Framing Matters: Contextual Influences on Interracial Interaction Outcomes

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Abstract

Previous studies indicate that interracial interactions frequently have negative outcomes but have typically focused on social contexts. The current studies examined the effect of manipulating interaction context. In Study I, Black and White participants worked together with instructions that created either a social focus or a task focus. With a task focus, interracial pairs were more consistently synchronized, Black participants showed less executive function depletion, and White participants generally showed reduced implicit bias. Follow-up studies suggested that prejudice concerns help explain these findings: White participants reported fewer concerns about appearing prejudiced when they imagined an interracial interaction with a task focus rather than a social focus (Study 2a), and Black participants reported less vigilance against prejudice in an imagined interracial interaction with a task focus rather than a social focus (Study 2b). Taken together, these studies illustrate the importance of interaction context for the experiences of both Blacks and Whites.

Keywords

interracial interaction, intergroup relations, prejudice concerns, self-regulation, implicit bias

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As societies and organizations grow increasingly diverse, the opportunity for meaningful interracial interaction grows as well. However, research on interactions between White and Black Americans has identified potentially negative outcomes for members of both groups (Richeson & Trawalter, 2005; Shelton, Richeson, & Salvatore, 2005). For example, both Whites and Blacks often exhibit depleted executive function after such interactions (Richeson & Trawalter, 2005; Richeson, Trawalter, & Shelton, 2005). Many of these negative consequences—such as feeling less authentic during the interaction and decreased liking of one's partner are exacerbated by concerns about prejudice (Plant & Butz, 2006; Shelton, Richeson, & Salvatore, 2005; Vorauer & Turpie, 2004). White individuals experience more negative outcomes when concerned about appearing prejudiced (Shelton, 2003), whereas Black individuals experience more negative outcomes when concerned about their partner's prejudice (Shelton & Richeson, 2006a).

These negative outcomes seem to stand in the way of the benefits that many people assume will come with an increasingly diverse society. But could a simple shift in context help to bring those benefits within closer reach? Given the consequences associated with being concerned about prejudice, one ironic possibility is that individuals in interracial interactions may benefit from being *less* focused on making a good impression. By varying the context of an interracial interaction, the present work tested this idea that a reduced focus on

social objectives may bring with it advantages for both Whites and Blacks in diverse settings.

There is little in the interracial dyad literature that directly addresses this hypothesis: Most social psychology experiments, including those cited above, have examined interactions in purely social contexts. The type of activity featured in an interaction—whether a getting-acquainted discussion (e.g., Vorauer & Kumhyr, 2001) or an interactive game (e.g., Mendes, Blascovich, Lickel, & Hunter, 2002)—tends to be seen as an incidental factor, and its influence on interaction outcomes is not usually examined directly. Other researchers, recognizing this gap in the literature, have called for greater attention to interaction context, suggesting that freeform discussions might activate different concerns than game playing, for example, and that this often-overlooked aspect of an interaction may in fact influence participants' behavior (Trawalter, Richeson, & Shelton, 2009). The current research builds on that idea by examining an even more subtle difference: the effect of shifting interaction context by simply manipulating instructions to interracial dyads, while keeping the content of the interaction constant.

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The current work also takes a step toward integrating two research areas: social psychology, in which interracial interactions are generally studied within social contexts, and organizational psychology, in which diversity is often examined within task-oriented contexts (typically by focusing on group-level outcomes such as cohesion and performance). By directly comparing the effects of a social focus and task focus on participants' experiences and cognitive tendencies, we sought to identify the circumstances under which diversity proves most beneficial for both Blacks and Whites.

Research literatures in both areas lend support to the prediction that a task focus will produce better interaction outcomes than a social focus. Social-cognitive benefits have been found for diverse groups in task-oriented settings (see Sommers, 2008). In addition, research on interracial dyads indicates that Whites benefit when their focus is directed away from prejudice concerns (Trawalter & Richeson, 2006) and when interracial interactions are more structured (Avery, Richeson, Hebl, & Ambady, 2009; Richeson & Trawalter, 2005). A task focus, then, should provide an alternate focus and more concrete goal for White participants.

Unfortunately, fewer studies have considered the effects of diverse settings on Black participants—instead, most examine interactions between White participants and Black confederates or experimenters. Still, the limited data available imply potential benefits of a task focus for Black individuals as well. Blacks who are more concerned about prejudice have more negative interracial interaction experiences (Shelton, Richeson, & Salvatore, 2005), but learning that their White partner is prejudiced actually reduces uncertainty and permits greater enjoyment of the interaction (Shelton, 2003). Shifting an interaction's focus from social outcomes to task performance may have similar effects.

The present research included three studies. In Study 1, we adopted a relational approach (see Shelton & Richeson, 2006b), creating actual, unscripted interactions and examining the experiences of both Black and White naïve participants. Dyads worked on four problem-solving tasks; their focus was manipulated via experimenter instructions. We hypothesized that both dyad members would experience more positive outcomes when instructed to focus on task performance (the *task-focus* condition) than when instructed to focus on the social aspects of the interaction (the *social-focus* condition).

This approach is novel in several ways. Few interracial interaction studies include both White and Black participants, and fewer still measure outcomes after an unscripted, in-person interaction. Another way in which the current study goes beyond previous work is the nature of our manipulation (*task focus* vs. *social focus*). Other studies have shifted interracial outcomes by asking White participants to focus on learning goals or to approach the interaction as a positive opportunity, or by providing a script (Goff, Steele, & Davies, 2008; Richeson & Trawalter, 2005; Trawalter & Richeson, 2006). Although some of these manipulations

resemble instructions sometimes given to diverse groups (perhaps in the context of diversity training), the present manipulation maps onto scenarios already occurring in diverse schools and workplaces, where interracial interactions occur in social- or task-focused contexts on a daily basis. In addition to its applicability outside the lab, the present work provides a framework for interpreting and synthesizing previous studies: Although we know that context matters for social interaction in a general sense, it has not been treated as an important factor in interracial interaction studies. The present investigation has the potential to demonstrate that context can be an important moderator of the effects of diversity.

Another way in which the current research extends past work is through use of a combination of cognitive and behavioral measures in Study 1, in addition to self-report items in Studies 2a and 2b. Although previous studies in this literature have often focused on self-report measures, we were primarily interested in measuring cognitive and behavioral outcomes, in part because they are less susceptible to presentational concerns. Investigations relying exclusively on selfreport measures may be particularly difficult to interpret in the context of interracial interactions. For example, previous work found no relationship between White participants' selfreported friendliness toward a Black partner and the partner's own ratings of how friendly the White participant was; instead, participants' implicit bias and nonverbal behavior predicted how friendly they appeared to their partner (Dovidio, Kawakami, & Gaertner, 2002). Thus, in Study 1, we focused on less-controllable measures of cognitive function, nonverbal behavior, and implicit bias, as detailed below.

Cognitive Function

The critical cognitive outcome variable for Study 1 was executive function depletion. We were especially interested in the executive function results for Black participants, as most previous research in this domain has focused on White participants. For example, several studies have shown that manipulating situational factors can increase or decrease White participants' depletion of executive function (Richeson & Shelton, 2003; Richeson & Trawalter, 2005; Trawalter & Richeson, 2006). One recent study used an experimental manipulation to show that Black participants exposed to racist comments showed greater depletion (Bair & Steele, 2010), but to our knowledge, the present study is the first to examine a situational manipulation with the potential to reduce Blacks' executive function depletion after an interracial interaction. Given the frequency with which Blacks encounter such interactions—and given that this contact can result in depletion (Bair & Steele, 2010; Richeson et al., 2005)—the identification of one factor that might attenuate this outcome for Blacks was a central goal of the current research.

Nonverbal Behavior

We also examined participants' nonverbal behavior, coded from videotapes of the interactions. Much of the published literature concerning participants' behavior in interracial contexts has been based on responses to target photographs, or a single participant's behavior while interacting with a confederate. To capture the dynamics of social behavior between two naïve participants, we looked at dyadic behavior across the course of the interaction. Specifically, we were interested in nonverbal synchrony—the extent to which participants' behavior was coordinated. Behavioral coordination is often more difficult in interracial compared to same-race interactions (Heider & Skowronski, 2005), but contextual factors matter too. For example, individuals who are primed with an interdependent self-construal are more likely to mimic the behavior of their interaction partner, increasing coordination (van Baaren, Maddux, Chartrand, de Bouter, & van Knippenberg, 2003). Thus, we expected interracial dyads in the *task-focus* condition to be more synchronized than those in the social-focus condition.

Implicit Bias

We measured Whites' implicit bias after the interaction—as a dependent variable—rather than before the interaction—as a predictor—because such associations are often malleable, shifting in response to participant motivation and situational factors (see Blair, 2002, for a review). For example, White individuals who are motivated to avoid prejudice for internal rather than external reasons show less implicit bias (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002); contextual manipulations of status also affect Whites' implicit bias (Richeson & Ambady, 2003). We included implicit bias as an outcome measure to determine whether our manipulation produced temporary changes in bias—that is, would participants in the *task-focus* condition show less implicit bias than those in the *social-focus* condition?

Our primary interest was in Whites' scores on this measure (as in Shelton, Richeson, Salvatore, & Trawalter, 2005). Past research has shown that although there is some variability in Blacks' Implicit Association Test (IAT) scores, these scores are generally much lower than those of Whites, reflecting more egalitarian implicit attitudes—so we expected little or no variation because of our manipulation (Ashburn-Nardo, Knowles, & Monteith, 2003; Nosek, Banaji, & Greenwald, 2002; Richeson et al., 2005). However, for logistical reasons (i.e., so that the study duration was the same for all participants), both Black and White respondents completed the IAT.

In sum, Study 1 examined the effects of task or social framing—an often-overlooked but naturally occurring aspect of diverse settings—on how well an interracial interaction goes. We utilized a design that allowed for more natural (if less predictable) interactions, included both Black and White naïve participants, and examined measures less susceptible

to self-presentational concerns to best capture the social dynamics and cognitive outcomes of these interactions.

Study I

Method

Participants and design. Participants were undergraduates recruited for pay. Six dyads were excluded because participants reported already knowing their partner, as were two dyads in which the Black partner was African rather than African American (and therefore relatively new to racial norms within the United States). This left 86 dyads (53 interracial and 33 all White). All dyads were same sex; 30 were male and 56 were female. The study design was 2 (Dyad Composition: interracial or all White) × 3 (Instructions: task focus, social focus, or control).

Materials. Each dyad completed the same four problemsolving tasks, in the same order. Rather than requiring acquired knowledge in a certain domain, the tasks drew on creativity, common sense, and social acumen—skills that are valued broadly across situations and organizations. Each was suitable as both a performance-oriented task and an icebreaker. In the first task, dyads read a wilderness survival scenario and ranked 12 items in order of usefulness. For the second task, dyads ranked 10 female baby names in order of mothers' average education level; some of these names are more commonly given to Black children (e.g., Diamond), and some are more commonly given to White children (e.g., Amber), though race was not mentioned in the task. For the third task, dyads ranked 10 U.S. states by percentage of White residents. For the last task, dyads watched brief videos of people smiling and judged each smile as genuine or fake. This task was included because it was more social than the other three tasks, and we wanted participants to complete a range of tasks that drew on different skills. However, it necessitated a change in procedure: Participants left the table where they had worked on the paper-based tasks and sat next to each other at a computer to view the videos. Thus, we did not videotape the fourth task; its inclusion served to extend the interactions and add variety to the activities, but it was not included in our analyses of nonverbal behavior.

We expected that the second and third tasks might make race salient for participants, whereas the first would not (the fourth task was neutral in nature but came after the race-salient tasks; however, as explained above, it was not included in the nonverbal behavior analyses). Other studies have used a similar combination of race-neutral and race-relevant tasks to make these interactions longer and more varied (Richeson & Shelton, 2003; Richeson & Trawalter, 2005).

Procedure. Verbal instructions in the *control* condition were simply that participants would be working together on a series of tasks. Dyads in the *social-focus* condition were told that the study examined social interactions, that the tasks were icebreakers, and that they would each eventually

answer questions concerning their impressions of their partner. Dyads in the *task-focus* condition were told that the study examined performance, that they should focus on getting correct answers to each task, and that the dyad with the highest cumulative score would receive a \$100 bonus.

We did not include a monetary incentive in the socialfocus condition because we wanted to examine the effects of social concerns on Whites and Blacks in circumstances that more closely matched situations outside the lab (e.g., orientation activities in companies and schools) and in previous interracial interaction studies featuring get-acquainted conversations (e.g., Shelton, Richeson, & Salvatore, 2005). The prize was included in the task-focus condition to ensure that participants were focused on performance rather than social concerns. Previous research has shown that absent such incentive, participants' default concerns in interracial interactions are often social. For example, White participants tend to focus on avoiding appearing prejudiced unless this focus is disrupted (Trawalter & Richeson, 2006), and this prejudice avoidance is learned early in life (Apfelbaum, Pauker, Ambady, Sommers, & Norton, 2008) and can come at the expense of task performance (Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006). In addition, performance-focused interactions outside the lab often have tangible rewards or consequences associated with their outcomes, whereas purely social interactions generally do not.

The experimenter left the room during each task. After the final task, each participant took the Stroop (1935) test and the IAT (Greenwald, McGhee, & Schwartz, 1998) at computers in separate rooms. Finally, participants were debriefed and paid for their participation.

Measures

Stroop. Executive function depletion was measured with the Stroop color-naming task. In incompatible trials, participants saw a color name (e.g., "red") in a font color different than what the word represented (e.g., blue) and responded with the font color. In control trials, participants saw a string of Xs, and again responded with the font color. Words and Xs appeared in red, yellow, green, or blue, and participants responded using four keyboard keys of those colors. Trials were preceded by a fixation cross (+); the inter-trial interval (ITI) was 1,500 ms. After a practice block, participants completed 10 blocks of 12 trials each, for a total of 120 experimental trials. Interference scores were computed by subtracting the average latency for the control trials from the average latency for the incongruent trials, such that higher scores indicated more depletion.

Implicit Association Test. Although the IAT often serves as a preinteraction individual difference measure (e.g., Richeson & Shelton, 2003), in this study participants completed it after the interaction. Other studies have also taken this approach to measure changes in implicit bias (e.g., Richeson & Ambady, 2003). The version of the IAT we used measures overall

implicit positivity and negativity toward Whites and Blacks. Participants saw White and Black male faces and positive and negative race-neutral words (e.g., *joy*, *peace*, *pain*, *abuse*) and sorted each into the appropriate category (White/Black or positive/negative) by pressing one of two keys. In one block, White faces and positive words shared a key and Black faces and negative words shared another key. Latencies from this block were subtracted from latencies from the White/negative and Black/positive block to obtain a difference score reflecting pro-White bias. The order of the blocks was counterbalanced among participants; the two critical blocks each contained 40 trials.

Interaction behavior. Dyadic behavior was coded from thin slices of video showing both participants. The thin slice technique—coding short sections of a longer interaction—has been shown to yield valid judgments of a number of behavioral variables, including interactional synchrony, our variable of focus (see Ambady, Bernieri, & Richeson, 2000). We excerpted 10-s clips at the 80-s mark of each of the first three tasks, when dyads had read the instructions but not yet completed the task (the fourth task was not videotaped because it required participants to face a computer instead of each other). The video clips included audio; thin slices with audio tend to yield variables with greater reliability than thin slices of silent video (Ambady et al., 2000). Coders were blind to condition and hypotheses.

Results

Although the study design was 2×3 at the dyad level, it was not fully factorial at the level of participant race: Black participants were members of interracial dyads, but sampling constraints prevented the inclusion of all-Black dyads. Accordingly, to allow for comparisons between Blacks in interracial dyads, Whites in interracial dyads, and Whites in all-White dyads, individual respondents were treated as nested within dyads and individual-level data were analyzed via either between- or within-dyad planned contrasts, as appropriate (following the analytic strategy adopted by Sommers, 2006). Specifically, for both the Stroop and IAT analyses, we began by calculating two scores for each dyad. For interracial dyads, one score represented the Black participant's score and the other represented the White participant's score. For all-White dyads, we averaged both participants' scores to account for dependency, and thus these dyads had two identical scores in the data file. When we calculated contrasts for comparisons across dyad composition, we included either the White participants' scores from the interracial dyads and the averaged scores from the all-White dyads or the Black participants' scores from the interracial dyads and the averaged scores from the all-White dyads. When examining differences by condition for members of interracial dyads, we included in the contrasts the all-White dyad cells to more accurately account for the variability in the design (in these cases, we set contrast weights

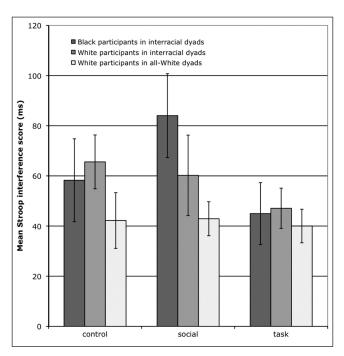


Figure 1. Study 1: Mean Stroop interference score by condition and participant race

Error bars represent standard errors of the mean.

for all-White dyads to zero). Dyad-level data (i.e., interaction behavior coded from videos in which both participants were visible) were analyzed with mixed-model ANOVAs as well as with planned contrasts.

Stroop. All latencies over 1,400 ms (2.5 standard deviations above the mean) and under 200 ms were recoded as in Richeson and Trawalter (2005). Latencies were log transformed for analysis, but untransformed means are presented here (and in Figure 1). Planned contrasts revealed that, as predicted, Black participants in the *task-focus* condition (M = 48.61, SD = 61.97) experienced significantly less executive function depletion than Blacks in the *social-focus* condition (M = 84.02, SD = 74.81), t(80) = -2.17, p = .033, r = .24. The Stroop scores of Whites in interracial dyads showed a similar pattern, with the least depletion in the *task-focus* condition, but these differences did not reach statistical significance, t(80) = -0.92, p = .36. There were no significant differences by condition for Whites in the all-White dyads.

Interaction behavior. Two White female coders assessed the extent to which each dyad appeared synchronized on a 7-point scale ($1 = not \ at \ all$, $7 = a \ great \ deal$), rating each dyad once per task, and overlapping on 53 of the videos (intraclass r = .72). We performed a $3 \times 2 \times 3$ mixed-model ANOVA, with one within-subjects factor (Task Sequence: ratings at the *first*, *second*, and *third task*) and two between-subjects factors (Dyad Composition: *interracial* vs. *all-White* and Instructions: *task focus* vs. *social focus* vs. *control*). We found a main effect of Task Sequence, with

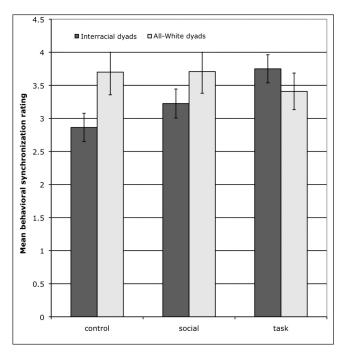


Figure 2. Study 1: Mean behavioral synchronization ratings for Task 1 by condition and dyad composition Error bars represent standard errors of the mean.

both interracial and all-White dyads appearing more synchronized in later tasks compared to the first task, F(2, 158) = 12.49, p < .001, $\eta_{\rm p}^2 = .14$. Specifically, dyads were rated as less synchronized in Task 1 (M = 3.49, SD = 1.01) than in Task 2, M = 3.94, SD = 1.13, t(84) = -3.75, p < .001, r = .38, or Task 3, M = 4.00, SD = 1.11, t(84) = 3.60, p < .001, r = .37. There was also a significant Task Sequence × Dyad Composition × Instructions interaction, F(4, 158) = 3.46, p = .01, $\eta_{-}^{2} = .08$. This interaction was driven by interracial dyads in the taskfocus condition: On the first task, interracial dyads were rated as more synchronized in the task-focus condition than in the *control* and *social-focus* conditions, t(80) = 3.01, p = .004, r = .32 (see Figure 2). There were no significant differences for the subsequent tasks, as synchronization ratings for dyads in the other two conditions were as high as those in the taskfocus condition on these tasks, and ratings for the all-White dyads did not differ significantly by condition for any task (see Table 1 for all cell means). In short, interracial dyads in the task-focus condition began their interactions with a level of synchronization that interracial dyads in the social-focus and control conditions did not achieve until later in their interactions.

Implicit Association Test. Latencies under 400 ms and over 10,000 ms were dropped, in accordance with Greenwald, Nosek, and Banaji (2003). As predicted, there were no differences by condition for Black participants; in fact, Black participants' scores were not significantly different from zero, M = 0.10, SD = 0.46, t(52) = 1.59, p = .12.

	Task I				Task 2				Task 3			
	Inter	racial	All V	Vhite	Inter	racial	All V	Vhite	Inter	racial	AllV	Vhite
Instructions	М	SD	М	SD	М	SD	М	SD	M	SD	М	SD
Control	2.86ª	0.71	3.70	1.09	3.64	0.95	3.85	1.29	4.00	1.23	3.95	1.24
Social focus	3.23 ^a	0.98	3.71	1.14	3.66	1.33	4.33	0.81	3.79	1.06	4.42	0.95
Task focus	3.75 ^b	1.04	3.41	0.92	4.04	1.16	4.00	0.98	3.71	1.07	4.64	0.84

Table 1. Ratings of Behavioral Synchronization by Task Sequence, Dyad Composition, and Instructions

Means in the same column with different superscripts differ at p < .05.

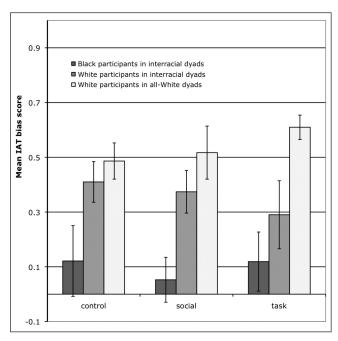


Figure 3. Study 1: Mean Implicit Association Test scores by condition and participant race Error bars represent standard errors of the mean.

There were also no differences by condition for Whites in all-White dyads (see Figure 3). The predicted condition difference for White participants in interracial dyads was significant—but only for White men, who exhibited reduced implicit bias in the *task-focus* condition compared to the *control*, t(6.34) = 3.95, p = .007, r = .84, and *social-focus* conditions, t(11.45) = -2.20, p = .049, r = .55 (see Figure 4). White women showed no differences in implicit bias by condition (see Table 2 for means by gender). We had not predicted gender differences on any of the outcome variables and indeed found no main or interactive effects of gender for the Stroop scores or synchronization ratings.

Finally, a planned contrast showed that in the *task-focus* condition, White participants of both genders showed significantly less bias on the post-interaction IAT when in interracial dyads than when in all-White dyads, t(22) = -2.16, p = .042, r = .42.

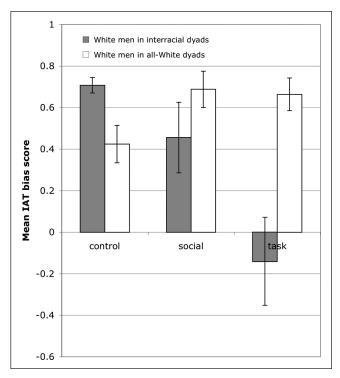


Figure 4. Study 1: Mean Implicit Association Test scores by condition and dyad composition for White men Error bars represent standard errors of the mean.

Table 2. Implicit Association Test Scores for White Participants in Interracial Dyads, Study I

	Со	ntrol	So	cial	Task		
	М	SD	М	SD	М	SD	
Women	0.34	0.22	0.33	0.27	0.58	0.36	
Men	0.71	0.053	0.46	0.45	-0.14	0.56	

Discussion

These findings indicate that context shapes social and cognitive outcomes in interracial interactions. Overall, interracial dyads had more positive experiences when given a task focus as opposed to a social focus. This pattern held at the

dyad and participant levels, for both cognitive and behavioral outcomes, and was particularly robust among Black participants, a population that has been studied all too infrequently.

Although Study 1 suggests a promising way to improve interracial interactions, it does not demonstrate a mechanism for these findings. Because previous research suggests that a task focus could reduce prejudice concerns (e.g., Avery et al., 2009; Richeson & Trawalter, 2005), we examined that link in two follow-up studies. We hypothesized that White participants would report less concern about appearing prejudiced when imagining a *task-focused* interracial interaction as opposed to a *social-focused* interracial interaction (Study 2a) and that Black participants would report less vigilance against prejudice from their partner when imagining a *task-focused* interracial interaction as opposed to a *social-focused* interracial interaction (Study 2b).

Study 2a

Method

Participants and design. Participants were White American adults, recruited from the website Mechanical Turk, where participants can take short surveys online in exchange for small payments (see Buhrmester, Kwang, & Gosling, 2011). A total of 117 participants correctly identified the race and gender of their imagined partner in a manipulation check, but 2 participants were excluded because they responded to every item with a 7. The remaining 115 participants (73 female) ranged in age from 18 to 77 (M = 36.94, SD = 12.73). There was one independent variable (instructions), with three levels: $task\ focus, social\ focus,$ and control.

Procedure. Participants responded to a post on Mechanical Turk offering a brief survey on social issues. After answering a few demographic questions, they were randomly assigned to imagine one of three scenarios. The scenarios were designed to evoke as closely as possible the experience of participants in Study 1. In the *control* condition, participants were asked to imagine that they were taking part in an exercise involving working in pairs, had been paired with a Black person of the same age and gender, and had been asked to work on four problem-solving tasks. In the *social-focus* condition, participants were asked to imagine that they were taking part in an exercise involving social interactions, had been paired with a Black person of the same age and gender, and had been asked to just treat the tasks as icebreakers. They were also told to imagine that they would be answering questions about their impressions of their partner after the interaction. In the taskfocus condition, participants were asked to imagine that they were taking part in an exercise involving task performance, had been paired with a Black person of the same age and gender, and had been asked to do as well as possible on four problem-solving tasks. They were also told to imagine that there was a \$100 reward for the pair that performed best.

Next, participants answered questions about what they would be focused on during this hypothetical interaction, using a scale of 1 (not at all) to 7 (very much). To ensure that participants had paid attention to the way each scenario was described, and used that information when answering the questions, we included items measuring their focus on the social and task aspects of the interaction. To check participants' focus on the social aspects of the interaction, we asked to what extent they would be focused on being liked during the interaction and to what extent they would be focused on being friendly to their partner. We created a composite score of these two social focus items (Cronbach's $\alpha = .67$). To measure participants' focus on the task aspects of the interaction, we asked to what extent would they be focused on staying on task during the interaction and to what extent they would be focused on doing well on the tasks. We also created a composite score of these two task focus items (Cronbach's $\alpha = .82$). To test our hypothesis, we included three items addressing concerns about appearing prejudiced (adapted from Richeson & Trawalter, 2005). We asked participants to what extent they would monitor their thoughts to avoid appearing prejudiced, to what extent they would monitor their behavior to avoid appearing prejudiced, and to what extent they would be focused on not appearing prejudiced during the interaction (Cronbach's $\alpha = .91$).

Results and Discussion

In Studies 2a and 2b, all analyses were at the individual level: Participants were not in dyads, so analyses were conducted using one-way ANOVA and planned contrasts. First, we examined participants' social- and task-related concerns to ensure that our manipulation affected participants' focus. As expected, there was a main effect of condition on the social-focus composite, F(2, 112) = 4.91, p = .009, $\eta_n^2 = .08$. Planned contrasts indicated that participants in the socialfocus condition (M = 5.63, SD = 1.16) were significantly more concerned about the social aspects of the interaction than participants in the task-focus condition (M = 5.41,SD = 1.30), t(112) = -3.07, p = .003, r = .28. There was also a main effect of condition on the task-focus composite, $F(2, 112) = 6.58, p = .002, \eta_{\rm p}^2 = .11$. Planned contrasts indicated that scores on the task-focus composite in the taskfocus condition (M = 6.75, SD = 0.79) were significantly higher than scores in the *social-focus* condition (M = 6.03, SD = 1.08), indicating that participants were more concerned about doing well on the tasks when imagining an interaction with a task focus, t(80.75) = 3.50, p = .001, r = .36. Finally, we examined participants' concern about prejudice. There was a marginal main effect of condition, F(2, 112) = 2.93, p = .058, $\eta^2 = .05$. However, planned contrasts showed a significant difference: Participants in the *task-focus* condition (M = 3.06, SD = 1.78) reported less concern about prejudice than participants in the social-focus condition (M = 3.92, SD = 2.00),

t(112) = -2.01, p = .047, r = .19. Participants in the *control* condition (M = 3.03, SD = 1.94) also reported less concern about prejudice than participants in the *social-focus* condition, t(112) = -2.05, p = .043, r = .19.

These findings indicate that White participants did have different concerns when given a task focus rather than a social focus. Specifically, in addition to a greater focus on the task aspects of the interaction, participants in the taskfocus condition reported significantly less concern about prejudice than participants in the social-focus condition. Interestingly, participants in the *control* condition also expressed less prejudice concern than participants in the socialfocus condition. The instructions in the control conditionwhich specified that the exercise involved working in pairs on four problem-solving tasks—may have created more of a task focus in this study than in Study 1 because participants were merely reading about a hypothetical interaction and did not actually encounter a Black partner. Indeed, in the current study, participants in the *control* condition (M = 6.39, SD = 0.63)had marginally higher scores on the task-focus composite than did participants in the *social-focus* condition (M = 6.03, SD = 1.08), t(112) = 1.78, p = .079, r = .17.

To examine whether the instruction manipulation would also shift Black participants' focus and their concerns about prejudice, we ran an additional study, recruiting only Black participants and asking about their concerns about prejudice from their partner.

Study 2b

Method

Participants and design. Participants were Black American adults, also recruited from the website Mechanical Turk. Among the 60 participants (37 female) who correctly reported the race and gender of their imagined partner in a manipulation check, the age range was 18 to 63 (M = 28.77, SD = 8.52). As in Study 2b, there was one independent variable (instructions), with three levels: task focus, social focus, and control.

Procedure. Participants responded to a post on Mechanical Turk offering a brief survey on social issues and specifying that Black or African American participants were needed. As in Study 2a, participants answered a few demographic questions and then were randomly assigned to imagine one of three scenarios. These scenarios were identical to those in Study 2a, except that participants were asked to imagine that they had been paired with a White partner.

Participants then answered questions about concerns they would have during this hypothetical interaction. We included the same two items to check participants' focus on the social aspects of the interaction, again creating a composite score representing social focus (Cronbach's $\alpha=.78$). The two items forming the task-focus composite were also identical to those in Study 2a (Cronbach's $\alpha=.63$). Finally, to measure vigilance against prejudice from their partner, we asked

participants to what extent they would be watching their partner's behavior for signs of prejudice, to what extent they would monitor their own behavior to avoid confirming stereotypes, and to what extent they would be concerned about their partner being prejudiced (Cronbach's $\alpha = .71$).

Results and Discussion

Unlike in Study 2a, there was no main effect of condition on the social-focus composite, though the means were in the predicted direction, F(2, 57) = 0.66, p = .52, $\eta_p^2 = .02$. There was, however, a marginal main effect of condition on the task focus composite, F(2, 57) = 3.07, p = .054, $\eta_p^2 = .10$. Planned contrasts indicated that participants in the task-focus condition (M = 6.52, SD = 0.83) reported significantly more focus on task-related aspects of the interaction than participants in the social-focus condition (M = 5.77, SD = 1.09), t(56) = 2.36,p = .022, r = .30. We also found a main effect of condition on participants' concern about prejudice, F(2, 57) = 3.33, p = .043, $\eta^2 = .11$; planned contrasts showed that participants in the task-focus condition (M = 3.39, SD = 1.56) were less vigilant against prejudice than those in the social-focus condition (M = 4.46, SD = 1.38), t(56) = -2.41, p = .019, r = .31.Together with the findings from Study 2a, these results indicate that participants' prejudice concerns—in terms of both displaying and experiencing prejudice—are affected by the focus they are given, even when the interaction is hypothetical.

General Discussion

Over three studies, we found that participants who were assigned a task focus had more positive experiences and expectations of interracial interactions than participants assigned a social focus. In the first study, interracial dyads given a task focus negotiated the first moments of the interaction with more synchronized behavior than dyads given a social focus. Black participants experienced less cognitive depletion in the *task-focus* condition, and White male participants showed less implicit bias after a task-focused interaction. In the second study, we found that White and Black participants reported less prejudice-related concern when given a task focus as opposed to a social focus.

Behavioral and Cognitive Outcomes

At the dyad level, interracial pairs in Study 1 appeared more consistently synchronized when in the *task-focus* condition. There were no differences by condition for all-White pairs, suggesting that this effect was specific to interracial interactions and not solely the result of the cash prize at stake in the *task-focus* condition. And although it is true that we cannot differentiate between the influence of the monetary incentive and that of the task-focus instructions themselves, either one would be expected to have the same ultimate effect: to motivate participants to focus on the task at hand. That this

task focus led interracial, but not all-White, dyads to begin the interaction with more synchronized behavior is consistent with previous work. For example, a task focus can facilitate interracial interaction by providing a superordinate goal that emphasizes teamwork, thereby freeing participants from the potentially negative consequences of their usual attempts to manage prejudice concerns during such interactions (see Apfelbaum & Sommers, 2009)—especially during the first few minutes of an interracial exchange, when individuals are seeking to make a positive first impression as well as gauge the tone and normative structure of the interaction (Apfelbaum, Sommers, & Norton, 2008).

At first blush, it may seem surprising that overall, dyads became more synchronized as the interaction progressed, given that the second and third tasks were more relevant to race. However, White participants have been shown to be equally anxious in race-relevant and race-neutral interracial discussions, whereas Black participants show less anxiety in race-relevant compared to race-neutral discussions (Trawalter & Richeson, 2008). Thus, as the interaction progressed, anxiety may have remained relatively constant for White participants while decreasing for Black participants, resulting in a net decrease in anxiety and increase in synchronization. Participants may also have become more comfortable with their partner over time; stereotypes that were activated on first encountering their partner may have gradually become deactivated (Kunda, Davies, Adams, & Spencer, 2002).

At the individual level, task-focus benefits were particularly evident for Black participants: This framing significantly reduced their executive function depletion. In fact, it did so to the point where Blacks in a task-focused interracial interaction exhibited the same low level of depletion experienced by Whites in all-White dyads. The task focus may have counteracted depleting tendencies such as vigilance against prejudice, redirecting participants' attention to task performance. This possibility is supported by the findings of Study 2b: Black participants given a task focus reported less vigilance against prejudice from their partner and greater attention to task performance. The reduction in executive function depletion also fits well with the finding that taskfocused interracial dyads began the interaction with more synchronized behavior, as past work has found that interactions in which behavioral coordination is less challenging lead to less depletion than those in which coordination is more effortful (Finkel et al., 2006).

For White participants, executive function results were in the predicted direction but did not reach statistical significance. There was, however, a significant difference in White men's implicit bias scores: White men in interracial dyads had lower postinteraction IAT scores in the *task-focus* condition than in the *social-focus* or *control* conditions. Although we did not predict a gender difference, one possible explanation is that men concentrated on the interdyad competition component of the task-focused instructions more than women did (see Niederle & Vesterlund, 2007).

The resulting dependence on one's partner may have facilitated a superordinate identity (see Dovidio & Gaertner, 1999) or the process of individuation (Neuberg & Fiske, 1987). This remains post hoc speculation, however, and greater investigation of the role of gender in interracial contexts is clearly warranted. For example, in future work we plan to examine the potential effects of the gender of the stimuli faces in the IAT. In Study 1, both male and female participants completed an IAT that used only male faces; perhaps interacting with a female partner and then completing a male IAT had some effect on our female participants' scores.²

We also found a difference in implicit bias scores between White participants in interracial and all-White dyads: In the *task-focus* condition, Whites in interracial dyads had lower postinteraction IAT scores than Whites in all-White dyads. Simply focusing on performance with a Black partner reduced Whites' bias, as might be predicted by intergroup contact theory (see Pettigrew & Tropp, 2006), or previous findings that White participants exhibit lower IAT bias in the presence of a Black experimenter (Lowery, Hardin, & Sinclair, 2001).

Self-Reported Prejudice Concerns

In Studies 2a and 2b, we investigated how task- and socialfocused instructions influence prejudice concerns. We found that White participants who imagined themselves in a taskfocused interracial interaction reported less concern about appearing prejudiced (Study 2a) and that Black participants who imagined themselves in a task-focused interracial interaction reported less concern about prejudice from their partner (Study 2b). Although these findings do not conclusively identify prejudice concern as the mediator of the effects in Study 1, they do offer plausible explanations that fit with prior research. We know that concern about appearing prejudiced affects Whites' nonverbal behavior (Apfelbaum, Sommers, et al., 2008) and implicit bias scores (Frantz, Cuddy, Burnett, Ray, & Hart, 2004), and other work suggests that vigilance against prejudice can be depleting for Blacks (Richeson et al., 2005). The current findings indicate that prejudice concerns may underlie the behavioral and cognitive effects in Study 1 as well.

Practical and Research Implications

These findings highlight the importance of framing for interracial interactions. In Study 1, we found different behavioral and cognitive outcomes by varying just a few words of preinteraction instruction—despite the fact that the actual content of the interaction remained identical across conditions. This means that an interaction involving some form of task completion is not necessarily a task-focused interaction: Without incentive to perform well, social concerns may dominate instead. Perhaps this is why previous dyadic interaction studies involving performance have not always found

benefits of diversity: Absent a tangible incentive for doing well on a task, participants often default to social concerns—even when performance is assessed (Apfelbaum, Sommers, et al., 2008; Norton et al., 2006).

These findings also demonstrate the importance of including Black participants in interracial interaction research, as opposed to examining only White participants' interactions with Black confederates. Although this method is logistically challenging in majority-White participant populations, findings obtained using both White and Black participants are more widely applicable because of the naturalistic, unscripted nature of participants' interactions. Furthermore, by including Black participants, we were able to identify one possible route to reducing or eliminating the executive function depletion that Blacks may experience following interracial interactions (Richeson et al., 2005). We demonstrated that changing the framing of even a hypothetical interaction can reduce Blacks' concern about prejudice (and, importantly, the behavioral data from Study 1 suggest that this reduced concern is not misplaced). Although previous research in this area has identified ways to make these interactions more positive for Whites, the current studies take an important step beyond this past work in highlighting an approach that improves outcomes for Blacks (and happens to be beneficial for Whites as well).

There remain several directions for future research on these issues. For example, there is evidence that Blacks' default motivation during an interracial interaction is to appear competent, whereas Whites' is to be liked (Bergsieker, Shelton, & Richeson, 2010). Perhaps Black participants had the most positive outcomes in the task-focus condition because the instructions both liberated them from prejudice concerns and provided the opportunity to demonstrate competence. White participants may have even more positive outcomes when given both a social focus and a performance goal. For example, if we had added a monetary reward in the social-focus condition, such that the dyad that formed the most accurate impressions of each other received a prize, we might have found that White participants benefited from having a more specific interaction goal as well as an opportunity to demonstrate likeability.

Another area for future research is to look at social and task focus outside of the lab—that is, to measure or manipulate this focus in longer-term interracial interactions occurring in schools or workplaces. Longitudinal studies can reveal the cumulative effects of small differences—for example, a single intervention to reduce stereotype threat can prevent a downward trend in Black students' academic performance over the course of a semester (Cohen, Garcia, Apfel, & Master, 2006). Our research found that giving Black participants a task focus rather than a social focus attenuated executive function depletion; perhaps members of diverse groups would have better long-term outcomes if their initial contact involved a task-focused activity rather than the typical get-to-know-you exercises. Although these

icebreaker exercises are employed in an attempt to reduce tension, our work suggests that they may actually heighten concerns about prejudice for both majority and minority group members, leading to a less positive experience for everyone. Whether that initial experience also affects longerterm outcomes merits further study.

Conclusions

The present studies demonstrated that a social focus for interracial interaction can, ironically, undermine the experiences of both Whites and Blacks. When given a task focus rather than a social focus, interracial pairs appeared more consistently synchronized, Black participants exhibited less post-interaction executive function depletion, and White men displayed significantly less implicit bias. In addition, both White and Black participants were less concerned about prejudice when envisioning task-focused rather than social-focused interactions. These findings have both theoretical and practical implications in our increasingly diverse society.

First, they help to reconcile two bodies of research that have examined interracial interaction but have remained largely separate. Because of underlying differences in research interests and methods, studies of interracial interactions in organizational psychology often employ performance-focused contexts, whereas social psychological studies are more likely to examine interactions in social contexts. It is now clearer than ever that the context in which these interactions take place has important effects. Participants' focus in a given study should be considered when synthesizing findings from across the two literatures and designing future investigations of interracial interaction.

The present findings have practical implications as well. Although many residential areas are still largely segregated, schools and workplaces are growing increasingly diverse (Ellis, 2004), and students and employees often have both performance and social goals when interacting. Understanding which goal predominates in a given situation may help to predict how well an interaction will go, and this knowledge can be used to promote positive outcomes. Ironically, the benefits that come from a reduced focus on the social aspects of interacial interaction may also pave the way for more positive social relationships in the future.

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Notes

1. Indeed, we asked coders to assess thin slices of dyadic behavior for anxiety as well and found an overall decrease as the interaction progressed: A mixed-model ANOVA showed a main effect of task sequence, with both interracial and all-White dyads appearing less anxious in later compared to earlier tasks, F(2, 158) = 6.80, p = .001, $\eta_p^2 = .08$.

2. We thank an anonymous reviewer for this suggestion.

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