention that concern and restraint need not necessarily be evoked in the same situations. Indeed, Olson and Fazio (in press) have addressed this very issue. Their review of the available evidence led to the suggestion that concern with acting prejudiced may be evoked more strongly when the category "Blacks" is being judged, whereas restraint is relevant as a motivational variable primarily when individuating information about a Black target person is available. Because the only information participants had in the present study was the targets' race, this logic would imply that only concern might be expected to be evoked as a motivation for controlling prejudiced reactions. Thus, only those who were more concerned would be expected to show evidence of correcting for any automatically activated negativity. On the other hand, restraint to avoid dispute did not appear to lead to any such motivated correction processes. In fact, higher restraint was associated with reports of less anticipated comfort interacting with

Blacks, not more. In this study, restraint appeared to be operating not as a motivational force but as a proxy for the degree to which participants were experienced at social interaction with Black people. Further research that more directly assesses the role of such experiential variables clearly is necessary to substantiate our interpretation of the findings regarding the restraint variable.

#### IMPLICATIONS

The present findings provide additional support for the MODE model's postulate regarding the role of automatically activated attitudes and for the validity and utility of priming procedures such as the bona fide pipeline (Fazio et al., 1995) for predicting judgments and behavior. The findings also point to the importance of assessing both participants' automatically activated racial attitudes and their motivations to control prejudiced reactions. The most interesting data patterns were obtained when attitudes and motivation were considered in conjunction with one another.

Automatically activated racial attitudes were found to relate to anticipated comfort in interracial interactions among those participants with relatively low concern with acting prejudiced. Those with more negative automatically activated racial attitudes anticipated being less comfortable interacting with a Black person in relatively unscripted situations. In addition, this effect of attitude grew more apparent as participants were characterized by greater restraint to avoid dispute, presumably because such restraint is associated with lesser experience at interracial interaction. Nonetheless, some readers might be hesitant about the present findings on the grounds that participants were asked to imagine how comfortable and willing they would be to interact with a Black person in a variety of situations rather than how comfortable they were once they were already in situations that apparently required interaction. Considerable research has taught social psychologists to treat responses to hypothetical, imagined scenarios with some skepticism. We do not believe such concerns to be relevant in the present case. Instead, we would argue that this seeming weakness is actually a strength of the study, allowing it to fill a gap in the literature. When people make decisions about whether to enter an interaction, it is how they imagine they will feel that guides their decisions rather than how they actually do feel once they are already in the situation. In fact, the very contribution of this study is that it explores factors that influence how people appraise situations in advance of their entering the situation and, hence, factors that lead them to avoid facing situations they perceive as potentially uncomfortable.

The study has revealed interesting moderating effects of motivations to control prejudiced reactions and the

characteristics of the situation on the relation between automatically activated attitudes and anticipated comfort interacting with African Americans. However, we regard its major contribution to lie at an even more fundamental level. The study underscores the importance of an often-neglected topic in research on prejudice and racism—the importance of avoidance behavior. Although it is certainly critical to understand the process by which prejudice is expressed during the course of interracial interactions, it is arguably just as important to understand when interracial interactions are likely to occur at all. Prejudice should not be characterized just as hostility. It also promotes avoidance behavior. The present findings are disturbing in that they suggest that even though restrained persons with negative automatically activated attitudes might not necessarily avoid interaction with African Americans in some situations, they may actually be discriminating in more subtle and difficult-to-detect ways by avoiding African Americans in less scripted situations. Relatively unscripted settings that call for some shared intimacy appear to be the very types of situations that might promote positive change in racial attitudes (Pettigrew, 1997; Towles-Schwen & Fazio, 2001). Yet, these are the situations that people with the most negative attitudes are likely to avoid. By actively constructing a social world that retards the development of friendships with African Americans, they continue to experience, and reinforce, patterns of social segregation and discrimination. One can only hope that their anticipation of working harmoniously with African Americans in scripted situations might eventually generalize to more meaningful interactions.

#### NOTES

1. This technique is often referred to as an implicit measure of attitudes, but it does not purport to measure what is necessarily an "implicit attitude." As Fazio and Olson (in press) have argued, nothing about this measurement technique, or other implicit measurement procedures such as the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998), guarantees that the participants are unaware of their attitudes. It is the measure itself—not the attitude—that is implicit.

2. Although we sometimes refer to the intimacy of the situations as *high* or *low*, the means suggest that, technically, the most intimate situations studied are only moderately so. Therefore, our use of the terms *high* and *low* in this article is intended in a relative sense.

3. Pilot data also were obtained with respect to who would have greater power in the situations described ( $-3 = \text{My partner has more power}$  to  $+3 = \text{I have more power}$ ). The data regarding power were analyzed in two ways. The raw data were used to examine the degree to which the respondents felt they would have more power, and the absolute values of these data were used to explore the degree to which power was distributed evenly between the partners. The pilot data revealed no correlations among the intimacy, scriptedness, and power (both the respondents' and the power differential) variables; for both the complete set of 23 and just the 8 selected situations, all  $r$ s < .30. A hierarchical multiple regression on relative power also was performed by entering the degree of intimacy and scriptedness of the 8 situations into the first block of the regression and the Intimacy  $\times$  Scriptedness interaction into the second block. This analysis revealed an interaction between intimacy and scriptedness,  $t(7) = 3.13, p < .04$ . The nature of the inter-



action can be illustrated by calculating the regression equation's predicted values 1 standard deviation above and 1 standard deviation below the means of intimacy and scriptedness. This interaction shows that two types of situations—those that were more intimate and more scripted (−2.30) and those that were less intimate and less scripted (−1.12)—were judged to give greater power to the imagined partner than those that were more intimate and less scripted (0.16) or less intimate but more scripted (0.35). These differences in power are probably inherent to these types of situations but do not, by themselves, explain the pattern of results obtained.

4. In the many studies that the laboratory has conducted using the bona fide pipeline priming procedure, the average score sometimes has been significantly more negative than zero (e.g., Fazio, Jackson, Dunton, & Williams, 1995; Olson & Fazio, 1999; Towles-Schwen & Fazio, 2001) and sometimes not (e.g., Fazio & Dunton, 1997; Fazio & Hilden, 2001; Jackson, 1997; Olson & Fazio, in press). We presume that these outcomes simply reflect sampling variability. Of importance, a positive average has never been obtained. Moreover, relations between the attitude estimates and race-related judgments and behaviors have been observed regardless of the sample's average level of negativity toward African Americans.

5. The data from one participant whose attitude score fell more than 3 standard deviations below the sample mean were excluded from the regression analyses. Including this participant's data does not affect the inferences drawn from the findings. For example, the most theoretically relevant effect involving attitudes—the four-way interaction of attitude, concern, restraint, and scriptedness—remained statistically significant when this participant was not excluded,  $t(111) = 2.40$ ,  $p = .018$ .

6. In the regression equation predicting the Intimacy × Scriptedness interaction effect, the only variable to reach a conventional level of statistical significance was that representing the Concern × Restraint × Intimacy × Scriptedness interaction,  $t(110) = 3.49$ ,  $p = .001$ . Given that this interaction was neither readily interpretable nor theoretically relevant, because it does not implicate racial attitudes, the interaction receives no further consideration in this article.

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