It Doesn’t Have To Be Uncomfortable: The Role of Behavioral Scripts in Black-White Interracial Interactions

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Abstract

Despite growing racioethnic diversity in U.S. organizations, few organizational studies have focused on Black-White interracial interactions. Two experiments examined the influence of interaction roles, and the social scripts they trigger, on White participants’ anxiety during dyadic interactions with Black partners. Results from both studies revealed that White participants exhibited greater discomfort in Black-White than in same-race interactions unless their interaction role offered an accessible script to guide behavior. Thus, the present findings suggest organizations may be able to attenuate anxiety among White employees by (a) providing opportunities for initial Black-White interactions in settings with clearly defined social scripts for behavior and (b) helping them to develop behavioral scripts for naturally occurring Black-White workplace interactions.
It Doesn’t Have To Be Uncomfortable: The Role of Behavioral Scripts in Black-White Interracial Interactions

Racioethnic (i.e., racial and ethnic) diversity is clearly on the rise in United States workplaces. At the turn of the century, White, non-Hispanic Americans represented 72% of the U.S. workforce; fast forward five years to 2005 and that number had declined to 69.6% (Toossi, 2006). This trend is projected to continue into the foreseeable future, as the relative proportion of employees belonging to traditionally underrepresented racioethnic groups (e.g., Black, Hispanic, and Asian American) will continue to grow (Toossi, 2006). As a natural consequence of this increasing diversity, the proportion of workplace interactions spanning racioethnic lines will rise. Thus, workplace interracial interaction is becoming increasingly common and, ultimately, the ability to effectively navigate it will be a determinant of individual and organizational success (Combs & Griffith, 2007).

Despite its growing workplace relevance, not much organizational inquiry, other than research on mentoring, has focused specifically on interracial interactions (see Bacharach, Bamberger, & Vashdi, 2005; Larkey, 1996; or McKay & Avery, 2006 for exceptions). Fortunately, however, social psychologists have devoted considerable attention to the topic and organizational scholars (e.g., Cortina, 2008; Pendry, Driscoll, & Fields, 2007) have called for greater integration of social psychological research. Examining the business implications of this work, some of the more pertinent findings show that (a) White Americans often find interracial interactions discomforting, (b) their discomfort, despite their best efforts to conceal it, is commonly apparent to their Black partners, (c) the cognitive resources expended in interracial interactions can impair various types of performance, (d) anxiety concerning these interactions tends to lead to avoidance of minorities, and (e) the most intense feelings about interracial
interactions involve contact with Blacks (Dixon, 2006; Dovidio, Kawakami, & Gaertner, 2002; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006; Plant & Devine, 2003; Richeson & Shelton, 2003; Richeson & Trawalter, 2005; Shelton, 2003). Consequently, firms are likely to find their ability to capitalize on the prospective benefits of racioethnic diversity (see Richard, 2000; Richard, Murthi, & Ismail, 2007) compromised unless they are able to help facilitate productive interracial interactions within the company. This is particularly important amongst their Black and White personnel because of the extensive history of contested Black-White relations in America (Bacharach et al., 2005).

Unfortunately, existing research has identified few means through which they might achieve this end. In fact, the only tactic from the literature that, seemingly, might help in this regard is diversity training. Nonetheless, diversity training, at least in its current forms, is probably ill-equipped for this challenge (Kulik & Roberson, 2008). To fill this void, the present research presents two experimental studies examining how providing White employees with better defined social scripts (i.e., norms dictating expected interpersonal behavior) helps to attenuate their anxiety regarding initial Black-White interracial interactions as perceived by others. The first study is preliminary, in that it focuses solely on women and employs a single-item rating of participants’ anxiety. The second study, however, is complementary and helps to address these shortcomings. As such, the findings hold the collective potential to (a) broaden our understanding of the dynamics involved in workplace Black-White interracial interactions in the United States and (b) provide organizations with empirically based suggestions on how to improve them.

We focus our attention here on White employees for four reasons. First, largely because they represent the numerical majority in organizations and society alike, White employees are
less likely than their non-White counterparts to have significant prior experience engaging in
inters racial interactions (Ibarra, 1993, 1995; Smith, 2002). Experience of this type commonly
promotes comfort with, and affinity for, subsequent interracial contact (Emerson, Kimbro, &
Yancey, 2002). Second, many White employees are highly concerned with avoiding the
appearance of being racist, which can influence their behavior in interracial workplace
interactions and work performance in general (Blank & Slipp, 1994; Roberson & Kulik, 2007).
This could help to explain why White employee withdrawal behavior (a common psychological
defense) increases as a function of the proportion of racially dissimilar others at work (Plant &
Devine, 2003; Tsui & Gutek, 1999). Third, identifying ways to help alleviate White employees’
anxiety about interactions with Blacks could help to diminish diversity resistance and backlash
amongst this group, which can impede diversity efforts (Thomas, 2007). Fourth, interactions
with White coworkers and supervisors can be a source of perceived discrimination among non-
White employees (Ensher, Grant-Vallone, & Donaldson, 2001). Less anxiety on the part of
White employees should reduce the likelihood of a socially awkward interaction that could be
perceived as racially discriminatory. In sum, by focusing on the anxiety of White employees, our
results hold the potential to enhance the quality of workplace experiences for all employees as
well as the organizational bottom line. In the sections that follow, we briefly review literature
from social and industrial/organizational psychology providing the theoretical foundation for this
research. Subsequently, we discuss the potential role of social scripts in Black-White interracial
interactions and introduce the research hypotheses.

A Social Psychological Perspective on Interracial Interaction

Social psychology research suggests White Americans often feel anxious and self-
conscious both prior to and during interactions with Black Americans (Blascovich, Mendes,
It seems Black-White interracial interactions invoke a state of physiological threat in some individuals (Blascovich et al., 2000; Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001). When engaging with Black partners, White individuals reveal cardiac reactivity reflective of “threat” and display increased total peripheral resistance when communicating with a Black confederate (Blascovich et al., 2001; Blascovich & Tomaka, 1996). By contrast, when communicating with a White partner, these reactions do not occur. Although it is tempting to attribute this pattern to prejudice, even low-prejudiced members of non-stigmatized social groups tend to behave in an anxious, distant manner (e.g., avoiding eye contact) during intergroup interactions (Devine, Evett, Vasquez-Suson, 1996).

So why does this threat response occur? According to Blascovich et al. (2001), physiological threat emerges when the psychological demands of a particular situation seemingly outweigh available resources (Blascovich & Tomaka, 1996). A variety of facets of Black-White interracial interactions can lead White Americans to find them psychologically demanding, and, therefore, threatening (Neuberg, Smith, & Asher, 2000). For instance, White individuals may react to Black people with apprehension because of the negative stereotypes associated with the latter group. Similarly, Black-White interracial interactions may be cognitively demanding for White participants if they harbor concerns that their Black partners will think they are biased (Vorauer, Hunter, Main, & Roy, 2000) because they must exert resources to carefully monitor their thoughts and behavior (Devine et al., 1996; Gaertner & Dovidio, 1996; Shelton, 2003). Given that tasks requiring executive function (e.g., mental control and behavioral inhibition) strain and, sometimes, exhaust cognitive resources (Mauraven & Baumeister, 2000; Wegner &
Bargh, 1998), it follows that White individuals are likely to appraise contact with Blacks as being particularly taxing. Indeed, recent research finds that even brief interracial contact may temporarily deplete the executive attentional resources of White individuals (Richeson & Shelton, 2003; Richeson & Trawalter, 2005).

In addition to these potential sources of anxiety during Black-White intergroup contact, intergroup anxiety theory (Stephan & Stephan, 1985) argues that the anxiety stems, in part, from the uncertainty of the situation. Specifically, interactions with outgroup members tend to be relatively novel and unfamiliar, and therefore present uncertainty regarding how to negotiate the interaction (Crocker et al., 1998; Hamilton & Bishop, 1976). Similarly, anxiety/uncertainty management theory (Gudykunst, 1995; Gudykunst & Shapiro, 1996) asserts that interactions, wherein the behavioral expectancies of the participants are ambiguous or hard to predict, increase anxiety and uncertainty, which, in turn, reduces satisfaction with the interaction. Gudykunst (1995) argued that individuals are especially likely to feel uncertain about their behavior during initial interactions with members of a different sociocultural group. Such uncertainty often leads members of dominant social groups (e.g., White Americans) to fear making inappropriate remarks (Blank & Shipp, 1994; Hebl, Tickle, & Heatherton, 2000) or revealing latent prejudice (Devine, et al., 1996; Dovidio & Gaertner, 1998) during encounters with outgroup members (e.g., Black Americans). Resolving uncertainty regarding how to behave in the interaction, therefore, should reduce the anxiety and discomfort associated with intergroup contact experiences (Olson, Roese, & Zanna, 1996). We believe behavioral social scripts provide an avenue for reducing this uncertainty.
Clearly, racial group membership can serve as a powerful stimulus invoking anxiety and apprehension in members of dominant racial groups. Other factors also affect experiences during dyadic interactions, such as the role participants hold (Snyder & Stukas, 1999). During many everyday interactions, individuals behave according to appropriate norms associated with the roles they assume for the dyad (Baumeister & Newman, 1995). Highly scripted social roles (i.e., those with more clearly defined behavioral expectancies) automatically cue specific and predictable patterns of behavior (Bargh, 1990, 1994; Baumeister & Newman, 1995; Jones, 1990; Schank & Abelson, 1977; Schlenker & Weigold, 1992). In other words, after participants’ roles have been established, the norms and scripts these roles trigger tend to shape subsequent behavior. Adherence (whether explicit or implicit) to these normative scripts has been linked to many interpersonal phenomena, including the attenuation of gender differences in leadership styles (Eagly & Johnson, 1990), the expression of prejudice (Crandall, Eshleman, & O’Brien, 2002; Gaertner & Dovidio, 1986), attitude-behavior congruence more generally (Schofield, 1975; Warner & DeFleur, 1969), as well as the self-fulfilling prophecy (see Snyder & Stukas, 1999 for a discussion). By contrast, impromptu meetings with strangers are less strongly associated with a behavioral script. Beyond the initial greeting, it is not always clear what should occur during casual interactions with relative strangers, evidenced by the “awkward pause” that often follows greetings during such encounters.

Black-White interactions that involve enacting a familiar social script should require fewer psychological resources than unscripted interactions (Pryor, & Merluzzi, 1985; Schank & Abelson, 1977). In the former, White individuals can draw on the script associated with their role in the interaction to negotiate the encounter. Conversely, the latter offer individuals limited
guides for appropriate behavior and, therefore, should require greater effort for successful negotiation. We propose that the effort associated with negotiating interactions without concrete social scripts should make interracial encounters particularly demanding, and, therefore, anxiety-provoking (Blascovich et al., 2000). By contrast, the ease associated with negotiating a role-based script should reduce the psychological demands of intergroup contact, and, therefore, scripted intergroup interactions should be relatively less disquieting for non-stigmatized individuals. In short, higher levels of scripting should reduce the uncertainty regarding how to behave and how others will behave, thereby diminishing anxiety.

One recent study provided some degree of preliminary support for this logic (Towles-Schwen & Fazio, 2003). Participants rated their anticipated willingness and comfort engaging in scenarios that had been identified in pre-testing as being relatively scripted (e.g., serving a Black customer in a restaurant) and relatively unscripted (e.g., sitting in a crowded library at a table where a Black person is already seated). The more scripted the scenario, the more comfort participants anticipated in interacting with a Black individual. Extending these findings, the present work considers how comfortably White individuals actually behave during Black-White interracial, compared to same-race, interactions as a function of their roles during the encounter.

It is important to acknowledge that individuals often are unaware of their feelings and behaviors during interracial interactions (e.g., Word, Zanna, & Cooper, 1974). Moreover, when aware, they may be inclined to misrepresent any negative feelings and experiences (Dunton & Fazio, 1997; Plant & Devine, 1998). To overcome these issues, we employed a relatively unobtrusive measure of behavior—analysis of participants’ nonverbal behaviors. Nonverbal behaviors convey the genuine affective reactions of the actors, often without their conscious awareness (DePaulo & Freidman, 1998). Furthermore, research examining interactions between
members of different groups attests to the ability of nonverbal aspects of communications to reveal attitudes that individuals do not report through the verbal components of their communication, or on self-report instruments (e.g., Ambady, Bernieri, & Richeson, 2000; Babad, Bernieri, & Rosenthal, 1989; Dovidio, Kawakami, & Gaertner, 2001; Feldman & Donahoe, 1978; Weitz, 1972). For instance, White participants’ nonverbal behaviors (i.e., blinking, eye contact) with Black interaction partners were more consistent with their implicit attitudes towards Black Americans, than were their explicit evaluations of their partners (Dovidio et al., 1997). Explicit attitude measures, however, were predictive of participants’ self-reported evaluations of their partners. Hence, similar to other unobtrusive measures (e.g., Fazio, Jackson, Dunton, & Williams, 1995), as well as the physiological markers examined by Blascovich and Tomaka (1996), nonverbal behavior can serve as an index of individuals’ genuine feelings and affective states during interracial encounters.

A Prior Example of Scripting

We are not the first to suggest the potential for scripting to have a positive influence on interracial interactions. One form of scripting, employment interview structure, has received extensive research attention and demonstrated potential in this regard (see Campion, Palmer, & Campion, 1997 for an extensive review of this literature). Within an interview, structure is believed to reduce bias by standardizing the process to ensure greater consistency from interview to interview. Accordingly, interviewers record responses to the same, job-relevant questions, which are asked in an identical sequence and manner, thereby making this information more comparable across the candidate pool (Campion et al., 1997). Such standardization also reduces opportunities for interviewer bias (e.g., prejudice) to influence decision-making and, ultimately,
diminishes the likelihood of racial discrimination taking place (Campion et al., 1997; Williamson, Campion, Malos, Roehling, & Campion, 1997).

Although researchers have studied the effects of various forms of interview structure (e.g., asking the same questions, limiting prompting, or taking detailed notes) on discrimination and the reactions of both interviewers and candidates, their focus has been on outcomes (e.g., assessment psychometrics and bias) and perceptions of face validity as opposed to psychosocial process variables like anxiety (Campion et al., 1997). This omission is important for a couple of reasons. First, anxiety could provide an alternative explanation for why structure decreases discriminatory outcomes. Perhaps greater structure diminishes participants’ uncertainty regarding the process, thereby reducing their anxiety (Stephan & Stephan, 1985). Because anxiety diverts attentional resources from the task at hand to resolving internal conflicts (i.e., reducing the anxiety; Hyers & Swim, 1998), more anxious participants should be more apt to rely upon stereotypes when making judgments (Wilder, 1993). Accordingly, their responses will be based less on what actually occurs during the interaction and more on their stereotypical beliefs and biases regarding their partner’s identity group (Aberson & Haag, 2007). Second, anxiety could deter candidates from further pursuing opportunities with the organization (McKay & Avery, 2006). As Campion et al. stated (1997, p. 691), “the interview serves recruiting and public relations roles.” Consequently, enhanced anxiety in Black-White interracial interactions could induce applicants (both Black and White) to seek employment elsewhere.

Here, we focus on Black-White interactions to examine the impact of scripting on anxiety. Though scripting is much simpler and less formal than many previously examined forms of structure, we anticipate that it reduces the uncertainty that many White individuals experience...
when interacting with Black counterparts. Consequently, scripting should help to attenuate anxiety among Whites involved in Black-White interactions.

_Hypothesis 1._ Prior to the assignment of interaction roles, there will be a main effect of partner race such that White participants exhibit greater discomfort during Black-White than in same-race dyads.

_Hypothesis 2._ After role assignment, the level of scripting will moderate the effect of racial dyad composition. Specifically, the predicted effect of partner race will be significantly stronger for participants in less scripted roles.

Study 1

Methods

_Participants & Design_

Forty-eight White American female students at a private, northeastern U.S. university completed this experiment for a monetary reward of $6. The experimental design was a 2 (partner race: Black, White) x 2 (role: scripted, unscripted) factorial design.

_Pilot-testing._ To manipulate scripted roles, we asked participants to play either the role of an interviewer or of an applicant. We were not interested in the differences that these roles might produce but rather, we were trying to enhance construct validity (Wells & Windschitl, 1999) and ensure that enacting any particular script did not yield idiosyncratic results. To ensure that the interviewer and applicant roles would be perceived as more scripted than the conversation partner role, we had 19 individuals rate each role for scripting on 7-point scales with anchors of -3 (not at all scripted) and 3 (very scripted). Scenarios associated with the three roles used here were embedded among eight scenarios previously reported to differ reliably in perceived scripting (Towles-Schwen & Fazio, 2003). Participants’ ratings of the four scripted
and four unscripted scenarios from Towles-Schwen and Fazio (2003) were averaged and used to define criterion levels of scripted and unscripted roles, respectively.

Next, we compared participants’ ratings of the three target roles (interviewer, applicant, conversation partner) to each criterion. Results indicated that both the interviewer and applicant roles were rated significantly more scripted than the unscripted criterion \([t(18) = 2.92, p < .01, d = 1.38; t(18) = 5.60, p < .001, d = 2.64; \text{respectively}]\). Similarly, the interviewer role was rated comparably to the scripted criterion \([t(18) = 0.55, p < .30, d = .26]\) and ratings of the applicant role marginally exceeded the scripted criterion \([t(18) = 1.79, p < .05, d = .84]\). By contrast, the conversation partner role scenario was rated lower than the scripted \([t(18) = 2.74, p < .01, d = 1.29]\), but similarly to the unscripted criterion \([t(18) = .20, p = ns, d = .09]\). Taken together, these ratings suggest participants will perceive the interviewer and applicant roles as scripted and the conversation role as unscripted conditions.

**Procedures**

Upon arrival to the laboratory, each participant was greeted by a White female experimenter, escorted into a room, and seated in front of a monitor and video camera. Participants were told they would be videotaped and have a conversation with another student in this study examining "communication via different media, namely video and telephone." Subsequently, participants read and signed a consent form.

*Video manipulation.* Each participant was assigned randomly to view a 2-minute video of either a Black or White target discussing “her favorite movie.” Unbeknown to the participants, the content of the target video clips was standardized and identical. Participants were told that the purpose of watching the tape was to learn about her interaction partner prior to having a short telephone conversation with her. After viewing the tape, each participant was
videotaped discussing her favorite movie, ostensibly for her interaction partner to acquire information about her prior to the conversation. The primary purpose of the video manipulation was twofold. First, it ensured that the participant knew the race and gender of her interaction partner and created the impression that her partner had the same information about her. Second, the tape made by the participants was examined for nonverbal cues of differential discomfort prior to the interaction (described further in the measures section). After participants finished making their video, the experimenter prepared them for the conversation and introduced the role condition.

**Conversation/interaction.** Participants engaged in a videotaped telephone conversation with either the same White or Black (consistent with the tape they previously viewed) female confederate who served as the interaction partner. Prior to the conversation, the participant was assigned randomly to assume a scripted or unscripted role for the interaction. Participants spoke with the confederate for 7 minutes and were videotaped by a clearly visible camera. These videos served as the stimuli for our analyses of nonverbal behavior during the interaction.

**Confederates.** Two female confederates (one Black, one White) acted as the interaction partners for the participants during the telephone conversations. Confederates were blind to the research questions and hypotheses and were instructed to talk with each participant about the pre-taped target video and life at the university. The confederates were in a separate room from participants during the telephone conversation and were audio-taped during the conversation. These confederate conversation tapes were examined by two trained coders for systematic differences in the confederates' behaviors as a function of participants' roles during the interaction (Spearman-Brown $R = .7$). Analyses of these ratings, which were based on standard statistical tests because recent evidence suggests they are more appropriate than equivalence
testing when sample sizes are small (Cribbie, Gruman, & Arpin-Cribbie, 2004), indicated no differences in confederate behavior.

Immediately following the conversation, participants also made ratings of their interaction partner (i.e., the confederate). We used these ratings to check for racial differences in how the confederates were perceived. Results did not indicate any systematic differences in how positively participants rated their interaction partners as a function of role, confederate race, or the interaction between these factors. After making these ratings, participants were debriefed and compensated.

Measures of Nonverbal Behavior

Stimulus preparation. Recall that participants were videotaped at two points during this study: prior to and after assuming a role. We assessed participants’ nonverbal behavior at each point to examine their discomfort before and after the induction of roles involving behavioral scripts. Specifically, we investigated "thin-slices" of behavior—short segments of less than five minutes—during each of these occasions (Ambady, et al., 2000; Ambady & Rosenthal, 1992). Prior evidence shows ratings of thin-slices of nonverbal behavior are more valid than those of longer segments in predicting concrete outcomes such as teacher effectiveness and racial bias (Ambady, et al., 2000; Ambady & Rosenthal, 1992; Babad, et al., 1989). Thus, to examine the nonverbal behavior of participants’ introductions to their partners, the first 30-seconds of each introduction were extracted and compiled on a master tape. Similarly, a one-minute clip from the midpoint of each participant’s interaction videotape also was extracted to examine nonverbal behavior during the interactions. Two clips were omitted due to technical error; thus, there were a total of 46 clips compiled for examination. Ratings of these clips provided the primary
dependent variables—analyses of participants’ macro nonverbal behavior before role-assignment (i.e., during the introduction) and after role-assignment (i.e., during the interaction).

**Nonverbal coding.** “Macro” nonverbal variables such as warmth, enthusiasm, and hostility typically tend to be better predictors of concrete outcomes such as teacher effectiveness and doctor success, compared to more “micro” variables (e.g., smiles, nods, leans, fidgets) (Rosenthal, 1987). Thus, in the present study, both the introductory and interaction clips were rated according to how anxious each participant appeared in the clip on a 9-point scale with anchors where 1 (not at all) and 9 (very much so). Eleven naïve (i.e., ignorant to the purpose of the study, the factors of interest, and the design) judges rated each of the introductory clips, and 10 different naïve judges rated each of the interaction clips. For each set, the individual clips were presented one at a time, without sound, on a 19” color monitor to groups of 1 to 4 judges who were discouraged from talking to one another during the rating sessions. At the end of each rating session, the judges were paid for their participation. We applied the Spearman-Brown formula to the average correlation amongst the raters to judge reliability. Preliminary examination revealed that the judges’ ratings of anxiety were somewhat reliable for the introductory clips ($R = .64$), and sufficiently reliable for the interaction clips ($R = .73$).

**Results**

Our hypotheses predicted a main effect of partner race prior to the assignment of social roles (H1) and a conditional effect after the assignment of roles wherein partner race affects anxiety more when roles are less scripted (H2). We used a $t$-test to assess the first hypothesis. Results revealed that participants were judged to be significantly more anxious prior to the assignment of social roles when interacting with a Black ($M = 3.97$, $SD = .57$) as opposed to a White ($M = 3.57$, $SD = .75$) partner ($t(45) = 2.05$, $p < .05$, $d = .60$). Thus, H1 was supported.
To examine whether assuming a scripted interaction role attenuated the strength of this effect, we conducted a 2 (interaction partner race: Black or White) x 2 (role: scripted or unscripted) factorial analysis of covariance (ANCOVA) on the mean of the judges’ ratings for how anxiously participants behaved during the interaction, controlling for participants’ pre-interaction anxiety. Consistent with our prediction, there was a statistically significant interaction between partner race and interaction role \[F(1, 39) = 6.81, p < .01, \eta^2 = .14\]. To further probe this interaction, we conducted several follow-up independent samples t-tests (see Figure 1 for a graphic illustration). The first, which tested whether participants interacting with racially dissimilar partners in the unscripted role were relatively more anxious during the interaction than participants in the scripted roles, was statistically significant \[t(22) = 2.76, p = .01, d = 1.03\]. The second, which tested the main effect of partner race for those in the relatively unscripted conversation situation, also was significant \[t(14) = 2.15, p < .05, d = 1.08\]. No significant differences, however, were detected between (a) participants in scripted roles with Black and White partners, (b) those with White partners in scripted and unscripted roles, or (c) participants in the scripted interviewer \((n = 15)\) and applicant \((n = 15)\) roles, irrespective of their partner’s race. This pattern of results provides strong support for H2.

As an additional analysis, we conducted paired samples t-tests for the anxiety scores to examine changes in anxiety ratings from pre-encounter to encounter. Although there was an overall tendency for anxiety during the encounter to be lower than it was preceding it \[t(43) = 6.74, p < .01, d = 1.27\], this pattern was significant for all conditions except those with Black partners in the unscripted role. To ensure that this finding was not attributable to differences in the raters of anxiety at the two points, we also conducted repeated measures ANOVA with partner race and scripting as independent variables. The partner race x scripting x time
interaction was statistically significant ($F(1, 40) = 4.50, p < .05, \eta^2 = .10$). Scripting produced twice as large of a decrease in anxiety for those with Black ($\eta^2 = .14$) compared to White partners ($\eta^2 = .07$). Moreover, the effect of partner race on the reduction in anxiety was more than twice as large for those in scripted ($\eta^2 = .16$) than in unscripted conditions ($\eta^2 = .07$). This further supports our contention that scripting helped decrease anxiety associated with Black-White interracial interactions.

*Supplemental Analyses*

Because a common concern about increasing structure is that it can result in more impersonal interactions (Campion et al., 1997), we also had the judges rate participants’ positivity [using a composite from ratings of interested, honest, polite, warm, and patronizing (negatively loaded); $\alpha = .75$] and engagement [using a composite from ratings of enthusiastic, persistent, and quiet (negatively loaded); $\alpha = .72$] during the clips. Tests of our model using these variables as outcomes produced no statistically significant independent or interactive effects of scripting. Thus, scripting does not appear to influence White participants’ positivity or engagement during interactions, but seems to reduce anxiety.

*Discussion*

The results of Study 1 support our prediction that White participants’ behavior would reveal less anxiety during scripted, rather than unscripted, interracial interactions with Black partners. Anticipating an interracial interaction was expected to invoke conditions akin to stigma-related threat (Blascovich et al., 2000). Hence, we predicted that participants in interracial dyadic conditions would feel more uncomfortable with a Black than with a White interaction partner. Being assigned a role for the interaction that provided a clear script and cues regarding how to behave, however, was expected to alleviate some of the threat instigated by the interracial
composition of the dyad. Consistent with these predictions, participants were more anxious while initially introducing themselves to their interaction partners if the partner was Black as opposed to White. Furthermore, after roles were assigned, the dyadic composition affected anxiety only when participants were in a relatively unscripted situation.

Thus, the results of Study 1 provide initial evidence of the moderating effects of interaction roles and the social scripts they trigger for interracial encounter dynamics. Nevertheless, several limitations in the methodology of Study 1 necessitate replication of the primary findings. First, all participants were women. Moreover, they interacted with confederates instead of independent interaction partners, and only one confederate per race, thereby limiting generalizability. Participants also communicated with the confederates via video or telephone instead of face-to-face. Furthermore, the key dependent variable – anxiety – was assessed by a single item.

Study 2

To address the limitations of the first study and provide further evidence for the influence of social scripts in interracial dyadic interactions, we conducted a second study wherein male and female participants engaged in either same-race or interracial, face-to-face interactions with another naïve participant, rather than a confederate. Each person considered the same potential job, to control for differences in the content of the scripted and unscripted conditions. Similar to the primary finding of Study 1, we predicted:

Hypothesis 3: The level of scripting will moderate the effect of partner race such that Black-White interracial dyads will provoke more discomfort for White individuals than same-race dyads only when roles are unscripted.
Methods

Participants & Design

Sixty White (20 male) and 30 Black (10 male) students at the same university sampled in Study 1 participated in this study for monetary compensation. We randomly assigned the White participants to interact with either another White or with a Black individual, as well as to a scripted or unscripted role. The design, therefore, was a 2 (partner race: White, Black) x 2 (interaction role: scripted, unscripted) factorial.

Procedure

Upon their arrival to the laboratory, the experimenter greeted participants and escorted them to separate rooms. Similar to Study 1, participants were told that the study concerned “the impact of the video and computer revolution on task performance and communication in work environments” and that they would have a videotaped interaction with another student about a job at a student travel agency. Subsequently, they read and signed a consent form and were assigned randomly to either a Black or White target (interaction partner), as well as a role condition. Participant sex was matched in each dyad.

Introduction of dyadic roles. Participants were assigned at random to either a scripted (i.e., interviewer, applicant) or unscripted (i.e., conversation partner) role. Further, they were made aware that their partners were assigned the complementary role to their own. Prior to the interaction, they received information about the position at the travel agency, including some of the requisite qualifications. Afterward, interviewers were asked to “take a moment to develop questions to ask the applicant.” By contrast, applicants were asked to “consider how they would respond to questions from the interviewer.” Participants in the conversation condition were asked simply to think about what type of person would be good for the position, and, consequently, the
conversation condition was expected to offer fewer guides for behavior than the interview conditions.

Interaction. After a few minutes, participants were assembled as a dyad in a room with a large conference table, as well as two video cameras that allowed for each to be videotaped separately during the interaction. They were instructed to begin the interview as soon as the experimenter left the room. The cameras were visibly in the room and participants were aware they were being taped. The videos provided the stimuli for the present analyses of nonverbal behavior during the interaction. After five minutes, the experimenter interrupted the participants and stopped the video recorders.

Examination of Nonverbal Behavior

As in Study 1, we investigated thin-slices of nonverbal behavior during participants’ interactions with the targets. Specifically, a 30-second clip from the midpoint of each of the videotapes provided by the White participants communicating with either a White or Black target was extracted. Each clip presented a participant, in approximately the middle of the screen, talking to the target (interaction partner), who could not be seen in the clip. Two participants were not taped properly and, therefore, were excluded from analyses. A master tape of the 58 remaining clips in random order was created.

Each clip was rated by the same 12 judges who were unaware of the purpose, design, and/or hypotheses of the study. Further, all judges were students at a different college from the participants and did not know any of the individuals in the videos. The clips were presented without sound on a 19" color monitor in several sessions composed of 1-4 judges who were discouraged from talking with one another during the rating sessions. After rating all of the 58 clips, each judge was paid for their participation. Based on the findings of Study 1, we selected a
number of new variables on which to obtain ratings in addition to several of the variables examined previously. We were particularly interested in assessing anxiety or discomfort during the interaction with more than a single item. In the present study, therefore, discomfort was measured with ratings of how anxious, uncomfortable, worried, agitated, and quiet participants appeared. We obtained ratings of each adjective on 9-point scales with anchors of 1 (not at all) and 9 (very much so). The effective reliability among the judges indicated adequate agreement ($R = .75$) and their ratings were combined by averaging within, then across judges (coefficient $\alpha = .70$).

Results and Discussion

Recall that in the same-race conditions, data from both participants were examined, and therefore, judgments of their behavior may not be independent, violating the assumptions of traditional ANOVA. To investigate this question, we computed the intraclass correlation (ICC) for these dyads on discomfort and it was small and non-significant [$ICC = .06; F (13, 14) = 1.13, ns$]. Consequently, we subjected this variable to a 2 (partner race: White, Black) x 2 (role condition: scripted, unscripted) factorial ANCOVA, controlling for sex, which did not produce a significant effect.

Hypothesis 3 predicted participants would experience greater discomfort during Black-White interracial than same-race interactions only when in the unscripted role. As expected, we detected a significant interaction on discomfort [$F(1, 53) = 14.89, p < .001, \eta^2 = .22$]. The condition means are diagrammed in Figure 2. Follow-up independent samples t-tests showed no differences in discomfort between same-race and Black-White partners in scripted roles, but significant differences for those in unscripted roles [$t(17) = 3.31, p < .01, d = 1.54$]. Participants in Black-White pairings exhibited less discomfort in scripted than in unscripted roles [$t(26) =$
2.90, \( p < .01, d = 1.09 \) whereas the opposite was true for those in all-White dyads \([t(28) = -2.64, p = .01, d = -1.10]\). Again, there were no differences between those in the two scripted roles [i.e., applicant (\( n = 19 \)) and interviewer (\( n = 21 \))], irrespective of partner race. Thus, similar to Study 1, these results suggest that Black-White dyadic interactions are relatively more disturbing for White individuals than same-race dyadic interactions, unless participants occupy roles with accessible scripts for appropriate behavior.

**Supplemental Analyses**

Despite the apparent statistical independence of participants’ anxiety scores in all-White pairings, it is possible that the nesting of these respondents within dyads influenced our analyses (Kenny, Kashy, & Cook, 2006). Consequently, we used the mixed model feature in SPSS to account for this possibility, which produces results that are virtually identical to multi-level modeling software, such as HLM (Kenny et al.). This method of analysis requires assigning participants a member number (either 1 or 2) and a dyad number matching that of their partner; the latter term serves as the “subjects” variable and the former is the “repeated” variable (Kenny et al.). Next, we specified the fixed model to include the intercept, sex as a covariate, and the full 2 x 2 factorial involving scripting and partner race. For the random effects, dyad is included as the subject grouping variable and the intercept is not included. The scripting x partner race interaction was significant \( (b = -.84, p = .001, 95\% \text{ CI} = -1.28, -.40) \), thereby further supporting our belief that the nested nature of the data had minimal impact on our results.

We also had judges code the discomfort of the Black participants to perform a post hoc examination of the role of scripting on their discomfort. Controlling for sex (which was not significant), we conducted Black-White comparisons amongst the participants engaged in interracial interactions. These analyses indicated several noteworthy findings. First, White
participants were more uncomfortable than Black participants during Black-White interactions [3.69 vs. 3.40; $F(1, 50) = 8.41, p < .01, \eta^2 = .14$]. Second, interracial interactants in unscripted roles were more uncomfortable than those in scripted roles [3.66 vs. 3.43; $F(1, 50) = 4.71, p < .05, \eta^2 = .09$]. Third, the effect of scripting was significant only for White participants, resulting in a race x scripting interaction [$F(1, 50) = 4.96, p < .05, \eta^2 = .09$], which is depicted graphically in Figure 3. Black participants’ discomfort during interactions with White participants was virtually indistinguishable in scripted and unscripted encounters [3.38 vs. 3.40, respectively; $t(25) = -.16, ns, d = -.06$] and across the roles (i.e., interviewer, applicant, conversation partner).

It is also interesting to note that Black-White differences in anxiety during these interactions were significant in unscripted [$t(19) = -3.10, p < .01, d = -1.35$], but not scripted [$t(32) = -.58, ns, d = -.19$] conditions.

Finally, as in the first study, the judges rated participants’ negativity [using a composite from ratings of hostile, angry, condescending, patronizing, standoffish, and polite (reverse scored); $\alpha = .79$]. Again, there were no significant main or interactive effects of scripting for White or Black participants. Thus, scripting did not appear to influence how participants behaved toward their partners, but helped diminish discomfort for White interactants with Black partners.

General Discussion

The purpose of this research was to examine the impact of social scripts on observers’ perceptions of White Americans’ anxiety and discomfort during interracial interactions. Results were quite consistent across two experimental studies testing the research hypotheses. White participants found Black-White interactions more discomforting than same-race interactions. This effect was conditional, however, depending on how scripted of a role they occupied in the
dyadic interaction. In short, partner race affected anxiety and discomfort only when participants occupied relatively unscripted social roles. We discuss the implications of these findings below.

**Implications**

From a theoretical perspective, the findings extend those presented previously in the social psychological literature demonstrating the angst-provoking potential of Black-White interracial interactions for many White Americans. While scholars (e.g., Stephan & Stephan, 1985; Gukykunst, 1995) have theorized concerning why (i.e., uncertainty, fears about protecting one’s egalitarian image) interracial interactions often provoke these types of affective responses, far less is known about the boundary conditions delineating the circumstances under which such effects are more or less likely to occur. Our results suggest that one such boundary condition is the degree of scripting inherent in the roles occupied by the dyadic participants. In unscripted situations, there are fewer norms and cues available guiding individual choices regarding appropriate speech and behavior. This lack of situational signals renders common heuristics governing interpersonal interaction useless. The result is a high degree of uncertainty concerning what to say or do, which is, understandably disconcerting. This is compounded further by the fact that many White Americans are highly motivated to avoid appearing racist, particularly in important settings such as the workplace (Blank & Shipp, 1994; Roberson & Kulik, 2007).

The impact of the heightened anxiety associated with unscripted Black-White interracial workplace interactions could be extensive. For instance, evidence indicates anxiety produced by an individual’s desire to avoid stereotype-confirming behavior can have deleterious effects on performance (Roberson & Kulik, 2007). Thus, if White employees are aware of stereotypes suggesting they are racially biased and are concerned with disproving them to others in their workplace, their job performance could suffer as a result. Furthermore, to the extent that White
employees’ anxiety concerning interracial interactions is detectable by Black coworkers and clients, as some research suggests (e.g., Dovidio et al., 2002), perceptions of workplace discrimination may arise and relationships among coworkers could suffer. Anxiety concerning Black-White interracial interactions also may lead to greater avoidance behavior (Plant & Devine, 2003), thereby helping to explain the disproportionately high degree of homophily in White employees’ organizational social networks (Ibarra, 1995).

Another theoretical implication involves the adaptation of diversity training models to incorporate our findings. There are a plethora of ideas about the most effective way to provide diversity training. Unfortunately, this also means that there is little consensus (Pendry et al., 2007). In a recent review of the approaches to diversity training Pendry et al. (2007) identified a number of theoretically based approaches and provided some preliminary support for the efficacy of a few. None, however, focused on providing and expanding employees’ behavioral scripts for interactions. As Roberson and Kulik (2007) stated, “one way to reduce stereotype threat is to teach affected employees behavioral strategies for improving performance and counteracting negative stereotypes” (p. 34). Our results suggest diversity training theorists include tactics to provide behavioral scripting because they should help to alleviate White employees’ anxiety about Black-White interracial interactions, thereby making other objectives of diversity training (e.g., bias reduction) more attainable (Combs & Griffith, 2007).

From a practical standpoint, the findings identify potential options for organizations to decrease the likelihood that interactions with Blacks will be discomforting to their White employees. This is particularly encouraging in light of recent evidence suggesting both White and Black individuals would like to engage in greater intergroup contact, but are apprehensive about actually doing so (Shelton & Richeson, 2005). It is not to say that organizations should
invest in creating behavioral scripts for all required workplace interactions; rather, the key is to be strategic. Initial interactions between Black and White employees are likely to create far more anxiety than any subsequent interaction between the same two individuals because the principal interaction sets the tone for any subsequent relations (Lee & Gudykunst, 2001). Thus, organizational efforts to ensure that initial Black-White interactions take place in situations involving more structured roles could prove highly productive.

Such efforts could take a number of forms. For instance, organizations can integrate dyadic meet-and-greet icebreakers into formal organizational gatherings such as new employee orientation or business meetings. By encouraging interactions between unfamiliar coworkers and providing scripts for the brief encounters (e.g., “discuss three interesting things about yourself” or “describe your role in the organization”), companies can help their employees attenuate anxiety regarding initial interracial interactions. These introductory encounters should form the basis for subsequent conversation. Moreover, the potential identification of common ground could become the basis for friendship.

Additionally, practitioners may want to focus diversity training efforts more on a particular skill – behavioral scripting – and less on awareness (Roberson et al., 2003). Helping White employees recognize uncertainty is a primary cause of their discomfort during Black-White interactions could prove empowering. This is especially true if trainers follow this information by identifying sound general strategies for communicating and interacting with those who are different. Not only would such information provide the basis for employees to form their own social scripts for interracial interactions, but it also might elevate trainees’ diversity self-efficacy, thereby enhancing the likelihood of employees transferring what they have learned after
returning to their jobs (Combs & Luthans, 2007). This could enhance employees’ effectiveness in relating to one another and prospective employees as well (McKay & Avery, 2006).

Our findings also have implications for industries involving a high degree of customer contact, as the impact of employee-customer dissimilarity on customer satisfaction is more pronounced in jobs requiring a higher degree of interaction (Cunningham & Sagas, 2006). When preparing employees to interact with customers, it is important to clearly outline behavioral scripts for potential employee-customer interaction (e.g., how to initially approach and address a customer). Doing so should identify and develop clear strategies for employees to enact when engaging with customers. This, in turn, will aid in alleviating potential apprehension and concerns that may surface for a White employee serving a Black patron. We should note, however, that not all jobs are equally susceptible to scripting in the same manner. Consequently, we urge practitioners to exercise judgment and discretion in determining how to best incorporate scripting into their particular organizational circumstances.

Limitations and Future Research Directions

Our methodology and design presented four potential limitations. First, we used a laboratory setting. Though this provided experimental control over a variety of factors that could have confounded results if tested in the field (e.g., organizational diversity climate; see Blanchard, Crandall, Brigham, & Vaugh, 1994), it is uncertain exactly how our findings extend to organizational settings. Second, we restricted our focus to White employees’ comfort with interracial interactions. We did so partly because prior inquiry indicated uncertainty reduction to be more important to and necessary for White than Black Americans during interracial interactions (Hyers & Swim, 1998; Lee & Gudykunst, 2001), which suggests these situations are more anxiety producing and debilitating for the former than the latter. Nonetheless, recent
research showed (a) interracial interactions also negatively impact Blacks’ cognitive performance (Richeson, Trawalter, & Shelton, 2005) and (b) the perceived proportion of racioethnically dissimilar coworkers influences Black employees’ psychological well being (Enchautegui-de-Jesús, Hughes, Johnston, & Oh, 2006). Unfortunately, we cannot be certain how behavioral scripts affect potential anxiety and discomfort for non-White employees or White employees interacting with non-White others who are not Black. Third, the reliability estimates for our dependent variables were somewhat low, indicating some degree of measurement error, which could have caused underestimation of true relationships. Finally, our design does not allow us to determine the duration of the effects of scripting. Thus, our assumption that it anxiety-reducing effects are likely to extend beyond the scripted interaction warrants empirical investigation.

A potentially promising avenue for future research might involve examining how ethnic identity, the degree to which individuals identify with their racioethnic groups, influences the effects of scripting that we demonstrated. Prior research has shown White employees’ ethnic identity to influence their attitudes and behavior concerning interracial situations at work (Block, Roberson, & Neuger, 1995; Chrobot-Mason, 2004). In fact, Block et al. (1995) concluded that the effectiveness of organizational interventions designed to improve interracial interactions should depend on the identity levels of the involved employees. Consequently, it would be of theoretical and practical interest to see if the effects of scripting on anxiety and discomfort are influenced by the ethnic identity levels of those comprising the dyad.

We also encourage researchers to consider how other individual differences might influence the efficacy of scripting in reducing anxiety and discomfort. For instance, White employees who have had more contact with Blacks Americans are likely to be more comfortable
with Black-White interactions and, therefore, should exhibit smaller effects of scripting. Also, those with less malleable unfavorable views of dissimilar others also could be less influenced by scripting because their anxiety is due more to bias than to uncertainty about dissimilar others. Finally, those who are less motivated to respond without prejudice (Plant & Devine, 1998) also might show smaller effects of scripting.

Future research also should examine the effects of scripting for other interracial combinations. Because Black Americans have a unique history in the U.S., relative to other non-White groups, Whites’ relations with Blacks often differ from their relations with other racioethnic groups (Dixon, 2006). We cannot be certain, therefore, how well our results generalize to White-Hispanic or White-Asian dyads. Despite some recent evidence suggesting parallels between White-Black and White-Hispanic interactions (Plant, Butz, & Tartakovsky, 2008), we encourage subsequent researchers to explore the generality of our findings in this regard. Additionally, we were not able to fully examine the reactions of Blacks to scripting because we did not include the Black-Black dyad. Nevertheless, we were able to determine that scripting had a negligible impact on anxiety among Blacks interacting with White partners. We encourage scholars to assess the effects of scripting on the perspectives of other non-Whites regarding interracial interactions as well.

Conclusions

Limitations aside, this study makes several important contributions to the literature. First, we replicated prior evidence indicating that interracial interactions can produce heightened anxiety in White Americans. Second, we found the impact of racial dyadic composition to be contingent upon interaction roles, with effects being more pronounced when roles were unscripted. Third, our dependent variables (i.e., anxiety and discomfort) involved neutral
observers’ ratings of actual behavior in interracial interactions as opposed to self-ratings. In short, our results identify scripting as a means of helping organizations better manage their racioethnic diversity.
References


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Figure Captions

Figure 1. Anxiety by role and partner race in Study 1.

Figure 2. Discomfort by role and partner race in Study 2.

Figure 3. Discomfort in interracial interactions by role and participant race in Study 2.
Figure 1

[Bar chart showing data for 'Unscripted' and 'Scripted' conditions with bars for 'White Partner' and 'Black Partner'.]
Figure 2
Figure 3

![Bar chart showing comparison between Unscripted and Scripted for White and Black Participants.]