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# Guess Who Might Be Coming to Dinner?: Personal Involvement and Racial Stereotyping

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This research investigated the motivational influences of personal involvement and target race on the social judgments about and behavior toward another person. Specifically, male undergraduates were led to anticipate either a series of dates (high involvement) or a brief interaction (low involvement) with a white or a black female. As predicted, high as compared to low involvement subjects demonstrated more concern with their personal appearance, thought relatively more about the immediate interpersonal situation, and felt more apprehensive and less positive about their partners, their upcoming interactions, and the study as a whole, with these tendencies more pronounced among subjects expecting a black partner. In contrast to these judgment and evaluation measures, however, the overt behavior of high involvement subjects toward a different black female was especially warm and friendly. Additional analyses suggested that low levels of involvement may reduce people's tendencies to stereotype at a global level. The nature and effects of different motivational factors and their implications for processes of stereotype change are discussed. 

For a variety of reasons, there has been a resurgence of social psychological interest in the influence of motivational factors on cognitive processing (see Markus & Zajonc, 1985; Sorrentino & Higgins, 1986). Some of this work, which can be classified under the rubric of "motivated social cognition" (Showers & Cantor, 1985), examines the extent to which various psychological constructs with motivational significance are associated with different kinds of thinking, judgment strategies, and

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memory processes in a variety of task situations. Motivational variables, for example, have been shown to affect social cognition in a variety of contexts, including decision-making and judgment (Kruglanski & Freund, 1983; Tetlock, 1985), impression formation (Erber & Fiske, 1984; Monson, Keel, Stephens, & Genung, 1982; Neuberg & Fiske, 1987), contingency estimation (Harkness, DeBono, & Borgida, 1985), social comparison (Kruglanski & Mayseless, 1987), and the processing of issue debates (Howard-Pitney, Borgida, & Omoto, 1986). It would seem that experimental research investigating such motivational influences as well as their consequences for social interaction is especially important to the extent that involving stimuli and situations characterize naturalistic social cognition and action.

In many investigations, personal involvement in the experimental task has been used to examine motivational influences on cognitive processing and social judgments. A consistent finding in this research is that when people are involved in experimental tasks, they exert greater cognitive scrutiny and effort than they typically expend in less involving experimental contexts (Fiske & Taylor, 1984). One common and powerful contextual operationalization of involvement that has been shown to affect cognitive processes is outcome dependency, or the knowledge that one's future outcomes are partially determined by another person.

For example, in a study by Berscheid, Graziano, Monson, and Dermer (1976), participants were led to believe that they would date either one or many people assigned by the experimenters for a period of 5 weeks. Participants then viewed three opposite sex individuals engaged in a videotaped discussion, one of whom they believed they would later date. Berscheid, Graziano, Monson, & Dermer (1976) found that people paid more attention to their dating partners than to the two nondates while viewing these videotapes, better remembered their partner's behaviors and characteristics, and evaluated their partners more positively than nondates. In addition, subjects expecting future dates evaluated their partners more positively than subjects in a control condition in which none of the discussion participants were believed to be future dates. Apparently, then, subjects differentially attended to and evaluated people depending on whether these individuals had future implications for them.

Using a different operationalization of outcome dependency in which subjects thought that their efforts on a two-person task would be judged independently or together with a partner, Erber and Fiske (1984) found that outcome dependency motivated people to focus on specific attribute information about the partner (see Pittman, Scherrer, & Wright, 1977, for similar findings in the persuasion domain). In particular, Erber and Fiske found that outcome-dependent subjects paid more attention to attribute information that was inconsistent with their initial impressions of their partner than subjects who were not outcome dependent, whereas

the outcome dependency manipulation did not affect attention to consistent information or liking for the partner. Erber and Fiske interpreted their findings by suggesting that inconsistent information is potentially more valuable than consistent information for people anticipating an upcoming interaction with a partner.

Thus, people may be motivated in these impression formation situations to pay attention to information about their partners, presumably in order to better predict and control their social environments (Fiske & Taylor, 1984; Kelley, 1967). In this context, then, both the Berscheid et al. (1976) and Erber and Fiske (1984) studies demonstrate that information search, the processing of information, and judgments about a person can be influenced by outcome dependency manipulations (see also Miller & Norman, 1975; Miller, Norman, & Wright, 1978; Monson et al., 1982; Neuberg & Fiske, 1987). In addition, Harkness, DeBono, and Borgida (1985) recently showed that the actual strategies individuals employ in general problem-solving can be influenced by outcome dependency. Specifically, outcome-dependent subjects, who believed they would be dating someone over the course of several weeks, tended to use more sophisticated strategies in assessing covariation than noninvolved (no date) participants.

In sum, then, outcome dependency manipulations affect people's information processing tendencies, the evaluations they make, and the ways they utilize information about a potential partner. The picture that emerges, in fact, is one of increasing effort and more thorough processing as a consequence of greater involvement, as well as generally positive evaluations of partners on whom one is outcome dependent. Certain characteristics of the partner, such as membership in a stigmatized social category, however, may interact with these task properties in influencing people's general processing and judgment tendencies. Furthermore, the behavioral implications of these judgments have remained largely unexplored (see Ickes, Robertson, Tooke, & Teng, 1986), leaving unanswered the question of whether involvement manipulations influence social interaction with a partner.

In the present research we were particularly interested in how the inclusion of category-based target information would interact with different levels of involvement in influencing the evaluations of a partner as well as social interaction more generally. Specifically, we were interested in the influence of social categories such as ethnicity, gender, or, in this case, race, that may be more affect-laden or reactive and that have frequently been found to foster simplified or "category-based" information processing (Fiske & Pavelchak, 1986). In particular, research in the stereotyping domain suggests that people tend to make quick judgments about members of certain social categories (e.g., blacks or women), and to assimilate even inconsistent behaviors performed by a group member to an already established stereotype or schema (cf. Hamilton, 1981;

Wilder, 1981; Stephan, 1985; see Higgins & Bargh, 1987, for limits on this process). Judgments made about these individuals, moreover, tend to be prejudiced, as indicated by their uniform negativity (Allport, 1954; Wilder, 1986).

Thus, in the current research we simultaneously manipulated task involvement and partner race in order to investigate the interaction of personal involvement and stereotypically negative target characteristics. Our manipulations were drawn from our analysis of the situations that generally have been employed to study motivational influences and race factors separately. For example, outcome dependency manipulations clearly operate at the situation or task level, and in typical experiments have been shown to affect judgments about standardized stimulus persons. In racial stereotyping studies, however, the focus has traditionally been on the manipulation of target features. So, for example, subjects at a set level of involvement may assess the job suitability of one of two target individuals who differ only in their race or gender.

In the present research we led white males to anticipate either a series of dates or a brief interaction with either a black or a white female. We expected the involvement and race combinations to affect what people thought about and to have consequences for their evaluations of targets and current situations. In addition, we were interested in the more general consequences of our manipulations for evaluations of the research experience and for overt behavior. With regard to the latter, and as a way of linking evaluative and judgment measures to social interaction, we unexpectedly provided each of our subjects with a chance to interact with a black female after they had evaluated their particular partner.

We expected our involvement manipulation to produce differential discomfort, uneasiness, and negativity between the dating and interaction conditions. We reasoned that white male undergraduates about to meet a woman assigned by the experimenters, whom they were committed to date exclusively, would be more anxious, and because of the public nature of their commitment would feel more self-conscious than subjects only expecting short and private interactions with an opposite sex partner. Further, we expected several additional concerns and conflicting motivations to be salient to subjects who found out that they were to date a black woman, leading these participants to feel even more anxious and uncomfortable than subjects who had been assigned to date a white woman. In particular, we expected that concerns about interracial dating (e.g., what other people would think of the interracial couple, where they would go on their dates, whether he would be perceived as prejudiced by his date, etc.), unfamiliarity with black women and black people in general, the surprise associated with expectancy disconfirmation, and the subject's own stereotyped beliefs and prejudicial attitudes would all contribute to subject anxiety and apprehension and that these concerns

would become focal in the thinking of these men. Consequently, these men were also expected to find the whole research experience more aversive than other participants in the experiment, and also to evaluate their partners most negatively.

For subjects in the interaction or low involvement conditions, however, we did not expect differential effects for black and white partners. Subjects in these conditions did not expect extended or public contact with their partners, so that the situation created for them should not have activated the conflicting motivations and concerns inherent in the dating conditions. It is important to note that the subjects in the interaction conditions were involved with their partners, but in rather limited ways. These men were not simply evaluating a partner in the abstract, but they anticipated a subsequent interaction in which they would have a chance to verify, alter, or disprove their impressions of her. Thus, to the extent that these men were attempting to form accurate impressions of their partners, impressions that would be of use to them in their subsequent task-related dealings with her, they can be described as involved in a low outcome dependency situation (see also Erber & Fiske, 1984; Neuberg & Fiske, 1987). Consistent with recent research by Neuberg and Fiske (1987), this low involvement was predicted to undercut tendencies to stereotype at a global level, and to lead participants to consider more thoroughly the attributes and information they received about their partners. In addition, the mere anticipation of contact with a partner has been shown to lead to increased liking for that person (Darley & Berscheid, 1967), even when that person is "obnoxious" (Tyler & Sears, 1977). Thus, to the extent that participants perceived a unit relationship with their partners (Darley & Berscheid, 1967), differential liking was not expected between black and white targets.

In sum, we predicted that dating condition subjects, particularly men expecting a black date, would be more nervous and apprehensive about their upcoming interactions than men in the interaction conditions and that the greater anxiety and apprehension experienced by these men would be reflected in thoughts about their immediate situations, negative evaluations of their partner, and pessimistic forecasts for their upcoming dates. Low involvement subjects, meanwhile, were predicted to think more about their partner's attributes and to foresee more pleasurable interactions with the partner, regardless of her race.

## METHOD

### *Subjects*

Forty-two undergraduate males enrolled in introductory psychology at the University of Minnesota took part in the study in exchange for extra credit points. None of the participants was black, and all were recruited by telephone from the *U of M Dating Study* sign up sheet. An information page that accompanied this sheet had explained to potential

participants that, in exchange for extra credit, they would be assigned an opposite sex partner for a series of three exclusive dates and that they would complete impression forms about their partner as they got to know him/her.

## Procedure

*Involvement manipulation.* Male introductory psychology students who signed up for the advertised dating study were considered as potential subjects. We introduced our involvement manipulation when we contacted eligible subjects by asking half of them if they would be interested in participating in the dating study, and describing an "interaction study" to the other half. We told the "interaction study" subjects that the experiment involved playing a short puzzle game with an opposite sex partner, whereas we reminded the dating study subjects that they would be exclusively dating a woman assigned by the experimenters for a series of three dates. Once subjects agreed to participate for whichever study had been described to them, an individual experimental session time was arranged.

When subjects arrived at an assigned waiting room, a male experimenter greeted them and led them to a smaller room equipped with a one-way mirror. The experimenter then outlined a first impressions study in which subjects would receive some information about their partner before meeting her, and then give their confidential first impressions of her.

The experimenter further explained to dating subjects that after each of their dates they were to fill out new impression forms and that they would receive $10 to help defray the costs of their dates.

The experimenter told interaction study subjects that after giving their first impressions they would play a puzzle game with their partner, and then provide their final impressions of her. All of these activities were to take place in the confines of the psychology building that day, so these subjects were not led to anticipate public or extended future dealings with their partner.

The experimenter went on to explain to all subjects that their assigned partner had already arrived and had begun work on a task that the subjects would now complete. Specifically, the experimenter took the subject's picture with a polaroid camera, and then left a "personal preference form" for him to complete. (Subjects in the dating study also signed a $10 voucher form.)

The personal preference form asked subjects to provide basic demographic information about themselves, as well as information about their most recent activities and preferences (e.g., foods, color). After completing this form, subjects put it and their photo in a folder and returned it to the experimenter, who then ostensibly passed it on to the partner to examine. At this time the experimenter also gave each subject his partner's folder (complete with her preference form and photo) to examine so he could begin forming his impressions of her. After examining his partner's folder, each subject received a confidential first impressions questionnaire to complete about the partner. Each subject completed these initial tasks without time limitations and in private, believing that after both he and his partner had finished they would meet and either set up their first date or play the puzzle game.

*Race manipulation.* Our race manipulation was introduced by way of the partner's personal folder. Specifically, all subjects received identical and rather uninformative preference information about their fictitious partner, "Laura," except that half of the subjects received a picture of a black woman, whereas the other half found a photo of a white woman in the folder. We selected the partner photos used in this study from a larger pool of polaroid snapshots of undergraduate women so that the black and white Lauras were rated of equal and moderately high physical attractiveness.[1] Furthermore, in order to assure some degree

[1] Male students' average attractiveness rating of the black woman in this study was 5.00, whereas the white woman received a mean attractiveness rating of 4.63. All attractiveness

of similarity between subjects and partners, three blanks on Laura's preference form were completed so as to match the subject's responses on those items. Otherwise, all subjects received information about Laura that indicated she was a 19-year-old sophomore, an astrological Cancer, and, among other things, liked cheesecake.

After each subject had finished his first impressions questionnaire, the experimenter returned and escorted him back to the waiting room, explaining that Laura had not yet finished making her assessments. The experimenter directed each subject to have a seat in the waiting room and said that he would return as soon as Laura had finished with her forms. When the subject entered the room this time, however, there was a black woman seated there, ostensibly waiting to take part in another study.

The large lounge waiting room was comfortably furnished (magazines, a plant, a coffee pot, etc.) and equipped with a one-way mirror. The black female, one of two experimental confederates who was blind to the subject's experimental condition, was seated at one end of a row of five chairs which were the only seats in the room. The subject was left in the waiting room for approximately 3 min, during which time any interaction between him and the confederate was videotaped from behind the one-way mirror. The confederates had previously been trained to respond to conversation by subjects in a socially appropriate and approachable manner, but *not* to ask questions. If after entering the waiting room the subject did not say anything to the confederate for 30 sec, the confederate said to him "I hope this doesn't take too long." If the subject did not respond to this comment or did not ask any questions, the confederate sat quietly for the remainder of the time.

At the end of the 3 min period, the experimenter returned to the waiting room and announced that Laura had still not completed her forms. In the meantime, though, he had brought a Psychology Department form for the subject to complete in order to "save some time in the long run." This form was ostensibly part of the Department's new policy to evaluate the educational benefits of research and supposedly had no direct connection with the current study. The experimenter instructed the subject to complete the form "as if you were done with the study" and then left the room. At this point, another experimenter appeared and called the confederate out to take part in her experiment, leaving the subject alone to complete the departmental form. Once he had finished, the first experimenter returned, probed the subject for suspicion, and then debriefed him about the purpose of the study and the deception involved. On a debriefing questionnaire and in interviews, none of the subjects expressed suspicion of the cover story or could guess the true nature of the experiment. In fact, most displayed genuine surprise when they were told that they would not meet Laura, and several spontaneously volunteered that they had been interested in playing the puzzle game and meeting Laura.

## *Dependent Measures*

*Initial tasks measures.* The time that it took subjects to complete the initial tasks was the first dependent measure collected. From behind the one-way mirror, an observer recorded the time that it took each subject to fill out his own personal preference form, to examine his partner's folder, and to complete the first impressions questionnaire. In addition, as an unobtrusive measure of the subject's self-consciousness and concern with his appearance, the observer counted the number of times that the subject looked at the mirror in order to adjust his hair and clothing.

*First impressions questionnaire.* The first impressions questionnaire contained several dependent measures and filler items. The first page contained several blank lines and instructed subjects to list as many or as few thoughts and feelings as they had while waiting to meet their partner. Second, subjects rated the extent to which they thought their partner

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ratings were made on a 7-point scale, with labeled anchors of 1 = not at all attractive and 7 = extremely attractive.

could be described by a set of positive (e.g., intelligent, sociable, friendly) and negative (e.g., cruel, quick-tempered, irresponsible) traits, and also rated the extent to which a list of feelings (eager, excited, attraction, worried, reluctant, afraid, and nervous) described how they felt about interacting with Laura. Subjects also provided their overall impressions of Laura on a set of semantic differential items (anchors of favorable–unfavorable, dislike–like, attracted to–repulsed by, good–bad, and awful–nice), and then rated how well they thought they would get along with Laura, how much they looked forward to meeting her, and how much they wanted to date her. Thus, the first impressions questionnaire included thought, feeling, evaluative, and general measures, with all ratings made on 11-point scales.

*Waiting room measures.* The Psychology Department form that subjects completed contained questions assessing how valuable and educational they had found the study, and how much they would recommend the study to other prospective participants. These items were answered on 11-point scales and tapped the subject's general impressions of the study and the research experience.

After interacting with each subject, the confederate provided subjective ratings of the interaction and the subject. That is, after she was called out of the waiting room, the confederate completed a form indicating her impressions of the subject's friendliness and the amount of interest he had shown in talking to her.

In addition, we had two observers who were blind to the experimental hypotheses and procedure independently view the waiting room videotapes and rate the warmth and smoothness of the interactions. Another pair of observers also viewed the videotapes and independently coded the frequency and amount of time that subjects both talked and looked at the confederate, and also recorded the chair in which subjects sat after they entered the waiting room.

## RESULTS

Because of the focused nature and specificity of our predictions, we used a planned comparison to test the overall pattern of means for each of our dependent measures (Hays, 1981; Rosenthal & Rosnow, 1985). That is, a traditional 2 × 2 ANOVA divides the variance in the data into four independent components representing two main effects, an (cross-over) interaction and error. Our hypotheses would not be directly tested by any of these effects, however, but would be spread over these sources. Thus, to more powerfully and explicitly test our predictions, we used a contrast in which we weighted the date/black partner cell +3, the date/white partner cell +1, and the two interaction cells −2. As mentioned earlier, we hypothesized that the nature of the involvement manipulation would first produce differences between the dating and interaction conditions and that the additional concerns and conflicting motivations that would be salient in the date/black partner cell would enhance the effects of the dating manipulation. Thus, we accorded the greatest weight in our contrast to this date/black partner cell, and the next greatest weight to the other dating cell. Finally, because we did not expect differences between white and black partners in the interaction condition, we weighted these cells equally in the contrast. Unless otherwise indicated, then, all main analyses were done using a planned comparison with the weighting scheme outlined above.[2]

[2] Obviously some of our predictions involved subjects making the most negative ratings

*Initial Tasks Measures*

*Total time*. The first dependent measure of interest, the total time that it took subjects to complete the initial tasks, can be interpreted as the amount of effort subjects were willing to expend in evaluating their partner and their situation. Our planned contrast on the total time measure, as shown in Table 1, revealed a marginally significant effect ($F(1, 38) = 3.364$, $p = .07$; residual, $F(1, 38) < 1$, ns).

*Looks in mirror*. We expected the involvement manipulation to influence the number of times subjects looked at the mirror, reasoning that dating subjects, more than interaction subjects, would be self-conscious because of the public nature of their commitment and would also be concerned about their appearance. Again, we expected subjects who anticipated a black date to be the most apprehensive, self-conscious, and insecure, and to manifest these tendencies by more glances toward the mirror. The expected pattern of means, as can be seen in Table 1, emerged and was highly significant ($F(1, 38) = 5.313$, $p = .03$; residual, $F(1, 38) < 1$, ns). Dating conditions elicited more mirror-looking behavior than interaction conditions, but this tendency was more pronounced among date/black partner subjects.

*First Impressions Questionnaire Measures*

*Thought measures*. In order to achieve a more detailed, fine-grained analysis of the consequences of our involvement and race combinations we next analyzed the thoughts that our subjects listed on the thought-listing page. Based on the thoughts listed, we devised an eight category coding scheme, and had two judges unfamiliar with the study independently code the subjects' thoughts.[3] These judges demonstrated substantial agreement in their coding of the listed thoughts ($\kappa = .71$), with disagreements resolved by a third independent judge.

We first tested whether interaction condition subjects tended to think relatively more about the specific information that had been presented

in the date/black partner cell. These hypotheses were tested using the contrast weighting as outlined, but the obtained pattern of means was also examined in combination with its magnitude to determine support/no support for our hypotheses. For each dependent measure we also tested the residual variance, or the remaining between-groups sums of squares, not accounted for by our contrasts (see Hays, 1981; Rosenthal & Rosnow, 1985). These residual analyses have 1 *df* because two a priori contrasts were actually performed on the data, although the first interaction contrast generally accounted for a much greater share of the variance than did the simple main effects contrast. Results for the second a priori contrast are presented under Additional Analyses.

[3] Before the judges coded the thought contents, two judges blind to subjects' experimental conditions read through all of the thoughts to determine if subjects had followed instructions in listing only one thought per line. The agreement rate for the thought demarcations was 94%, with disagreements resolved through discussion. Overall, thirty single-line thoughts were divided by the judges into multiple thoughts that were later coded.

TABLE 1
MEANS FOR INITIAL TASKS BY EXPERIMENTAL CONDITION

| | Condition | | | | Significance | |
|---|---|---|---|---|---|---|
| | High involvement | | Low involvement | | Contrast | |
| Measure | White | Black | White | Black | Interaction | Secondary |
| Total time (min) | 24.19 | 24.68 | 20.95 | 21.55 | .07 | ns |
| Looks in mirror | 5.90 | 8.64 | 3.50 | 4.55 | .03 | ns |

*Note*. Residual variances are *ns* at $p < .05$.

about their partners by analyzing the proportion of thoughts coded as specifically referencing Laura's personal preference form. Examples of these thoughts are "She likes cheesecake," or "Seems to like the sun (because Florida is her favorite vacation spot)." Means for this contrast generally conformed to prediction, as seen in Table 2, although our contrast was only marginally significant ($F(1, 38) = 3.633$, $p = .06$; residual, $F(1, 38) < 1$, ns).

Next, we analyzed the proportion of thoughts categorized as subject reactions to their immediate situation or circumstance. As expected, we found that date/black partner subjects wrote proportionally more of these thoughts ($F(1, 38) = 7.156$, $p = .01$; residual, $F(1, 38) = 5.21$, $p < .05$).[4]

*Feeling index.* We investigated the effects of involvement and race combinations on subjects' feelings by creating an index from the feeling items. This index was the difference between two aggregate feeling measures: positive anticipation items ($\alpha = .91$) and apprehension items ($\alpha = .88$). When this index was submitted to our planned contrast, the predicted pattern of effects emerged. As the means in Table 2 indicate, subjects expecting a series of dates were generally apprehensive about encountering Laura, whereas subjects expecting only brief interactions positively anticipated their encounters. The most apprehensive feelings, as hypothesized, were reported by subjects expecting a series of dates with a black female ($F(1, 37) = 7.447$, $p = .01$; residual, $F(1, 37) < 1$, ns).[5]

*Partner measures.* The first partner measures we examined were aggregate indices of subject ratings of Laura on the positive and negative traits. Employing the same contrast weighting, we did *not* find that the pattern of trait ascriptions could be described adequately, as the hypothesized contrast did not approach significance for either trait measure. An inspection of the means, as shown in Table 2, indicated that there were large main effects for race on both positive and negative trait measures, but no effects due to involvement. In fact, when we submitted these measures to a standard 2 (involvement) × 2 (partner race) ANOVA, a race of partner main effect emerged for both trait measures, with no main effect or interaction for the involvement manipulation: for positive

[4] As inspection of the means in Table 2 indicates, the significant residual on this measure may be due to the fact that proportionally few situation thoughts were generated in the date/white partner cell, especially relative to the proportions generated in the two low involvement cells.

[5] One subject failed to respond to one of the positive feeling items, so that an anticipation index score could not be computed for this individual. Similar problems or randomly missing data are responsible for other variable cell sizes. In addition, due to an equipment malfunction, only 39 waiting room scenes were videotaped and coded.

TABLE 2
MEANS FOR FIRST IMPRESSIONS QUESTIONNAIRE BY EXPERIMENTAL CONDITION

| Measure | Condition | | | | Significance | |
|---|---|---|---|---|---|---|
| | High involvement | | Low involvement | | Contrast | |
| | White | Black | White | Black | Interaction | Secondary |
| Thought measures | | | | | | |
| % Partner thoughts | .15 | .06 | .31 | .11 | .06 | .03 |
| % Immediate situation thoughts | .02 | .13 | .05 | .01 | .01 | .05* |
| Feeling index[a] | −1.11 | −3.73 | 8.70 | 3.64 | .01 | ns |
| Partner measures | | | | | | |
| Positive traits[b] | 51.20 | 62.45 | 52.70 | 60.45 | ns | ns |
| Negative traits[c] | 40.20 | 31.64 | 46.30 | 27.64 | ns | .005 |
| Overall evaluation[d] | 23.40 | 21.90 | 25.60 | 26.64 | .02 | ns |
| General measures | | | | | | |
| Smooth & pleasurable prediction | 19.56 | 18.27 | 23.70 | 20.73 | .002 | .05 |
| Look forward to partner | 13.78 | 12.09 | 16.30 | 13.73 | .02 | .07 |
| Like and likely to date[e] | 16.11 | 9.55 | 17.80 | 12.45 | .02 | .02* |

*Note.* Residual variance is *ns* unless otherwise indicated.
[a] Positive scores indicate positive anticipation and negative scores indicate apprehension.
[b] Higher numbers indicate more positive ratings.
[c] Higher numbers indicate more negative ratings.
[d] Higher numbers indicate more favorable ratings.
[e] Higher numbers indicate greater likelihood.
* Indicates residual variance is significant at $p < .05$.

traits, $F(1, 38) = 5.261$, $p = .03$; and for negative traits, $F(1, 38) = 9.367$, $p = .004$.

Our subjects, as can be seen, gave higher positive trait ratings to the black than to the white target, and ascribed negative traits to the white female to a greater extent than to the black female. In order to investigate this finding as well as the contention of Crosby, Bromley, and Saxe (1980; see also Sigall & Page, 1971) that white subjects may be responding in socially desirable ways when they give high positive ratings to black targets, we examined the variances on both of our trait indices. We reasoned that if subjects were simply responding in socially desirable ways, there should be relatively little variability in trait ascriptions across subjects. If social desirability is primarily responsible for the trait ratings our subjects made about black targets, then we would expect to find not only more positive ratings of the black Laura, but also greater variability among subjects who rated the white female than among those who judged the black female. The equality of two variances can be tested by computing an $F$ statistic from the ratio of these variances (see Hays, 1981). In doing so, we found that the variances on both trait measures were significantly greater for white targets than for black targets: for positive traits, $F(19, 21) = 2.913$, $p < .01$; and for negative traits, $F(19, 21) = 3.584$, $p < .01$.

In contrast to these trait ratings, a partner evaluation measure created from the semantic differential items ($\alpha = .92$) produced the expected pattern of means and was highly significant ($F(1, 37) = 6.106$, $p = .02$; residual, $F(1, 37) < 1$, ns). As predicted, and as shown in Table 2, subjects anticipating dates with a black Laura evaluated her least favorably overall, with subjects anticipating dates with a white Laura moderately positive, and subjects expecting only brief interactions with their partners the most positive. It is interesting to note that subjects gave the most negative overall evaluations to the black dating partner, despite the fact that they had ascribed positive traits to her to a great degree and had refrained from casting her in terms of negative traits.

Thus, it seems plausible to argue that social desirability influenced our subjects' trait ratings, especially given that the rating format probably also made social conventions and presentation concerns salient to subjects. In addition, all targets were rated more positively than negatively, indicating that our participants were generally reluctant to display negativity or, consistent with Darley and Berscheid (1967), simply saw their partners in a positive light. Our experimental manipulations, however, influenced the global overall evaluations that our subjects made of Laura in the predicted manner.

*General Measures.* Consistent with the overall evaluation results, we found that when it came to predicting their interactions with Laura, subjects were least optimistic about future dates, with dating encounters

with a black partner expected to go least well. That is, from the last set of items in the impressions questionnaire we created three different indices: one in which subjects anticipated how they thought they would get along with Laura ($\alpha = .78$), a second in which subjects rated how much they looked forward to meeting and getting to know Laura ($r = .58$), and a final index assessing subjects' desire and likelihood of dating Laura after the study ended ($\alpha = .84$).

When we tested our planned comparison on each of these indices, reliable effects were obtained, as revealed by the means in Table 2. We found that participants expecting a black date predicted the least pleasurable interactions with Laura ($F(1, 37) = 11.323$, $p = .002$; residual, $F(1, 37) < 1$, ns), were least eager to meet and get to know her ($F(1, 37) = 5.808$, $p = .02$; residual, $F(1, 37) < 1$, ns), and reported the least desire to actually date her ($F(1, 37) = 5.679$, $p = .022$; residual, $F(1, 37) = 5.387$, $p < .05$).[6]

*Waiting Room Measures*

The waiting room measures were all designed to assess the more general consequences of our manipulations and to extend the thought, judgment, and evaluation measures we have already discussed. In short, we were interested in how subjects' evaluations of the study might be affected by what they had experienced and in whether social interaction, as gauged by subject behavior toward a representative member of a stereotyped social group (i.e., a black female), would be influenced.

*Participation evaluation.* From the questions on the Departmental form, we created two indices to tap subject evaluations of the experiment. The first index assessed the subject's feelings about his participation in the study ($\alpha = .83$), and included items on whether he would participate again and how much he would recommend the study to other people. As shown in Table 3, the test for our predicted pattern of means was significant ($F(1, 36) = 15.117$, $p = .001$; residual, $F(1, 36) < 1$, ns).

*Study impression.* The second index ($\alpha = .85$) covered the subject's general reactions to the study in terms of how worthwhile, pleasurable, and interesting he thought it had been. Again, as the pattern of means in Table 3 demonstrates, our contrast was highly significant ($F(1, 36) = 13.853$, $p = .001$; residual, $F(1, 36) < 1$, ns).

*Confederate ratings.* Finally, using both the ratings made by confederates and the ratings of naive judges, we created two measures to assess the effects of our manipulations on actual behaviors. In particular, we were interested in whether and how evaluations made about a specific member

[6] The significant residual variance on this measure is probably due to the fact that regardless of the involvement condition, black targets received scores considerably lower than those of white targets on this index.

TABLE 3
MEANS FOR WAITING ROOM MEASURES BY EXPERIMENTAL CONDITION

| | Condition | | | | Significance | |
|---|---|---|---|---|---|---|
| | High involvement | | Low involvement | | Contrast | |
| Measure | White | Black | White | Black | Interaction | Secondary |
| Participation evaluation[a] | 21.89 | 18.55 | 26.90 | 25.20 | .001 | ns |
| Study Impression[a] | 35.56 | 34.18 | 42.80 | 39.70 | .001 | ns |
| Confederate ratings[b] | 16.20 | 17.18 | 13.40 | 8.73 | .06 | ns |
| Observer ratings[b] | 26.65 | 26.22 | 22.44 | 21.55 | .10 | ns |

*Note*. Residual variances are *ns* at $p < .05$.
[a] Higher numbers indicate more positive ratings.
[b] Higher numbers indicate greater sociability and warmth.

of a stereotyped social group, in this case the black partner Laura, might affect behavior toward other members of that social category. Thus, our primary interest in collecting these exploratory behavioral measures was in the general treatment of stereotyped social group members, especially as a function of our involvement and race manipulations.

There were no differences between the two confederates in their ratings of the waiting room scenes or in the ratings made by observers, nor were there any interactions between confederates and our manipulated variables. Therefore, we collapsed across confederates in all subsequent analyses, first submitting an aggregate index ($\alpha = .99$) of their ratings of subjects to our planned contrast. As shown in Table 3, this confederate index of subject talkativeness and friendliness revealed a marginally significant effect ($F(1, 38) = 3.795$, $p = .06$; residual, $F(1, 38) < 1$, ns).

*Observer ratings*. Since the two naive judges showed substantial agreement in their ratings of the videotapes (median $r = .763$, mean $r = .734$), we used their average ratings in our analyses. Specifically, we created a four-item index of the warmth of the waiting room interactions ($\alpha = .98$), which when submitted to our contrast revealed a marginally significant effect ($F(1, 35) = 2.870$, $p = .10$; residual, $F(1, 35) < 1$, ns).

But why, as shown in Table 3, might high involvement participants behave in more friendly ways? One could argue that high involvement participants were simply more nervous in the waiting room (since they were about to meet a dating partner) and that this nervousness either (1) was interpreted as general sociability, or (2) actually caused participants to behave in more sociable and approachable ways. To test these possibilities, we correlated an apprehension index and a separate single item measure of nervousness from the first impressions questionnaire with the confederate and observer waiting room indices.

The results of these analyses can be found in Table 4, where across experimental conditions there were no significant correlations between felt apprehension and nervousness and overt behavior.

Within the dating conditions, however, a consistent pattern of negative correlation emerged, although only one of these correlations differed significantly from zero. If anything, then, greater nervousness and apprehension were related to *less* positive and friendly ratings of high involvement participants, a pattern of association that is precisely the opposite of what would be expected if nervousness led people to behave in sociable and friendly ways.

Among low involvement participants, meanwhile, nervousness and overt behavior were slightly and positively related, indicating that greater nervousness was associated with greater judged sociability. This divergent pattern of correlation between conditions, furthermore, cannot be accounted for by differential variability between high and low involvement conditions.

Finally, two observers coded each of the videotapes for the number

TABLE 4
CORRELATIONS BETWEEN PARTICIPANTS' SELF-REPORTED NERVOUSNESS AND APPREHENSION AND WAITING ROOM MEASURES

| | Waiting room measures | |
|---|---|---|
| Self-reports | Rated warmth | Confederate ratings |
| Overall | | |
| Nervousness item | .089 | .093 |
| Apprehension index | .055 | −.018 |
| Dating conditions | | |
| Nervousness item | −.221 | −.242 |
| Apprehension index | −.254 | −.381* |
| Interaction conditions | | |
| Nervousness item | .343+ | .437* |
| Apprehension index | .200 | .262 |

* $p < .05$.
+ $.05 < p < .10$.

of times and the amount of time that subjects both talked and looked at the confederate. None of these measures revealed reliable differences in either our planned comparison or a 2 (Involvement) × 2 (Partner Race) ANOVA, however. In addition, as indicated by analyses on the chair choices of subjects, there were no differences between conditions in the degree to which participants physically approached the black female confederate.

*Additional Analyses*

Although our design did not permit a direct test of whether low involvement actually *reduced* people's tendencies to stereotype, we tested a second a priori orthogonal contrast with weights of 0 for both high involvement cells, +1 for the interaction/white partner cell, and −1 for the interaction/black partner cell to examine a portion of this hypothesis. Although akin to accepting the null findings of no significant effects in these analyses would at least be consistent with the notion that certain involvement manipulations can undercut people's tendencies to stereotype and to respond to individuals on the basis of social category information.

As shown in Tables 1–3, in fact, few differences emerged between low involvement black and white partner cells. In fact, on the initial tasks measures shown in Table 1, participants assigned to play a puzzle game with a black partner spent no more time completing their materials, nor glanced at the mirror more frequently, than subjects waiting to play a game with a white partner. Similarly, Table 2 shows that low involvement subjects did not differ in the percentage of situation thoughts they generated, in the feelings they reported, or in their overall evaluations of Laura.

Finally, as revealed in Table 3, regardless of the race of their partners low involvement subjects provided equivalent evaluations of their research experiences, and behaved toward a black female in very similar ways.

As shown in Table 2, though, partner race did have some effects in low involvement conditions. In particular, subjects expecting to meet a white female listed proportionally more thoughts about her specific attributes than those who anticipated meeting a black partner ($F(1, 38) = 5.198$, $p = .03$). In addition, subjects assigned a white partner, more than those assigned a black partner, expected smoother and more pleasurable interactions ($F(1, 37) = 4.231$, $p = .05$), marginally looked forward to meeting their partners more ($F(1, 37) = 3.404$, $p = .07$), and saw a greater likelihood that they would actually date their partners ($F(1, 37) = 5.794$, $p = .02$).[7]

## DISCUSSION

The results of our main analyses demonstrated that personal involvement and unambiguous social category information interacted in influencing people's social judgments and even their behaviors. First, as gauged by unobtrusive measures of gross behavior, the involvement and race manipulations affected the effort subjects expended on experimental tasks and the self-consciousness and personal appearance concern they displayed. Results from our thought listing task indicated that people focused their thoughts differently as a function of the involvement and race combinations. Specifically, when high involvement implicated a member of a stereotyped social group, participants thought relatively more about their immediate situations and less about their partners' specific attributes. Our hypothesized pattern of effects was also supported on a feeling measure, partner evaluations, and a set of more general items. Men expecting a black date were the most reluctant and unenthused, viewed their partner most negatively, and did not relish the chance to meet and interact with her.

In terms of more general consequences, participants expecting a black date evaluated their research experience most harshly and were the most negative about their experimental participation. Not only were the evaluations of stimulus targets affected by our involvement and race combinations then, but also assessment of the situations in which these targets were encountered was also influenced. The involvement and race manipulations also affected overt interpersonal behavior, but in a manner contrary to the pattern of judgments that subjects had made (see Ickes, 1984, for a similar pattern of findings). In interpreting the actions of our

[7] Although the contrast for positive trait ascriptions was not significant, black interaction partners were assigned negative traits significantly less than white interaction partners ($F(1, 38) = 8.803$, $p = .005$). As discussed previously, however, we believe that the differences on trait ratings in this study were probably the result of social desirability factors (see Crosby et al. 1980).

high involvement subjects, and particularly those expecting a black date, it may well have been the case that these men saw the waiting room as a perfect opportunity for them to "test out" or practice interacting with another member of the same social category. We suggest that in an attempt to prepare themselves for what they anticipated would be a negative event, these men took advantage of the opportunity afforded them in the waiting room and tried out ways of approaching and interacting with a (black) woman. This reasoning, in fact, is consistent with recent research on negative thinking, in which subjects induced to think negative thoughts or to expect a "worst possible case" scenario display more positive and sociable behaviors, and may even excel positive thinkers on achievement tests (Goodhart, 1986; Showers & Cantor, 1986). Our correlational analyses ruled out the possibility that general nervousness and anxiety caused our subjects to behave in more talkative and friendly ways. Instead, when faced with uncertainty and anxiety about an imminent interpersonal situation, our subjects may have tried to cope by enacting behaviors that were counter to how they were feeling: expecting the worst they behaved the best, leaving good impressions of themselves on others.

Lastly, consistent with research employing other category labels (Neuberg & Fiske, 1987), we found that low levels of involvement influenced the social judgments and evaluations that people made about others. In particular, it appears that conditions of low involvement made subjects less prone to categorize individuals and judge them in stereotypic ways, although this was not directly testable in our design. That is, black and white female targets tended to be judged equally positive and to elicit similar kinds of feelings in male undergraduates who only expected to briefly and privately interact with them. Low levels of involvement, therefore, may be one facet of task situations that leads people to seriously consider the available information about a target individual and to respond on the basis of this individuated information rather than a category label. Neuberg and Fiske (1987), in fact, have recently suggested that outcome dependency is one factor that may initiate accuracy-driven impression formation processes about stereotyped target individuals rather than quicker and more automatic category-based processes. While our data do not speak directly to the claim that accuracy needs mediate these impression formation processes, we did find that subjects thought about particular partner attributes to a greater extent in low, but not necessarily high, involvement conditions. Relatedly, Miller and Norman (1975; Miller, Norman, & Wright, 1978) have demonstrated that effective control needs can lead individuals to actually distort available information about another in making attributions. Thus, it would seem likely that motivational factors such as outcome dependency can affect not only information search, but information utilization and interpretation as well.

Taken together, the results of this investigation make clear that task involvement is not insensitive to target characteristics in influencing social judgments and overt behaviors, and may in fact actually depend upon certain target features. Likewise, evaluations of targets and target properties may importantly depend upon the conditions under which they are assessed. In particular, past research manipulating task properties has shown that higher levels of task (or situational) involvement empower people to process information more thoroughly and complexly (Harkness et al., 1985), to arrive at judgments that are more data-driven (Neuberg & Fiske, 1987), and to increase liking for a partner (Berscheid et al., 1976), while standard research on stigmatized targets has demonstrated economical, quick, and theory-driven processing of information about these targets under lower levels of involvement (Fiske & Taylor, 1984).

In the present research, however, we manipulated properties of both the task situation and the target individual in creating very different psychological situations for our participants. We complicated situations in which participants were more or less involved with partners by introducing targets who probably aroused negative and/or ambivalent feelings in many of our subjects. We suggest that the white subjects' knowledge that their partners were black altered the high involvement manipulation, compounding and adding to the already activated motivational and self-presentational concerns, but had comparatively minor effects on the low involvement manipulation. Although past research has shown that certain properties of task situations and targets can motivate different modes of thought, the present results clearly demonstrate that the interaction of these properties also has powerful influences on individuals. In addition, in the present research we explored the interpersonal consequences of intrapersonal judgments and evaluations. This step, we feel, is a critical one for investigators to take if a complete understanding of naturalistic cognition and action is to be achieved.

Our results would also seem to have interesting implications for stereotype change and the reduction of prejudice through intergroup contact. Changing stereotypic beliefs via intergroup contact is difficult and complex, and several conditions must be met at the time of the contact. One condition in particular that has been identified as essential for stereotype change is interdependency between group members (e.g., Amir, 1976; Cook, 1978, 1984; Stephan, 1985). Our results suggest that the way in which this "interdependency" is realized may have important implications for how individuals consider outgroup members. That is, at a general level, we found that men made outcome dependent on a woman by way of a dating manipulation thought about different characteristics of that woman and evaluated her more negatively than men whose interdependency on a woman was of a more short-term, task-oriented, and private nature (i.e., our interaction study conditions).

Furthermore, our results suggest that the essential nature of interdependency may also depend upon the person or group with whom one is interdependent. That is, stereotyped targets may arouse different degrees of reactivity and/or negativity in individuals, and these may have important implications for the ways interdependency on such targets is perceived, as well as the judgments and actions this interdependency inspires. In our study, for example, the *operational* context for men expecting to date women was identical, but we found that the *functional* nature of these contexts differed depending on the race of the partner.

Our interpretation is also consistent with a recent cognitive analysis of intergroup contact situations proposed by Rothbart and John (1985). Rothbart and John identified several conditions necessary for stereotype change to occur and, by implication, the many ways that most interracial contact situations fail to promote stereotype change. According to their model, for example, a perceiver's interaction goals may influence the kinds and levels of categories activated when a member of a stereotyped social group is encountered, with these categories in turn having implications for whether stereotype change occurs. We would argue that in the present research the interaction goals of men expecting to date women differed from those of men waiting to play a puzzle game and that these goals also varied with partner race. In support of this interpretation, we found that the levels and content of the information considered by our participants differed as a function of our involvement and race combinations.

Extrapolating from our data and following the Rothbart and John (1985) model further, our results underscore the difficulty of changing group-level stereotypes and prejudices *even when* the condition of interdependency is met. In particular, we found that low levels of involvement led people to consider specific information about a group member, but it is much less clear that this processing tendency led to generalizations about the broader social category. If we view our confederate and observer indices as behavioral measures of intergroup attitudes, in fact, our results suggest that negative and stereotypic beliefs may have remained unchanged under these conditions. At high levels of involvement, on the other hand, we found positive intergroup actions, but against the backdrop of negative judgments about a specific black person whose attributes other than race were generally not considered. As we suggested earlier, these positive actions may simply have reflected a coping strategy employed by our participants that grew out of their negative (e.g., prejudiced) reactions toward stigmatized targets.

Setting aside any other requisite conditions, therefore, we suggest that conditions of interdependency are not all equal and may not all be conducive to stereotype change and the reduction of intergroup conflict. Likewise, beliefs about certain social groups may be more or less susceptible to

change based on factors such as the complexity of the stereotype, the perceiver's general familiarity with the group, and the strength and valence of action tendencies aroused by that group. As researchers continue to detail those conditions that facilitate or inhibit stereotype change, they would be well advised to consider the precise nature of interdependencies, the general features of and reactions to particular social categories, and, importantly, the interactions between these task and target properties.

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