The Implicit Power Motive in Intergroup Dialogues About the History of Slavery

Ruth K. Ditlmann
WZB Berlin Social Science Center, Berlin, Germany

Valerie Purdie-Vaughns
Columbia University

John F. Dovidio
Yale University

Michael J. Naft
Columbia University

This research demonstrates that individual differences in the implicit power motive (i.e., the concern with impact, influence, and control) moderate how African Americans communicate with White Americans in challenging intergroup dialogues. In a study with African American participants we find that the higher their implicit power motive, the more they use an affiliation strategy to communicate with a White American partner in a conversation context that evokes the history of slavery (Study 1). In a study with White American participants we find that, in the same conversation context, they are more engaged (i.e., open, attentive, and motivated) if they receive an affiliation message rather than a no-affiliation message from an African American partner (Study 2). In interracial dyads we find that African American participants' implicit power motives moderate how much they intend to signal warmth to a White American discussion partner, how much they display immediacy behaviors and use affiliation imagery in the discussion, and with what level of engagement White American participants respond (Study 3). High but not low implicit power African Americans thus employ a communication strategy—expressing affiliation and warmth—that can be effective for engaging White Americans with uncomfortable, race-identity-relevant topics.

Keywords: implicit motives, power, interracial interactions, past injustice

Supplemental materials: http://dx.doi.org/10.1037/pspp0000118.supp

Individuals differ in how motivated they are to influence others. This difference is reflected in the *implicit power motive*. The implicit power motive represents an individual's relatively stable capacity to strive toward opportunities, or "incentives," to influence others (Fodor, 2009). Individuals who are high in implicit power are not only motivated to influence others, but also are skilled at doing so (Schultheiss & Brunstein, 2002). This skill enables them to excel in leadership positions and make important contributions to society (e.g., Jenkins, 1994; Winter, 2002). For example, in dyadic discussions about controversial topics, individuals high in implicit power are able to adopt forms of communi-

cation that convey competence and dominance, including verbal fluency and effective use of nonverbal signals (e.g., gesturing and eyebrow lifts; Schultheiss & Brunstein, 2002). This previous research on dyadic discussions, like most research on implicit motives, focuses on members of a dominant group in society (e.g., White Americans, hereinafter referred to as "Whites"). The present research extends existing research by investigating how members of a *nondominant* group (African Americans) seek influence in dyadic discussions with members of a dominant group (Whites).

In many situations, gaining influence and exerting leadership is especially important for nondominant groups, whose views may be largely unrecognized by the dominant group. However, attaining influence is also especially difficult for members of nondominant groups (Carli, 2001; Livingston & Pearce, 2009; Livingston, Rosette, & Washington, 2012), who often have to rely on less direct strategies than those typically used by members of dominant groups (e.g., signaling a communal orientation) in order be successful in their attempt to influence (Carli, LaFleur, & Loeber, 1995). Even on topics of great relevance to nondominant groups, disrupting the mainstream narrative is challenging (Bonilla-Silva, 2006).

A topic of particular relevance to African Americans is the history of chattel slavery in the United States. Accounts of American history conveyed in history books and at memorial sites often do not reflect significant aspects of African American history, including facts about slavery and other forms of oppression by

Whites (Alderman & Modlin, 2008; Loewen, 2000). This limited coverage serves the interests of Whites, who may experience threats to their personal or group image, anxiety, and discomfort when confronted with their group's past perpetrations (Ditlmann, Mayville, & Purdie-Vaughns, 2013; Leach, Zeineddine, & Čehajić-Clancy, 2013). At the same time, failure to represent these important aspects of American history marginalizes African Americans, who, as members of the victimized group, tend to want recognition and acknowledgment of past injustice (Shnabel, Nadler, Ullrich, Dovidio, & Carmi, 2009).

Integrating research on individual differences in influence-seeking skills (Schultheiss & Brunstein, 2002) and research on the effect of a group's position in society on effective influence-seeking strategies (Carli et al., 1995; Livingston et al., 2012), we investigated whether African Americans with a high rather than low implicit power motive are more likely to influence a White communication partner in dialogues that evoke the history of slavery, and what strategies they use to be successful. The implicit power motive involves individual differences in the degree to which a person has a nonconscious motivation for influence and control (Fodor, 2009). Because the effectiveness of influence-seeking communication relies on both the person attempting to influence and his or her target, our research includes African American and White participants—specifically, African Americans as senders and Whites as recipients of such communications. We thus empirically and conceptually complement past research that conceptualizes Whites as senders and African Americans as recipients or examines reciprocal communication processes (Toosi, Babbitt, Ambady, & Sommers, 2012).

The present research offers two distinct contributions, one to research on implicit motives and one to research on intergroup relations. First, we explore new forms of expressing the implicit power motive. Because traditional expressions of the power motive that convey competence and dominance tend to backfire for members of nondominant groups (Carli, 2001; Livingston & Pearce, 2009; Livingston et al., 2012), high implicit power motive African Americans may adopt indirect and counterintuitive strategies to maximize impact. Our research thus has potential to illuminate how the implicit power motive may be employed in communication strategies that, at first glance, do not seem related to the power motive at all.

Second, our research addresses how personality-based variability within nondominant groups shapes intergroup interactions, and how African Americans, who are often conceptualized as passive targets in interracial-interactions research, can actively shape conversations about race (Shelton, 2000). Past research on individual differences among African Americans in interracial interactions has mostly focused on differences that relate to membership in a nondominant group—including racial attitudes (Richeson, Trawalter, & Shelton, 2005), or discrimination expectations (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Shelton, Richeson, & Salvatore, 2005). The current research examines a broad-based personality difference that is not restricted to members of nondominant groups. Notably, the implicit power motive is rarely examined in members of nondominant groups. Yet, it is especially interesting in members of nondominant groups because it captures potential for leadership (Winter, 2010). As such, it can help to identify members of nondominant groups who want to

effect social change and have the skills to do so (Greene & Winter, 1971).

In what follows, we first review past research on implicit motives theory and intergroup dialogues about past injustice. We then derive several novel hypotheses from an integration of these distinct literatures, and test them with three empirical studies.

Implicit Power: The Motive to Influence Others

The implicit power motive represents an enduring nonconscious, affect-based preference for the attainment of influence, impact, and control (Fodor, 2009). Historically, researchers have adopted a Person $\times$ Situation perspective on implicit motives. People bring baseline motives to a given situation, and some situations "arouse" them—that is, activate a motive that then drives behavior toward incentives (Schultheiss, Kordik, Kullmann, Rawolle, & Rösch, 2009). Consistent with this literature (Schultheiss & Brunstein, 2010), we refer to individual differences as *motives* or *motive disposition*, whereas we refer to expressions of these motives in behaviors as *motivation* or *motive imagery*.

Situations that signal an opportunity for influence, impact, or control arouse the implicit power motive (Fodor, 2009). Individuals with a high implicit power motive take advantage of opportunities for influence, for example, when asked to give a speech or compete against others in a game (Schultheiss & Brunstein, 2002; Wirth, Welsh, & Schultheiss, 2006).

Importantly, high implicit power individuals are not only motivated to influence others but are also particularly adept at adopting context-specific strategies to be influential (Schultheiss & Brunstein, 2002). One of the few studies on the implicit power motive in African Americans found that, in attempts to advance racial equality, African Americans used strategies that were consistent with what was most likely to be effective in their home region in the United States in the 1960s (Greene & Winter, 1971). Among African Americans from the South, the implicit power motive was positively correlated with subordinating immediate concerns about racism to achieve long-term equality goals, while among African Americans from the North, it was correlated with use of more dominant, outspoken strategies.

The study by Greene and Winter (1971) also demonstrates that observed behaviors through which implicit motives are expressed are not always consistent with the actor's actual motives. Accordingly, while motive imagery in communication can be a direct expression of people's aroused motives, people may also adjust what imagery they express to the situation or their relationship with a communication target. For example, terrorist groups have been shown to adjust how much affiliation imagery they express based on whether a communication target is a member of the in- or outgroup (Smith, 2008).

Dialogues About the History of Slavery in the United States

We investigated the implicit power motive in intergroup dialogues about the history of slavery because such dialogues are challenging but also present an opportunity for African Americans to influence Whites. Members of dominant groups tend to be uncomfortable when talking about race (Trawalter & Richeson, 2008) and try to avoid topics related to race, oppression, and past

injustice (Bonilla-Silva, 2006; Ditlmann et al., 2013; Leach et al., 2013; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006). However, if they do engage with these topics, the potential for securing Whites' support for racial equality is great (Gaines & Reed, 1995; Nelson, Adams, & Salter, 2013). Accordingly, conversation contexts that remind Whites and African Americans about the history of slavery should constitute a power-arousing situation for African Americans.

Whether and how people express the implicit power motive in a given situation is highly contextual. Accordingly, it is important to understand the dynamics that occur when members of nondominant and dominant groups are reminded of past injustice. For members of nondominant groups, conversation contexts that evoke the role of their group as victims generate specific responses, such as a psychological need for empowerment (Shnabel et al., 2009) and a desire to be respected in intergroup interactions (Bergsieker, Shelton, & Richeson, 2010). Thus, they benefit from "being heard" by members of the dominant group who "actively listen" (Bruneau & Saxe, 2012).

By contrast, for members of dominant groups, conversation contexts that evoke the role of their group as perpetrators generate a psychological need for moral acceptance (Shnabel et al., 2009) and a desire to be liked in intergroup interactions (Bergsieker et al., 2010). On the one hand, if their acceptance need is satisfied, dominant group members may have an increased motivation to satisfy nondominant group members' need for empowerment—for example, by supporting a change to the status quo (Shnabel, Ullrich, Nadler, Dovidio, & Aydin, 2013). On the other hand, achieving their immediate goal for acceptance in intergroup exchanges may relax dominant group members' motivation to change the status quo to benefit the nondominant group (Dixon, Durrheim, & Tredoux, 2005; Saguy, Tausch, Dovidio, & Pratto, 2009), particularly when members of the nondominant group appear willing to support the status quo (Saguy & Dovidio, 2013).

Accordingly, a message of acceptance that is coupled with information about injustice—thus satisfying dominant group members' specific, context-based need while also challenging the status quo—should be especially effective for engaging members of the dominant group with past injustice. Indeed, in a laboratory experiment, Whites were most likely to support minority programs when they saw a movie clip about the civil-rights movement first and then had an opportunity to affirm their identity (Harvey & Oswald, 2000). In isolation each task was less effective.

Two key insights from the literature reviewed in this section inform the current research. First, because members of nondominant groups primarily want to be listened to by members of the dominant group (Bruneau & Saxe, 2012), the primary outcome we are interested in for Whites is the extent to which they are engaged with the information communicated to them by African Americans. Engagement involves being receptive to the information one's dialogue partner communicates and being motivated to process it deeply, which can promote persuasiveness (Petty & Cacioppo, 1986)—a metric of influence often used in research on the implicit power motive (Schultheiss & Brunstein, 2002). Eliciting engagement from a dominant-group partner thus reflects an immediate impact that members of a nondominant group can have that is consistent with their group-based need for empowerment.

Second, the literature on group-based needs (Bergsieker et al., 2010; Cehajic-Clancy, Effron, Halperin, Liberman, & Ross, 2011;

Shnabel et al., 2013) suggests that communication strategies that take into account dominant group members' need for acceptance are most effective for achieving impact in situations where past injustice is salient. Ours is the first research program to investigate what communication strategies members of nondominant groups spontaneously and intuitively employ when seeking to influence members of dominant groups. They could communicate affiliation imagery and warmth, a strategy that would assuage the White recipient's presumable need for acceptance. Alternatively, they could communicate power and competence, a strategy that would assuage their own-group-based need for empowerment without consideration for the acceptance need of their White interaction partner.

Accordingly, we ask whether (a) African Americans' implicit power motive moderates the degree to which they take advantage of conversational contexts that make past injustice salient to influence Whites, (b) they use the communication strategies that could potentially satisfy their White partner's need for acceptance, and (c) White partners respond positively or negatively to these strategies.

Research Hypotheses and Overview of Studies

Our reasoning leads to the following hypotheses: First, in conversation contexts that make past injustice salient, African Americans with a high implicit power motive should be successful at engaging Whites. Because of the empowerment–acceptance need dynamic discussed above, such contexts provide opportunities for influence. Contexts that do not evoke past injustice in this manner do not create the same dynamic and make it less likely that African Americans will have an impact on Whites. Thus, African Americans with a high implicit power motive should be less likely to attempt to influence the interaction. Moreover, regardless of context, African Americans with a low implicit power motive should generally be unlikely to attempt to influence the interaction. Second, we predict that White recipients will respond positively to high implicit power motive African Americans and the strategy they use to influence, by being engaged with the information they receive.

Understanding how a communication strategy is received in an intergroup context must take into account the perspectives of both senders and receivers (Shelton, 2000). In Study 1, we focused on African American senders, showing that their implicit power motive moderates how much affiliation imagery they employed in letters to Whites in power-arousing but not in nonpower-arousing conversation contexts (viewing, prior to writing the letter, a documentary clip about the history of slavery vs. a clip about the Alps). In Study 2, we shifted our focus to Whites to see how they responded to letters with or without affiliation imagery from African American senders. To demonstrate that the effectiveness of high implicit power individuals' communication strategy is context-dependent, we placed White participants in the same context as African American letter writers. That is, before they read the letter, Whites watched the same documentary clip their African American partner had seen before writing the letter.

Study 3 brings the two perspectives together. In dyadic interactions, we examined what communication strategies African Americans used based on both their implicit power motive and the discussion topic (history of slavery vs. the environment), and how

Whites responded. The controlled letter exchange in Studies 1 and 2 allowed us to pinpoint one strategy through which high implicit power African American participants influence Whites: use of affiliation imagery. Study 3 assessed how Whites respond to high implicit power African Americans in an interracial discussion involving two participants—the kind of discussion they might have in the "real world" (e.g., educational settings). Together, the three studies were designed to illuminate if and how African Americans with a high implicit power motive enact their power motive in counterintuitive and indirect ways, and how Whites respond. By extension, these studies should demonstrate how individual differences among African Americans shape intergroup interactions.

Study 1

Study 1 tested the hypothesis that, in a power-arousing conversation context, the implicit power motive moderates how African Americans communicate with Whites. We explored whether, when their power motive is aroused, high implicit power African Americans use an affiliation–warmth communication strategy. Use of an affiliation–warmth strategy is what intergroup relations research predicts would be most effective for engaging Whites, whose group's history of oppression implicates their group as perpetrators (Shnabel et al., 2013). We operationally defined viewing a documentary clip about the history of slavery as a power-arousing conversation context, and viewing a neutral control clip as a nonpower-arousing conversation context. We then measured how much affiliation versus power and achievement imagery African American participants subsequently expressed in letters to Whites.

During Session 1 of a two-session laboratory experiment, we measured participants' implicit power motives using the picture story exercise (PSE; Pang & Schultheiss, 2005). We also assessed common individual difference variables: ethnic identity (i.e., the part of an individual's self-concept that derives from his or her knowledge of membership in a social group; Phinney, 1992), ability to empathize (i.e., the reaction of one individual to the experiences of another; Davis, 1983), perspective-taking (i.e., the tendency to adopt the psychological point of view of others; Davis, 1983), and social dominance orientation (SDO; i.e., individuals' preferences for hierachy; Thomsen et al., 2010). We included these variables as covariates to rule out that high ethnic identity, high ability to empathize or perspective-take, or high SDO explain any observed influence-seeking communication strategies instead of high implicit power.

In general, situations vivid enough to engage multiple senses (e.g., vision, hearing, tasting, feeling, and smelling) arouse implicit motives (Schultheiss & Brunstein, 1999). Film clips or interpersonal interactions are especially effective for arousing implicit motives, while written text is often insufficient (Schultheiss & Brunstein, 1999; Schultheiss & Brunstein, 2002; Schultheiss, Wirth, & Stanton, 2004). Accordingly, in Session 2, we presented participants with pictorial stimuli about the history of slavery. Such stimuli are (a) vivid and (b) make historic injustice salient, thus eliciting the empowerment–acceptance need dynamic that creates an opportunity for African Americans to influence Whites.

In a pilot study, we identified a documentary as the most effective pictorial history-of-slavery stimulus for arousing the implicit power motive. We presented African American and White

participants with a set of image-based stimuli, and measured their affective reactions using a survey and focus-group discussions. The stimuli varied in complexity: historical still images, an excerpt from the film *Beloved* based on the novel by Toni Morrison, and a documentary clip about the history of slavery. The photographs would have been preferable for a controlled experimental design; however, the documentary and film clips were most vivid and affect-laden. We selected for use in Study 1 the documentary clip because it aroused the strongest affective reactions consistent with the power motive.

Accordingly, in Study 1, African American participants watched a documentary clip about the history of slavery in the power-arousing condition ("slavery-clip condition") and a motive-neutral documentary clip about the Alps in the nonpower-arousing condition ("control-clip condition"). Next, they were tasked with writing a letter to a White recipient about the effects of slavery on contemporary race relations. Using letter writing as the mode of communication instead of face-to-face dialogues enabled us to clearly operationalize African American participants as communication senders and Whites as recipients.

Following past research (Langner & Winter, 2001), we content-coded the letters to assess how much affiliation, power, and achievement imagery they expressed toward the White recipient. Affiliation imagery is defined as concerns for establishing, maintaining, or restoring friendly relations toward others. If high implicit power African Americans use affiliation imagery in their letters, this usage would be inconsistent with their own power-motive disposition but could satisfy White recipients' presumable acceptance need. Power imagery is defined as concerns with impact, influence, and control. If high implicit power African Americans use power imagery, this would be consistent with their own power-motive disposition and could satisfy their own-group-based need for empowerment, but not satisfy White recipients' presumable acceptance need. Achievement imagery is defined as concerns with excellence (McClelland, 1961). Given the suggestion by SimanTov-Nachlieli, Shnabel, and Nadler (2013) that communion and agency underlie most concepts typically assessed in research on intergroup motivations and perceptions (e.g., liking and acceptance need vs. respect and competence need), we suspected that power and achievement imagery would be highly correlated and the results for the two image types would therefore be similar.

Finally, participants completed a measure of collective action, the degree to which one aims to engage in effort on behalf of their social group (Derks, Van Laar, & Ellemers, 2009). If the purpose of deploying a specific communication strategy is to communicate one's group's account of historical injustice, the strategy participants use should mediate the association between the implicit power motive and collective action tendencies in the slavery-clip condition but not the control-clip condition (i.e., moderated mediation hypothesis).

Method

Participants. Fifty-three African American participants from two universities in the Northeastern United States participated in exchange for $18. Prior to analyses, we excluded two participants because of technical problems, nine because they did not self-identify as "Black/African American," and three because they

were not born in the United States, leaving 39 African Americans in the sample (24 female). Participation took approximately 90 min divided over two experimental sessions.

Implicit motives coding. To assess participants' implicit power motive dispositions in our pretest, as well as to assess their use of affiliation, power, and achievement motive imagery in letters, we used the *Manual for Scoring Motive Imagery in Running Text* (Winter, 1994). This manual includes a coding system for PSE stories and political documents (explained in greater detail below). The manual includes tests that individuals must pass to become certified coders for each type of text.

Session 1.

Implicit power motive. Participants' implicit power was assessed using the PSE (Pang & Schultheiss, 2005) in a computer-based format (Bernecker & Job, 2011). Participants were shown five ambiguous images (each for 20 s), and instructed to write fictional stories about what they saw. We adopted five images adequate for assessing the implicit power motive (Pang, 2010): a captain talking to a passenger, reporters, a nightclub, a couple standing at a bridge, and trapeze artists (picture copies were taken from: McClelland, 1975; Smith, Atkinson, McClelland, & Veroff, 1992).

All stories were coded for implicit power following Winter's (1994) *Manual for Scoring Motive Imagery in Running Text*. Our coder, an African American female, had previously attained 88% agreement with the manual's master solutions for power motive in the PSE. The coder was unaware of participants' race and study hypotheses.

PSE coding for implicit power. Power was coded at the level of the sentence for any indication that a person, group, or other person-like entity had impact, control, or influence on another person, group, or the world at large (Winter, 1994). For example, a sentence written in response to the captain-talking-to-passenger image that describes the captain urging passengers to leave his ship would be coded for power (e.g., "I want you off my ship immediately"; refer to Table 1 for a detailed explanation of coding procedures, categories, and examples). Participants received one overall implicit power motive score based on their stories in response to all five images. Participants' stories contained an average of 649 (range 205–1,391) words, and letters contained an average of 5 (range 0–15) power statements (raw scores: $M = 5.00$, $SD = 3.08$). Word counts and raw scores across all participants were consistent with previous research that employed the PSE (Pang & Schultheiss, 2005).

Because the skewness of implicit power motive raw scores was 1.10 (Shapiro–Wilk $W = .92$, $p = .006$), they were square-root transformed. All motive scores were adjusted for word counts by regression. For ease of interpretation, all motive scores were standardized, using standardized residuals (e.g., Schultheiss & Brunstein, 2002). The standardized residuals of the square-root transformed implicit power motive scores correlated with the raw scores, $r(39) = .73$, $p < .001$.

Additional pretest measures. After the PSE, we assessed participants' commitment to ethnic identity, empathy, perspective taking, and SDO. All measures were anchored 1 (*strongly disagree*) to 7 (*strongly agree*). We employed a five-item measure of commitment to racial identity (Phinney, 1992; $\alpha = .90$; $M = 5.58$, $SD = 1.37$), a six-item measure to assess empathy (Davis, 1983; $\alpha = .58$; $M = 5.23$, $SD = 0.86$), a six-item measure to assess

perspective-taking (Davis, 1983; $\alpha = .68$; $M = 5.09$. $SD = 0.84$), and a four-item measure of SDO (Thomsen et al., 2010; $\alpha = .52$; $M = 1.58$, $SD = 0.64$). All questionnaires were administered on a desktop computer using Qualtrics. Consistent with past research (McClelland, Koestner, & Weinberger, 1989), none of these self-report measures correlated with implicit power scores, all $ps > .100$.

Session 2.

Study materials. Participants were randomly assigned to watch either the slavery clip or the control clip. Clips were presented on a 21-in. monitor at 1,680 × 1,050 pixel resolution.

Slavery documentary clip. We used a 12-min clip edited from the PBS documentary *Slavery and the Making of America* (Farrell, Gazit, James, & Pellett, 2005) to create a power-arousing, race identity-relevant conversational context.

Control documentary clip. We developed a control clip about the Alps (Berlowitz et al., (2006)) that was of similar length as the slavery clip (11 min) and also a documentary excerpt. Because film clips are complex stimuli for use in a controlled laboratory experiment, we carefully chose a control clip that differed from the slavery clip primarily on our dimension of interest: power arousal. Following Schultheiss et al. (2004), our goal was to develop a clip that did not feature content that could arouse any implicit motives. The control clip was not associated with racial identity or race relations in the United States. Accordingly, it could create a nonpower-arousing conversational context for African American participants that is also race identity irrelevant.

Dependent variables.

Simulated intergroup letter exchange. Participants read the following instructions:

> As part of this research, we exchange letters between African American and Caucasian students who participate in our study. It is your task to write a letter as an African American student to a Caucasian student about the history of slavery and its implications for intergroup relations today if you think it has implications at all.

Participants typed their letters in a letter-shaped box on a computer screen, which substantially simulated the experience of writing a letter. To make the experience as realistic as possible, participants were told that they might later meet the ostensible recipient of their letter and discuss the topic in person.

Letter coding for affiliation, power, and achievement motive imagery. All letters were coded for affiliation, power, and achievement motive imagery following Winter's (1994) *Manual for Scoring Motive Imagery in Running Text*. The coder was the same African American female who had been trained and previously attained over 80% agreement with the master solution for implicit motives in political documents (affiliation: 88%, achievement: 78%, power: 87%). She was unaware of the study hypotheses (refer to supplement 1 for a detailed explanation of coding categories).

Affiliation. Affiliation motive imagery in the letters was coded at the level of the sentence for any indication of establishing, maintaining, or restoring friendship or friendly relations among persons (Winter, 1994). For example, talking about how "White Americans and African Americans will sit together at Martin Luther King's table of brotherhood one day" would be coded for affiliation motive imagery. Each participant received one overall score that indicated how many affiliation images he or she used.

Participants wrote an average of 234 (range: 72–510) words, and letters contained an average of 1.08 (range: 0–4) affiliation images.

Power. Power imagery was coded identically to how we coded the PSE stories. Examples of how power manifests itself in letters about slavery include "slave masters brutally whipped and lynched their African American slaves," and "the history of slavery continues to have a strong impact on intergroup relations today." Participants' letters contained an average of 2.72 (range: 0–7) power images.

Achievement. Achievement imagery was coded when a sentence indicated striving for excellence (Winter, 1994). For example, describing "[h]ow much African Americans have achieved despite racial inequality" would be coded for achievement. Participants' letters contained an average of 0.41 (range: 0–4) achievement images. Controlling for word count, there is a negative correlation between number of affiliation and achievement images $r(36) = -.32$, $p = .050$, but not between affiliation and power images, $r(36) = -.18$, $p = .277$.

Collective action. After participants completed the letters, we measured their willingness to pursue collective action. We used a five-item measure anchored by (1) *strongly disagree* to (7) *strongly agree* ($\alpha = .72$; e.g., "Even if it meant having less time for my own school work and extracurricular activities, I would be willing to participate in a volunteer organization dedicated to advancing awareness of minority issues on campus"). Mean values were 4.86 ($SD = 1.10$; based on Derks et al., 2009).

Demographics. We assessed participants' ethnicity and gender at the end of the study.

Procedure. African American participants individually came to our laboratory for two separate sessions. They were told that the study was about "emotional reactions to images and movies." Both sessions were run by a male, African American experimenter who was unaware of hypotheses and condition. In Session 1, after providing informed consent, participants completed measures of implicit power motive and all attitude measures.

In Session 2, participants returned to the lab individually, at least 24 hr but no more than 1 week after Session 1. Participants were randomly assigned to view either the slavery clip or control clip. After watching the clip, the participants wrote a letter to an ostensible White student about implications of the history of slavery for intergroup relations today. Finally, participants completed the collective action and demographics measures as well as other dependent variables that we report in the supplemental materials. Participants were then thanked, debriefed, and compensated for their participation.

Results

Use of affiliation imagery. Affiliation imagery scores were submitted to a linear regression model with residuals of power scores as a continuous variable, type of documentary as a dichotomous variable (-1 = Alps, 1 = slavery), and their interaction term. Standardized residual scores have a mean of 0, so no further centering of the implicit power variable is necessary. Results are presented in Figure 1. African Americans' implicit power scores interacted with documentary type, $\beta = 0.36$, $t(34) = 2.20$, $p = .034$.[1] There was a significant main effect of the implicit power motive, $\beta = 0.45$, $t(34) = 2.76$, $p = .009$, but not of documentary type, $p = .270$. In the
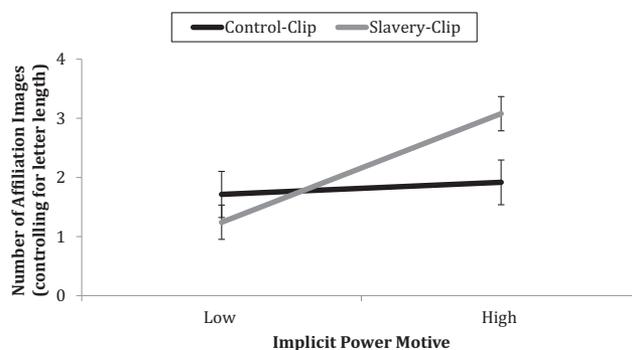

Figure 1. Number of affiliation images used in letters from African American participants in Study 1. Participants wrote an average of 234 (range 72–510) words, containing an average of 1.08 (range 0–4) affiliation images. Implicit power motive is graphed 1 *SD* below ("low") and above ("high") the mean. Error bars represent ± standard errors.

slavery-clip condition, the effect of implicit power was significant, $\beta = 0.80$, $t(34) = 2.84$, $p = .008$, such that higher scores were associated with more affiliation imagery in the letter. In the control condition, the effect of participants' implicit power motive was not significant, $\beta = 0.09$, $t(34) = 0.57$, $p = .571$.[2]

Alternative explanations. We reran the linear regression with implicit power motive as a continuous predictor, type of documentary as a dichotomous predictor, and their interaction on affiliation imagery five times, including (a) ethnic identity, (b) empathy, (c) perspective-taking, and SDO (d) separately and (e) together, as covariates. The interaction of implicit power and documentary type remained significant, both when all four covariates were included together, $\beta = 0.35$, $t(30) = 2.35$, $p = .025$, and separately (interaction of slavery clip and implicit power controlling for ethnic identity: $\beta = 0.35$, $t(33) = 2.34$, $p = .026$; controlling for empathy: $\beta = 0.36$, $t(33) = 2.30$, $p = .028$; controlling for perspective taking: $\beta = 0.37$, $t(33) = 2.38$, $p = .023$; controlling for SDO: $\beta = 0.33$, $t(33) = 2.04$, $p = .049$).

Use of power imagery. Participants' implicit power scores did not interact with documentary type to predict number of power images in their letters, $\beta = 0.132$, $t(34) = 0.84$, $p = .405$. None of the main effects were significant.

Use of achievement imagery. Participants' implicit power scores interacted with documentary type to predict number of achievement images in their letters, $\beta = -0.58$, $t(34) = -3.55$, $p =$

---

[1] Windsorizing one outlier in the distribution of square transformed implicit power motive standardized residuals reduced the interaction effect to $p = .072$. Because the participant did not differ in any observable way from all other participants, we retained the outlier in the final sample.

[2] We also coded the PSE stories for the affiliation motive and tested an alternative prediction that participants' implicit affiliation motive predicts affiliation imagery in their letters—a hypothesis consistent with research where the affiliation motive predicts outcomes that have to do with relationship building (Leary, 2009). In our research, however, the interaction of implicit power motive by type of documentary did not significantly predict affiliation imagery in letters, $\beta = 0.002$, $t(34) = .01$, $p = .992$, and neither of the main effects reached significance, $\beta = -0.08$, $t(34) = -0.424$, $p = .674$ for affiliation, and $\beta = 0.17$, $t(34) = 1.08$, $p = .286$ for type of documentary.

.001.[3] There was a significant main effect of the implicit power motive, $\beta = -0.59$, $t(34) = -3.63$, $p = .001$, but not of documentary type, $p = .351$. In the slavery-clip condition, the effect of implicit power was significant, $\beta = -1.16$, $t(34) = -4.10$, $p < .001$, such that higher scores were associated with less achievement imagery. In the control condition, the effect of participants' implicit power motive was not significant, $p = .941$.

Collective action. If high implicit power African American participants in the slavery-clip condition deploy affiliation imagery to influence the White target, the number of affiliation images should mediate the interaction effect of documentary type and implicit power motive on collective action scores. As described above, the interaction of documentary type and implicit power motive significantly predicted affiliation imagery, $b = 0.41$, $SE = 0.19$, $p = .034$. In addition, affiliation imagery significantly predicted collective action, $b = 0.24$, $SE = 0.12$, $p = .045$. Neither the c' path, $b = 0.08$, $SE = 0.13$, $p = .552$, nor the c path, $b = 0.18$, $SE = 0.13$, $p = .182$, was significant. According to Hayes (2013), however, indirect effects are possible and meaningful even if there is no direct effect of the predictor(s) of interest on the outcome. We found that the indirect effect of the implicit power motive x slavery documentary interaction on collective action through affiliation imagery is .10 and statistically significant; the bias corrected bootstrap 95% confidence interval (CI) [0.010, 0.285] does not include zero (based on 1,000 bootstrap samples). All the reported mediation analyses controlled for word count.

Discussion

Consistent with our hypothesis, in a power-arousing conversation context, implicit power moderates how African Americans communicate with Whites about past injustice. Use of affiliation imagery—expressions that show a concern for restoring, building, or maintaining relationships—was moderated by participants' implicit power motive and conversation context. Use of power imagery—expressions that show a concern for impact, influence, and control—did not vary systematically based on implicit power disposition and/or conversation context. Use of achievement imagery—expressions that show a concern for excellence—was moderated by participants' implicit power motive and conversation context. Importantly, overall mean levels of power imagery used by participants were higher than levels of affiliation imagery, while mean levels of achievement imagery were lowest. We do not know how aware participants were of choosing these particular communication strategies. Given that implicit motives are unconscious, imagery usage in letters may reflect an implicit preference rather than a deliberate choice.

The results for affiliation and power imagery suggest that most participants expressed their own-group-based empowerment need across conditions, while those with a high implicit power motive simultaneously expressed imagery that could satisfy the White partner's acceptance need in the slavery-clip condition. However, the decreased use of achievement imagery by high implicit power motive participants in the slavery-clip condition challenges this conclusion insofar as it suggests that, in the slavery-clip condition, high implicit power African Americans prioritized their White partner's acceptance need over their own-group-based empowerment need. Because the mean levels of achievement imagery were relatively low, and power motive imagery is more closely connected to the notion of empowerment from the needs-based model of reconciliation (Shnabel et al., 2009), we give more weight to the findings for power imagery than

achievement imagery. Nevertheless, understanding the different roles of power and achievement imagery in interracial communication is an interesting avenue for future research.

To separate motive arousal from its expression in behavior, we used a film clip to arouse the implicit power motive, and letters to assess motive imagery in communication. We chose a film clip because vivid stimuli that engage multiple senses are considered more effective for arousing implicit motives than written text (Schultheiss & Brunstein, 1999; Schultheiss & Brunstein, 2002). Others have pointed out, however, that the experience of writing a letter to an imagined letter recipient can also have motive-arousing effects (Langner & Winter, 2001). A possible limitation of Study 1 is thus that both experimental conditions may have aroused participants' implicit power motive. The effects of implicit power on increased use of affiliation imagery and decreased use of achievement imagery is consistent with this premise. We note, though, that to the extent that the letter writing exercise might prime the power motive and its manifestations, this effect would tend to diminish the anticipated differences between the two documentary-type conditions, and thus would work against finding the hypothesized effects.

Another limitation is that film clips are complex stimuli. While we were careful in selecting a control clip that would be nonpower arousing, we cannot rule out that it might have activated additional psychological processes outside of our awareness.

Interestingly, use of affiliation imagery in the slavery-clip condition mediated the association between implicit power motive and collective action tendencies in the slavery-clip condition, suggesting that high implicit power African Americans harness affiliation imagery to effectively narrate their group's perspective on the history of slavery. This finding raises the question of whether the increased affiliation imagery communication strategy employed by high implicit power African Americans does indeed increase Whites' engagement with this topic. Study 2 addressed this question.[4]

Study 2

Study 2 tests the hypothesis that the primary communication approach high implicit power African Americans used in their letters in the slavery-clip condition—use of affiliation imagery—is successful at getting Whites to listen actively. Because high implicit power individuals optimize their behaviors for a given context (Schultheiss & Brunstein, 2002), the affiliation-imagery strategy should be especially effective for influencing Whites in a communication about race relations after viewing a clip about the history of slavery. In this context, Whites' need for acceptance is heightened, and their receptivity to expressions of affiliation

---

[3] Windsorizing the same outlier in the distribution of square transformed implicit power motive standardized residuals as above did not alter the interaction effect, $p = .003$. Excluding one extreme outlier in the distribution of achievement imagery renders the interaction effect nonsignificant, $p = .087$ (windsorizing the same outlier: $p = .011$).

[4] Fifty-five White participants participated in the same laboratory experiment. Whites' level of implicit power did not interact with documentary type to predict the number of power, $\beta = -.13$, $t(50) = -1.33$, $p = .191$, achievement, $\beta = 0.14$, $t(50) = 1.08$, $p = .284$, or affiliation images, $\beta = 0.05$, $t(50) = 0.37$, $p = .715$, in their letters. We observed a main effect of documentary type on number of affiliation images, $\beta = 0.30$, $t(50) = 2.30$, $p = .026$, which is consistent with the proposition that Whites' acceptance need is heightened.

should therefore be increased, producing greater willingness to behave in ways to promote reconciliation by addressing the consequences of the injustice (Shnabel et al., 2009). By contrast, satisfying dominant-group members' need for acceptance by itself may not be sufficient to motivate engagement with past injustice and efforts to change the status quo (Saguy et al., 2009), and can reduce willingness to support social change (Banfield & Dovidio, 2013). Thus, affiliative communication by an African American person to a White person should be most effective in the context of the slavery documentary.

We tested this hypothesis in a 2 (Documentary Clip: slavery clip vs. control clip) × 2 (Letter Received: affiliation vs. no affiliation imagery) laboratory experiment with White participants. Participants watched the same documentary clips the African American participants watched in Study 1, and then read a letter from an African American sender about the implications of the history of slavery for the present day that either did or did not include affiliation imagery.

As explained in the introduction, an important first metric of success in communication about past injustice would be an increase in Whites' engagement with the topic after reading the letter. We used a mix of cognitive, motivational, and behavioral measures to assess such engagement. Our cognitive measure was a self-report of how receptive participants were to information in the letter. Because experiencing threat makes members of historic perpetrator groups defensive when confronted with past injustice (Cehajic-Clancy et al., 2011; Harvey & Oswald, 2000), our first motivational indicator of engagement was low anxiety. To limit social desirability influences that often lead Whites to report that they are less anxious in interracial exchanges than they exhibit behaviorally (Pearson, Dovidio, & Gaertner, 2009), we used an implicit measure of anxiety (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Furthermore, because asserting one's knowledge about African American history shows a desire to be, or at least appear to be, informed about this topic, our second motivational indicator of engagement is the number of historic African American figures participants listed when prompted. Similar to past research (Cheryan & Monin, 2005), we focused on differences between conditions rather than absolute numbers, because total numbers can vary based on prior exposure to the topic. Finally, our behavioral measure assessed whether higher levels of engagement translate to intentions to act for racial equality.

Method

Participants. Eighty-one White participants from a private university in the Northeastern United States participated in exchange for $15. Consistent with our selection criteria, prior to analysis we excluded four participants because they reported a second ethnicity in addition to being White, and four participants because they were non-U.S. citizens. We also excluded eight participants because of technical issues, leaving 65 participants (40 female). Participation took approximately 50 min. Participants were randomly assigned to one of four conditions as described in further detail below.

Materials and procedure.

Documentary clips. Participants were randomly assigned to watch either the slavery clip or control clip used in Study 1.

Affiliation versus no-affiliation imagery letters. Next, participants were randomly assigned to read a letter about "the implications of slavery for intergroup relations today" that either contained or did not contain affiliation imagery. We explained that the letter was written by an African American peer who had watched the same clip as the participant. Participants were told that they might have the opportunity to meet the author of the letter in the near future.

Two letters were adapted from those written by African American participants in Study 1 and we manipulated whether they contained affiliation imagery. We used two letters that were high in affiliation (i.e., 95th percentile of expressed affiliation, four and five affiliation images, respectively). For generalizability, within the 95th percentile of expressed affiliation, the two letters that we selected varied in both content and expressions of power and achievement: One focused on the connection between slavery and contemporary race relations in the university context, the other in American society more broadly. One affiliation letter included five power and two achievement expressions (word count = 452). The second affiliation letter included two achievement expressions (word count = 306). Participants in the high affiliation condition received one of the two original letters.

For no-affiliation letters, the same certified implicit motive coder from Study 1 removed all affiliation imagery from the two high affiliation letters and replaced them with motive-neutral statements (see Langner & Winter, 2001 for a more detailed description of this method). For example, the affiliation statement "the hope *that we will meet people* who are different from us" was replaced with the motive-neutral statement "the hope that *there will be people* who are different from us" (emphasis added). To check for accuracy in affiliation coding, two additional research assistants who were certified in implicit motive coding independently coded all four letters. Discrepancies were resolved through discussion. Statements that coders could not agree on were considered affiliation statements and removed in the no-affiliation condition (see Appendix A for all letters). Participants in the no-affiliation condition received one of the two modified letters.

Dependent variables.

Manipulation check. Participants were asked to spontaneously recall information from the letter and write their thoughts down (a "thought-listing" task; Cacioppo & Petty, 1981). One research assistant counted the number of statements participants accurately recalled that had previously been coded as affiliation imagery (affiliation condition: $M = 1.56$, $SD = .84$; range: 0–3).

Receptivity toward letter. The participant's receptivity toward the letter was assessed with five items: "Based on the letter, how much do you like the letter writer?"; "In your opinion, how reasonable do you think the letter is?"; "How well do you think the letter was composed?"; "How much did the letter writer impress you with their competence?"; and "How strong is the letter overall?" from 1 (*very much dislike/very unreasonable/very poor/very unimpressed/very weak*) to 7 (*very much like/very reasonable/mostly well/very much impressed/very strong*; $\alpha = .68$).[5] We created a standardized receptivity index using inverse covariance weighting ($M = 0$, $SD = 1$). This method maximizes the amount of information captured in the index by weighing individual items based on how highly they correlate with one another (Anderson,

---

[5] In an interitem correlation matrix, an additional item ("How biased do you think the letter is?") was the only item that did not significantly correlate with any other item, all $rs < .30$, and was not included in the composite score.

2008). For the receptivity construct, the covariance weighting is more appropriate than averaging across all items because the items are not part of a well-established scale. Unlike principal component analysis, which partials out multiple, orthogonal factors, inverse covariance weighting assumes that there is one trait of interest (Samii, 2016).

Implicit activation of anxiety-related words. As part of an ostensible concentration task, participants completed a 24-item word completion task (Vandello et al., 2008) after reading the letter. Seven of the word-stems could be completed with anxiety-related words: THREA_(threat), STRE_ _ (stress), _ _ SET (upset), _OTHER (bother), SHA _ E (shame), _EAK (weak), and LO_ER (loser). We recorded the proportion of target words participants completed with anxiety-related concepts ($M = 0.34$, $SD = 0.16$).

Listing of historic African American figures. Participants were instructed to list "as many historic African American figures you can think of" (adapted from Cheryan & Monin, 2005). On average, participants listed 7.68 ($SD = 2.39$) historic African American figures.

Action intentions. Action intentions were assessed with four actions that participants would be "willing to do to support racial equality": "write an advocacy letter," "donate money," "engage in community activism," "join relevant student organization," from 1 (*strongly disagree*) to 7 (*strongly agree;* $\alpha = .82$).[6] As with the receptivity measure, we created a standardized action intentions index using inverse covariance weighting ($M = 0$, $SD = 1$; Anderson, 2008).

Results

Manipulation check. The manipulation was successful. A 2 (Documentary Type: slavery vs. control) × 2 (Affiliation Imagery: present vs. absent) analysis of variance (ANOVA) revealed a main effect of affiliation imagery, $F(1, 61) = 94.75$, $p < .001$, $\eta^2 = .61$, with participants in the affiliation-imagery condition recalling more affiliation statements, $M = 1.56$, $SE = 0.11$, than those in the no-affiliation imagery condition ($M = 0$, $SE = 0$), $d = 2.49$, 95% CI [1.84, 3.14].

Receptivity. Receptivity toward the letter was submitted to a documentary type x affiliation imagery ANOVA. In line with our predictions, a marginally significant Documentary Type × Affiliation Imagery interaction emerged, $F(1, 61) = 3.18$, $p = .079$, $\eta^2 = .05$. This interaction remains marginally significant if we control for type of letter (low vs. high power imagery), $p = .09$. No main effects were significant. Whites in the slavery-clip condition were more receptive when affiliation imagery was present in ($M = 0.36$, $SE = 0.22$) than absent from the letter ($M = -0.21$, $SE = 0.25$), $F(1, 61) = 3.19$, $p = .079$, $d = .64$, 95% CI [0.04, 1.34]). In the control-clip condition, receptivity did not vary by affiliation condition, $F < 1.00$. Furthermore, Whites who received affiliation-imagery letters were more receptive toward them in the slavery-clip condition ($M = 0.36$, $SE = 0.22$) than in the control-clip condition ($M = -0.28$, $SE = 0.25$), $F(1, 61) = 3.89$, $p = .053$, $d = 0.58$, 95% CI [–.09, 1.25].[7]

Anxiety. The implicit activation of anxiety-related words score was submitted to a Documentary Type × Affiliation Imagery ANOVA. A significant interaction emerged, $F(1, 61) = 3.92$, $p = .052$, $\eta^2 = .06$. This interaction remains significant if we control for type of letter, $p = .049$. No main effects were significant. Whites in
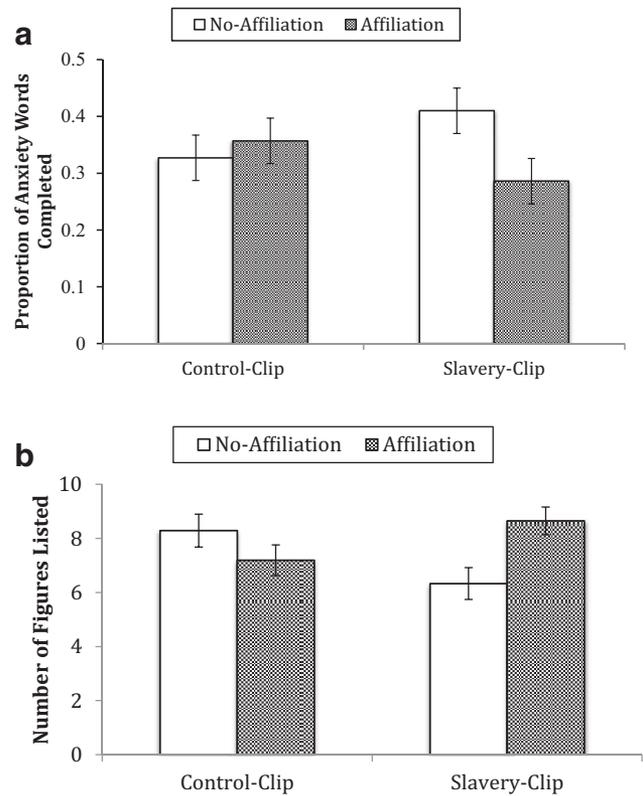
Figure 2. (a) Proportion of anxiety words completed by White participants depending on clip watched and type of letter received in Study 2. (b) Number of historic African American figures listed by White participants depending on clip watched and type of letter received in Study 2. The error bars represent ± standard errors.

the slavery-clip condition completed fewer word stems with anxiety-related concepts when affiliation imagery was present ($M = 0.29$, $SE = 0.04$) than when it was absent ($M = 0.41$, $SE = 0.04$), $F(1, 61) = 5.39$, $p = .024$, $d = -0.71$, 95% CI [-1.40, -0.02]. In the control-clip condition, number of word stems completed with anxiety-related concepts did not vary by affiliation condition, $F < 1.00$, see Figure 2a.

Historic African American figures. After watching the clip about slavery, if affiliation increases Whites' motivation to engage with the history of slavery, they should be eager to assert their knowledge of African American history and list more historic African American figures than those in the no-affiliation condition. For Whites in the control-clip condition, affiliation imagery should not affect listing of figures. Results supported our hypothesis. A

---

[6] In an interitem correlation matrix, an additional item ("Visit the new slavery museum in Washington, DC") was the only item that did not significantly correlate or correlated only weakly with any other item, all rs < .30, and was not included in the composite score.

[7] There are three nonextreme outliers on receptivity. If we windsorize these, the Documentary Type × Affiliation Imagery interaction drops to $p = .124$. Because they did not differ in any observable way from all other participants, we retained these participants in the final sample.

Documentary Type × Affiliation Imagery interaction emerged, $F(1, 61) = 9.06$, $p = .004$, $\eta^2 = .13$. This interaction remains significant when we control for type of letter, $p = .004$. No main effects were significant. The condition means are presented in Figure 2b. Whites in the slavery-clip condition listed more historic African American figures after reading letters with affiliation imagery present than absent, $F(1, 61) = 8.79$, $p = .004$, $d = 1.02$, 95% CI [0.17, 1.86]. Indeed, they listed 27% more than those who received letters without affiliation. In the control-clip condition, the number of African American figures listed did not vary by condition, $F < 2.00$.

Action intentions. The action intentions score was submitted to a documentary type x affiliation imagery ANOVA. Consistent with what we found for the other dependent variables, a marginally significant Documentary Type × Affiliation Imagery interaction emerged, $F(1, 61) = 3.53$, $p = .065$, $\eta^2 = .06$. This interaction remains marginally significant if we control for type of letter, $p = .059$. No main effects were significant. Notably, participants in the slavery-clip condition did not report higher action intentions when affiliation imagery was present ($M = 0.13$, $SE = 0.22$) than when it was absent ($M = 0.02$, $SE = 0.26$), $F < 1.00$. Instead, participants in the control-clip condition reported higher action intentions when affiliation imagery was absent ($M = .35$, $SE = .26$) than when it was present ($M = -0.48$, $SE = 0.25$), $F(1, 61) = 5.98$, $p = .017$, $d = -0.82$, 95% CI [-1.56, -0.07].

Discussion

Results from Study 2 support the hypothesis that the communication strategy high implicit power African Americans use in the slavery-clip condition—including affiliation imagery—successfully engages Whites with the topic of past injustice. In the slavery-clip condition, affiliation imagery reduced Whites' anxiety and increased the number of historic figures they listed. The findings for receptivity to the letter show a similar pattern. However, while single items reached significance,[8] the overall composite did not, the simple effect of affiliation within the slavery-clip condition was only marginally significant, and the Cohen's d CI included zero. The receptivity outcome thus needs to be interpreted with caution. Overall, it is interesting that we achieved more robust results with motivational outcomes (anxiety and listing of figures) than with the cognitive outcome (receptivity). This pattern may suggest that the underlying process for Whites is a motivational state of threat rather than a cognitive state of skepticism.

All effects hold regardless of whether affiliation imagery is coupled with high or low power imagery. However, only the high power letters allow African American letter writers to express their own-group-based need for empowerment, which may explain why high implicit power African Americans in Study 1 added affiliation imagery to letters that also featured high levels of power imagery. Both letter types in Study 2 included more than the average number of achievement images in Study 1 letters, confirming that expressing affiliation imagery is effective even without a simultaneous decrease in achievement imagery.

While only marginally significant, the simple effects for the action intentions outcome suggests that using affiliation imagery outside of race identity-relevant, power-arousing conversation contexts can stifle action for racial equality. This is consistent with research showing that achieving immediate goals for acceptance

can relax dominant group members' motivation to change the status quo to benefit a nondominant group (Dixon et al., 2005; Saguy et al., 2009). Indeed, an affiliation message without vivid reminders of past injustice may have generated complacence in White participants. The finding for action intentions thus suggests that high implicit power African Americans in Study 1 used an effective strategy not only when they deployed affiliation imagery after watching the slavery clip, but also when they did *not* deploy affiliation imagery in the control condition. Study 3 examines our theoretical framework in actual interracial dyadic interactions, and further clarifies in which contexts high implicit power African Americans use the affiliation–warmth strategy and if it is effective.

Study 3

In Studies 1 and 2, our experimental stimulus—the slavery clip—is both more power-arousing and more race identity-relevant than the control clip. We sought to disentangle these two factors in Study 3 by differentiating conditions only with respect to race-identity relevance. In Study 3, African Americans discussed with White conversation partners either the history of slavery or a set of similarly power-arousing but race identity-irrelevant questions related to environmental pollution. If, as we believe, the combination of power arousal and race-identity relevance accounts for the high affiliation and high engagement dynamic observed across Studies 1 and 2, we should see the moderating effect of African American participants' implicit power motive on their affiliation–warmth expressions and engagement of White participants only in the slavery-discussion condition. The effect should disappear in the control condition, which, while power-arousing, lacks race-identity relevance.

In Session 1 of a two-part experiment, we assessed participants' degree of implicit power using the PSE online (Pang, 2010). In Session 2, depending on random assignment, dyads consisting of one African American participant and one White participant discussed either the history of slavery or environmental pollution. Interpersonal discussions tend to arouse implicit motives (Schultheiss & Brunstein, 1999; Schultheiss & Brunstein, 2002), and we framed both discussions as opportunities for influence. Yet, only the discussion about slavery makes historical injustice and associated perpetrator and victim roles salient, and thus should elicit the race-based acceptance-empowerment dynamic. In these dyadic interactions, unlike in the letter-writing exercise of Studies 1 and 2, both participants had sender and recipient roles. Given the focus of this research, however, we analyzed only the communication messages African American participants sent and how White participants responded.

In addition to assessing how much affiliation imagery they expressed, we asked African American participants about their impression-management goals to appear warm and competent (Bergsieker et al., 2010). Although the terminology suggests otherwise, we argue that wanting to impress somebody with one's competence has more to do with seeking influence than achieving excellence; accordingly, it is most consistent with power rather than achievement imagery. Thus, self-reported warmth versus competence goals and affiliation versus power imagery should measure the same underlying construct, namely, signaling acceptance versus empowerment to a White target.

---

[8] The items that reached significance were "the letter was reasonable" and "liking the letter writer."

Asking about impression-management goals allowed us to test if participants were aware of their communication strategies. We also measured the degree to which African American participants engaged in nonverbal immediacy behaviors during the interaction and how much affiliation imagery they expressed verbally. Immediacy behaviors signal a positive attitude toward the addressee (Mehrabian, 1967), and are thus nonverbal signals of affiliation and warmth.

Because in Study 2 motivational measures yielded more consistent and robust results than cognitive measures, we relied on motivational measures to assess White participants' engagement with the history of slavery. As in Study 2, we measured how many historic African American Figures White participants listed (Cheryan & Monin, 2005). Similar to our anxiety measure in Study 2, we measured White participants' relaxation (Matthews, Jones, & Chamberlain, 1990) to assess how open versus closed-off they were to information from the discussion. We also measured how much White participants freely recalled of what their partner said (Matthews et al., 1990). Freely recalling more from a conversation shows a greater desire to retain what one's partner said, and is thus an indicator of engagement or "active listening."

Method

Participants. Seventy-one White and 71 African American participants (self-identified as "Black/African American") from universities in the Northeastern United States participated in the study. Each received $25 for participation and an additional $5 for rescheduling if their dyad partner did not show up for the session. Prior to analysis, we excluded 13 dyads: in five dyads, the African American participant failed to complete the PSE; in one, the White participant had a strong French accent; and in seven, we had technical problems.[9]

Our final sample included 58 dyads (116 participants). All participants were matched on gender, and 44 dyads were female. The majority of participants self-identified their political orientation as liberal (38 African Americans and 37 White participants); the rest self-identified as independent, moderate, conservative, or undeclared, with small numbers in each category. Participation took approximately 90 min over two sessions.

Session 1.

Implicit power motive. As in Study 1, we assessed implicit power with the PSE (using the same images as in Study 1), which participants completed using Qualtrics. All stories were coded for implicit power by a group of male, female, White, and African American coders ($n = 6$) who had been trained and previously attained over 85% agreement for the power motive with PSE materials prescored by experts (Winter, 1994) except for one coder who attained agreement of 81%. Coders were unaware of participants' race and study hypotheses. While all participants completed the pretest, we focus here only on African Americans participants' implicit motives.

Coding for implicit power. Power was coded in the same way as in Study 1. African American participants wrote an average of 595 words (range: 75–1,549), containing an average of four (range: 0–14) power statements (raw scores: $M = 4.16$, $SD = 3.36$). Word counts and raw scores were consistent with Study 1 and previous research that employed the PSE (Pang & Schultheiss, 2005). Because the skewness of implicit power motive raw scores was 1.09 (Shapiro–Wilk $W = .90$, $p < .001$), the raw scores plus one were square root

transformed. All motive scores were subsequently adjusted for word counts by regression and, for ease of interpretation, standardized using standardized residuals (e.g., Schultheiss & Brunstein, 2002). The standardized residuals correlated significantly with the raw scores, $r(56) = .61$, $p < .001$.

Additional pretest measures. The pretest included measures assessing other variables from the intergroup relations literature (see Appendix B), as well as a demographic questionnaire.

Session 2.

Dyadic interactions. Based on random assignment, participants discussed how to teach high school students either about the history of slavery or environmental pollution. They received three sets of questions in randomized order and were instructed to "brainstorm each question for approximately 5 min." The discussions provided optimal conditions for arousing the implicit power motive: (a) affect-laden, vivid materials, (b) a situation that presents an opportunity for impact and influence, and (c) a loose structure (Schultheiss & Brunstein, 2002). Participants read three engaging and controversial articles with colorful pictures to prepare for the discussion. The experimenter told participants that some of the discussion results might be used to inform educational policy. To maintain a loose structure, participants received only an approximate time frame to complete the brainstorming task.

History of slavery discussion. The article excerpts (two to four sentences long) participants read were from (a) a *Black Youth Project* article about an African American student who faced disciplinary action for comparing the education system to slavery (Black Youth Project, 2012), (b) a *Huffington Post* article about a controversial homework assignment at a Georgia school that included references to slaves (Hibbard, 2012), and (c) a *Washington Post* article about a teacher who reenacted a slave auction with fourth graders (Sieff, 2011). The discussion questions were pretested to evoke different responses from African Americans and Whites. The image question read as follows: "When teaching about the history of slavery, should teachers show original images of whippings, beatings, and the selling of slaves and/or audio and video reenactments of the cruel conditions of life as a slave?" The generality questions read,

> Should slavery be taught as part of American history (mentioned in teaching Colonialism and/or the Civil War), or should it be its own topic? How central is it to American history? How central is it to other disciplines (e.g., English, Science)?

Finally, the framing questions read,

> Is it better to focus on the legacy of slavery and its negative impact today or focus on resiliency and how far Blacks progressed despite slavery? Should teachers make a link between the legacy of slavery

---

[9] Among the 58 remaining dyads, at least one participant out of seven completed the PSE late, and at least one participant out of eight was not affiliated with the university. Four African American and one White participant were not U.S. citizens. Nine African American and four White participants checked two ethnicities. Because it was difficult to obtain a sufficiently large number of dyads composed of individuals who completed the pretest, we decided to include these participants prior to data analysis. We reran our models with the following covariates: at least one participant in a dyad not affiliated with the university, at least one PSE late in a dyad, dyad gender, at least one participant in a dyad not a U.S. citizen, African American or White self-identifying as "liberal," participant identifying more than one ethnicity, White participant being Jewish. We report results from this robustness check if the significance changed.

and the perpetuation of racial inequalities today? Should they discuss affirmative action policies in conjunction with the history of slavery?

Environment discussion. The article excerpts participants read were from (a) a *New York Times* article about supporters and critics of "green education" (Navarro & Bhanoo, 2010), (b) a *PBS NewsHour* transcript about resistance teachers face when teaching the science of climate change (PBS NewsHour, 2012), and (c) a *New Republic* article about the role of the nuclear power lobby in the development of school materials about nuclear energy (Blake, 2011). Article contents and informal pretesting demonstrated that environmental pollution and climate change are topics that can be controversial and polarizing. We designed control questions that were similar to the history-of-slavery questions in terms of their potential for controversy and impact. As such, both conditions were power-arousing, but only the slavery condition was race identity-relevant. The image question in the control condition read as follows: "When teaching about the environment should teachers show original images of animals injured in oil spills, mutations, and environmental decay and/or news footage of partially sunken ships?" The generality question was, "Should climate change and its effects on the environment be confined to science classes or should it be integrated in social studies where students can learn about terrible real-world disasters, and the history and politics of climate change?" Finally, the framing questions read,

> Should we teach about nuclear energy, its risk and benefits or teach about energy conservation, and renewable power production? Who should decide what is and is not appropriate content for a curriculum about this topic: the school, teachers, the state, parents, or scientific organizations?

Dependent variables.

Overview. This research conceptualizes African American and White participants in different roles: African American participants as communication senders who signal warmth-affiliation or competence-power intent (or both) and White participants as recipients who are more or less engaged with the discussion. Consistent with these distinct roles, we report warmth and competence goals, immediacy behaviors, and affiliation imagery for African American participants, and free recall, relaxation, and listing of historic figures for White participants.

African American participants.

Impression management goals. After the discussion, African American participants' impression-management goals were assessed using modified items from Bergsieker et al. (2010). We measured the goal to be perceived as warm during the brainstorming session with two items ($\alpha = .85$; "It was important to me that my partner saw me as kind / as a good person"), the goal to be perceived as moral with two items ($\alpha = .80$; "It was important to me that my partner saw me as fair / as open-minded"), and the goal to be perceived as competent with three items ($\alpha = .93$; "It was important to me that my partner saw me as intelligent / capable / competent") from 1 (*strongly disagree*) to 7 (*strongly agree*). Mean values were 4.77 ($SD = 1.71$) for the warmth goal, 4.93 ($SD = 1.52$) for the morality goal, and 5.14 ($SD = 1.57$) for the competence goal.

Immediacy behaviors. Following Mehrabian (1967), we assessed participants' forward lean and upright position (shoulder orientation parallel to the wall) as indicators of immediacy behavior.

Two independent coders (one White and one African American) who were unaware of discussion topic and participants' implicit power motive scores viewed the videos of dyadic interactions on mute. In light of the significant length of the videos, coders only watched and coded the image question, which was the most controversial question based on preliminary viewing of the videos by research assistants. Coders rated the degree to which participants leaned forward and sat in an erect position on 1 (*never*) to 5 (*all the time*) scales. Interrater reliability was high, $r(56) = .77$, $r(56) = .88$, and we thus collapsed across ratings from the two coders for each outcome. We created a composite score of immediacy behavior by averaging ratings for leaning forward and erect position (reverse coded; $\alpha = .86$).[10] Immediacy behaviors are not correlated significantly with warmth goals, $p > .100$.

Transcript of dyad coding for affiliation imagery. All discussions were transcribed and coded for affiliation, power, and achievement imagery by the same coder as in Study 1, following Winter's (1994) *Manual for Scoring Motive Imagery in Running Text*. Because our primary interest was in the affiliation–warmth strategy, we report only the number of affiliation images in text spoken by African American participants: $M = 0.39$ (range: 0–3) affiliation images, average length: 1,205 words. Affiliation images are not correlated significantly with warmth goals or immediacy behaviors.

White participants.

Free recall. We measured the number of words White participants freely recalled of their partner's response to each of the three sets of questions. Freely recalling more indicates greater desire to retain much of what one's partner said during a discussion, and is thus a compelling indicator of engagement. Mean values were 24.50 ($SD = 12.24$) for the image question, 27.59 ($SD = 11.77$) for the generality question, and 23.86 ($SD = 13.74$) for the framing questions. White participants' free recall did not correlate significantly with African American partners' warmth goal or immediacy behaviors in either condition for any of the questions (all $ps > .100$). Free recall for the generality question correlated significantly with African American partners' use of affiliation imagery overall $r(56) = .27$, $p = .041$. Free recall for the framing question correlated significantly with African American partners' use of affiliation imagery in the slavery condition, $r(31) = .38$, $p = .030$.

Relaxation. We assessed participants' emotions before and after the discussion using a self-report scale of physiological arousal (Matthews et al., 1990). We measured relaxation with three items out of a total of eight affective states (prediscussion: $\alpha = .86$, postdiscussion: $\alpha = .80$; "calm," "relaxed," "nervous" reverse coded). Before the discussion, mean values were 4.80 ($SD = 1.38$); after the discussion mean values were 5.26 ($SD = 1.13$). White participants' relaxation did not correlate significantly with African American partners' warmth goal, immediacy behaviors, or use of affiliation imagery overall, and also did not correlate with any of these outcomes in either condition. Relaxation did not correlate with any of the memory scores, all $ps > .100$.

Listing of historic African American figures. As in Study 2, participants were instructed to list "as many historic African Ameri-

---

[10] The raters also coded for smiles, frowns, nodding, fidgeting, and gesturing. For smiles, frowns, nodding, and gesturing, the interrater reliability was low. For fidgeting, it was satisfactory, but we found no significant effects.

can figures you can think of" (adapted from Cheryan & Monin, 2005). On average, White participants listed 8.63 (SD = 3.75) figures. This number did not significantly correlate with their partners' warmth goal, immediacy behaviors, or use of affiliation imagery overall or in either condition, except it did positively correlate with partner's use of affiliation imagery in the control condition, r(23) = .42, p = .037. It also did not correlate with their own relaxation or memory, all ps > .100.

Procedure. Potential participants who identified as "Black/ African American" or "White American" on a prescreen question-naire were sent a link to the Session 1 survey on Qualtrics. The survey included an informed consent form, the PSE, and several attitude measures not reported here (see Appendix B). Participants were instructed to complete the survey at least 24 hr before coming into the laboratory for Session 2.

Two White male experimenters unaware of hypotheses and condition ran the laboratory sessions. The experimenter on duty led participants to individual cubicles, where they gave informed consent for Session 2, completed a questionnaire (including the self-reported physiological arousal items), and read the articles to prepare for the discussion. Participants were then led to a separate room to meet their discussion partner. The experimenter handed the pair an envelope containing the discussion instructions and questions, turned on Noldus observer video equipment, and left the room. After participants completed their discussion and called the experimenter, he guided them to their individual cubicles, where they completed a Stroop task (results not reported here) and another questionnaire with all remaining items (plus additional dependent variables not reported here, see Appendix B). Partici-pants were thanked, debriefed, and paid.

Results

African American participants.
Warmth goal. Warmth goal scores were submitted to a linear regression model with residuals of square-root transformed power scores as continuous predictor, discussion topic as dichotomous pre-dictor (−1 = environment, 1 = slavery), and their interaction term. Results are presented in Figure 3. African Americans' implicit power motive interacted with discussion topic, β = 0.38, t(54) = 3.06, p = .003. No main effect was significant. In the slavery-topic condition, the effect of implicit power was significant, β = 0.44, t(54) = 2.59, p = .012, such that higher scores were associated with a greater goal to be seen as warm. In the control condition, the effect of participants' implicit power motive was marginally significant in the opposite direction, β = −0.33, t(54) = −1.77, p = .082.

Morality and competence goals. For morality and competence goal scores, neither the main effects nor the interaction term of implicit power motive and discussion topic was significant (all ps > .100).

Immediacy behaviors. For immediacy behavior scores, African Americans' implicit power motive interacted with discussion topic, β = 0.36, t(54) = 2.91, p = .005. No main effect was significant. In the slavery-topic condition, the effect of implicit power was signifi-cant, β = 0.36, t(54) = 2.11, p = .039, such that higher scores were associated with more immediacy behaviors. In the control condition, the effect of participants' implicit power motive was significant in the opposite direction, β = −0.37, t(54) = −2.01, p = .049.
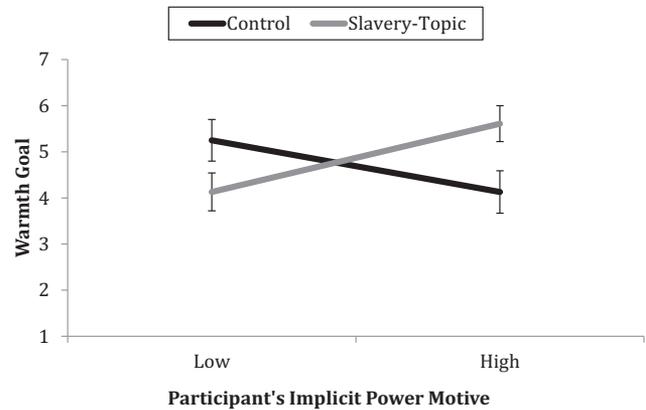

Figure 3. African American participants' goal to be perceived as warm depending on discussion topic and implicit power motive in Study 3. African American participants' implicit power motive is graphed 1 SD below ("low") and above ("high") the mean. Error bars represent ± standard errors.

Affiliation imagery in discussion. For affiliation imagery scores, the interaction of African Americans' implicit power mo-tive with discussion topic was not significant, β = 0.19, t(53) = 1.58, p = .120, controlling for total words spoken by participant. Only the main effect of slavery topic was significant, β = 0.27, t(53) = 2.14, p = .037. Even though the overall interaction was not significant, we followed up with a simple effect test of our hypothesis and found that, in the slavery-topic condition, the effect of implicit power was significant, β = 0.38, t(53) = 2.30, p = .026, such that higher scores were associated with more affiliation imagery (and this simple effect remained significant after includ-ing covariates). In the control condition, the effect of participants' implicit power motive was not significant, p = .977.

White participants.
Free recall. Memory scores for each of the three sets of questions were submitted to a linear regression model with resid-uals of square-root transformed African American partner power scores as continuous predictor, discussion topic as dichotomous predictor (−1 = environment, 1 = slavery), and their interaction term. For the question about showing graphic images, the interac-tion of African American partners' implicit power motive and discussion topic was significant, β = 0.31, t(54) = 2.41, p = .020 (see Figure 4). The same interaction was marginally significant, β = 0.20, t(54) = 1.75, p = .086, for the generality question, and not significant, β = 0.07, t(54) = 0.51, p = .613, for the framing question.[11] There was a significant main effect of discussion topic on memory for the generality question, β = 0.51, t(54) = 4.50, p < .001.

For the image question, the effect of partner's implicit power motive was significant in the slavery-topic condition, β = 0.39,

---

[11] The interaction remains significant for the images question, β = .36, t(46) = 2.70, p = .010, and marginally significant for the generality question, β = .23, t(46) = 1.84, p = .073, if we control for at least one participant in a dyad not affiliated with the university, at least one PSE late in a dyad, dyad gender, at least one participant in a dyad not being a U.S. citizen, African American or White participant self-identifying as "liberal," a dyad participant having a second ethnicity.
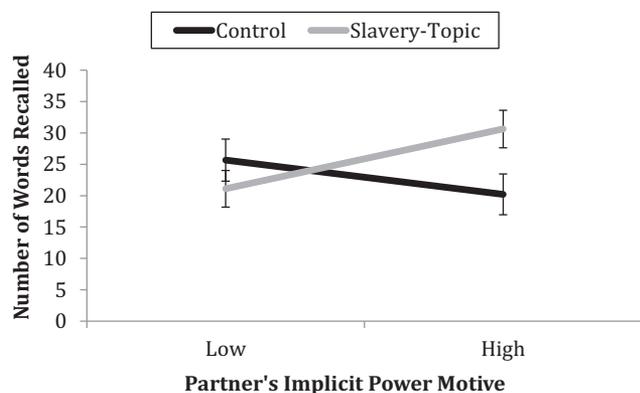
Figure 4. White participants' free recall of image question discussion depending on experimental condition and African American partner's implicit power motive in Study 3. African American partners' implicit power motive is graphed 1 *SD* below ("low") and above ("high") the mean. Error bars represent ± standard errors.

$t(54) = 2.26$, $p = .028$, such that higher scores were associated with remembering more of what the partner said, but not in the control condition, $\beta = -0.22$, $t(54) = -1.19$, $p = .240$. For the generality question, the effect of partner's implicit power motive in the slavery-topic condition was not significant, $p = .213$. However, within White participants who interacted with a high implicit power African American partner, the effect of discussion topic (slavery topic = 1, control = 0) was significant in the predicted direction for both the image question, $\beta = 0.43$, $t(54) = 2.38$, $p = .021$, and the generality question, $\beta = 0.71$, $t(54) = 4.42$, $p < .001$.

Relaxation. For White participants' relaxation scores, the interaction of African American partners' implicit power motive and discussion topic was significant, $\beta = 0.33$, $t(54) = 2.60$, $p = .012$. No main effect was significant. In the slavery-topic condition, the effect of partner's implicit power motive was significant, $\beta = 0.37$, $t(54) = 2.13$, $p = .037$, such that higher scores were associated with being more relaxed after the discussion.[12] In the control condition, the effect of partner's implicit power motive was not significant, $\beta = -0.29$, $t(54)$, $p = .123$.

Listing of historic African American figures. Contrary to our expectation, we did not find a significant interaction of African American partners' implicit power score with discussion topic, $\beta = -0.15$, $t(54) = -1.08$ $p = .283$, on number of historic figures listed, and neither of the main effects was significant, $p > .100$. Perhaps we failed to replicate the outcome from Study 2 because the already relatively high mean number of listed figures in Study 2 ($M = 7.68$, $SD = 2.39$), was even higher in Study 3 ($M = 8.63$, $SD = 3.75$), thus possibly creating a ceiling effect. Another possibility is that White participants in the slavery-topic condition who interacted with a high implicit power African American participant were more motivated than others to demonstrate their knowledge of African American history, but the discussion itself provided them with a sufficient opportunity to do so. That is, by the time they got to listing historic figures, they had already sufficiently expressed that motivation.

Discussion

Consistent with our hypothesis, in a race identity-relevant, power-arousing conversation context, the implicit power motive moderated whether African Americans have the goal of signaling warmth to their White partner. The impression-management goal of appearing warm—a signal of acceptance—was moderated by African American participants' implicit power motive and conversation context. Similarly, African American participants' immediacy behaviors and use of affiliation imagery were moderated by their implicit power motive and discussion topic. While the simple effect of participants' implicit power motive in the slavery-topic condition replicated Study 1, the mean of affiliation imagery in these task-focused discussions was low, and the interaction effect was not significant. The impression-management goal of appearing competent—a signal of empowerment—did not vary systematically; however, mean levels of competence goals were higher than warmth goals.

These results suggest that most African American participants expressed their own-group-based empowerment need across conditions, while African Americans with a high implicit power motive simultaneously aimed to satisfy their White partner's acceptance need in the slavery-topic condition. Given that goals were self-reported, high implicit power participants were probably aware of their goal to appear warm in the slavery-topic condition. Because the implicit power motive is unconscious, it is doubtful that participants have insight into why they aim to appear warm or are pursuing a strategy to influence Whites. However, the current data cannot rule out this possibility.

Interestingly, in the control condition, the effects of participants' implicit power motive on their warmth goal and their immediacy behaviors were marginally significant in the opposite direction. In discussions about the environment—a race-identity irrelevant topic— "traditional" persuasion strategies of appearing competent and dominant (Schultheiss & Brunstein, 2002) are probably more effective than appearing warm. Especially for African Americans, who often contend with the stereotype of being warm but not competent (Cuddy, Fiske, & Glick, 2008), a warmth goal could reinforce this stereotype in discussions about the environment. Thus, similar to *not* using affiliation imagery in the control condition in Study 1, a low warmth goal and few immediacy behaviors is probably the most effective strategy for being influential in the control condition in Study 3.

Moreover, both the history of slavery and climate change are issues that people of liberal, but not conservative, political orientation tend to view as important and favor taking action to address (Henry, 2003; Schuldt & Pearson, 2016). Thus, if the effects in Studies 1 and 2 were artifacts merely of African American participants' political orientation, the observed divergence of results in Study 3 between conditions would have been less likely to emerge.

Study 3 also provides some evidence that African Americans' implicit power moderated how effectively they engaged Whites in the discussions. The higher an African American partner's implicit

---

[12] The interaction drops to $\beta = 0.22$, $t(44) = 1.42$, $p = .164$, and the effect of African American partner's implicit power motive score in the slavery-topic condition drops to $\beta = 0.24$, $t(44) = 1.66$, $p = .104$, if we control for the same covariates plus White participant's relaxation before discussion (one missing).

power motive, the more Whites recalled from the interaction and the more relaxed they reported being. However, the memory effect appeared only for selected discussion questions.

Overall, the evidence in support of the hypothesis for Whites is mixed. Yet, it is remarkable that we see any indirect effect of African Americans' implicit power motive on White discussion partners, especially given the loose structure of the interactions. Unlike in Studies 1 and 2, however, we have no evidence that African American participants' warmth goals and immediacy behaviors are the sole processes through which African Americans influence Whites. Given the complexity of the dyadic discussions and the skills of high implicit power individuals, it is likely that they used a variety of strategies in combination with immediacy behaviors and striving to appear warm, probably adjusting to their partner's reactions throughout the discussion.

General Discussion

In a conversational context that is power-arousing and race identity-relevant, the higher African Americans' implicit power motive, the more they engage Whites with the anxiety-provoking issue of the history of slavery. They appear to achieve this, at least partly, with an affiliation–warmth communication strategy. In Study 1, African Americans' implicit power motive was associated with using more affiliation and less achievement imagery in letters to White recipients after watching a documentary clip about the history of slavery but not a control clip. Power imagery was high for most participants and across both conditions. Study 2 revealed that after exposure to the slavery-topic clip but not the control clip, Whites were more engaged with information in a letter from an African American sender if it contained affiliation imagery. Consistent with past research (Dixon et al., 2005; Saguy et al., 2009), in the control condition, Whites responded with less action intent to affiliation versus no-affiliation letters. Remarkably, the risky combination of control clip plus high affiliation rarely occurred in Study 1. Instead, with few exceptions, African American participants expressed extremely low levels of affiliation imagery in the control condition. This finding suggests that high implicit power African Americans used a communication strategy that was effective for engaging Whites in a specific, shared context and refrained from using it in a context where it likely would be ineffective.

Study 3 replicated and extended the findings from Studies 1 and 2 in an interracial dyadic setting. When discussing controversial questions related to teaching about the history of slavery but not the environment, African Americans' implicit power motive predicted their warmth goal, nonverbal immediacy behaviors, and, to some extent, use of affiliation imagery. In the same condition, African Americans' implicit power motive also predicted their White partners' level of relaxation, and, for some of the questions, their memory of the discussion. Taken together, these findings suggest that African American participants with a high implicit power motive took advantage of the conversation context and/or the discussion topic focused on the history of slavery to increase Whites' engagement with this controversial topic.

Implications

Our findings suggest an interesting and novel extension of implicit motives theory—namely, that power motivation can be disguised in

expressions of affiliation and warmth. Most past research looked for expressions of the high implicit power motive in assertive, openly power-seeking behaviors—including escalating a crisis (Winter, 2007), achieving career success in managerial positions (Jenkins, 1994), holding political office (Winter, 1973, 1987), and verbal fluency, effective gesturing, and eyebrow lifts in dyadic discussion (Schultheiss & Brunstein, 2002). In our studies, the implicit power motive is associated with using affiliation and warmth. This strategy, which has not been examined in prior research, successfully impacts White partners insofar as it heightens their engagement with the important topic of past racial injustice.

Using an affiliation–warmth strategy to change people's views on important topics is consistent with past research. People attune their attitudes to the attitudes of people they like (Sinclair, Lowery, Hardin, & Colangelo, 2005). Past research shows that a message of acceptance from the victim group (Shnabel et al., 2013), self-affirmation triggered by an experimenter or a member of the stigmatized group (Cehajic-Clancy et al., 2011), invoking a common identity (Schmader, Croft, Whitehead, & Stone, 2013), and use of humor by a stigmatized group member (Focella, 2013)—all versions of the affiliation–warmth strategy—can effectively move members of perpetrator groups to change the status quo, acknowledge ingroup responsibility for past wrongdoing, support programs that strengthen the victim group, and reduce discrimination and prejudice. In all of these studies, the experimenters designed and tested the strategies based on their knowledge of social psychological research. Remarkably, in our studies, research participants, who are members of historic victim groups with a high implicit power motive, intuitively and spontaneously adopted a similar strategy.

In addition, while the implicit power motive is often associated with dark outcomes (including, e.g., conflict escalation; Langner & Winter, 2001), the current research is the first to suggest that the implicit power motive can play a role in promoting positive outcomes—in particular, conflict de-escalation and reconciliation. The current research is among the few studies examining the implicit power motive in members of a nondominant group. History shows numerous examples of dominant groups seeking to exert influence to perpetuate an unequal status quo. By contrast, nondominant groups have often sought influence to disrupt the regnant social or political order in furtherance of greater equality. The civil-rights movement in the United States provides a particularly instructive example. It is thus not surprising that, in focusing on the implicit power motive specifically in minority groups, our research sheds light on how individuals with a high implicit power motive can act in ways that de-escalate conflict and potentially promote positive outcomes for society.

Limitations

An important limitation of our research is that sample sizes across the studies are relatively small. African Americans constitute only 15% of enrolled college students in the United States (in 2012; U.S. Department of Education, National Center for Education Statistics, 2015), making recruitment challenging. Furthermore, the two-part structure of Studies 1 and 3 led to a loss of participants, as some subjects failed to complete both parts. This difficulty in achieving a large sample size may be one reason why few researchers study personality-based variability among ethnic and racial minority groups. Yet, this kind of research is of paramount importance for understanding both personality traits and

personality-based variations among minority groups. The conceptual replication of our main finding from Study 1 in Study 3 is encouraging. We hope future research will replicate the high power-affiliation effect and pursue other questions regarding personality-based variability among minority groups.

Future research should investigate two potential boundary conditions of our theory: conversation context and race of recipient. First, the race identity-relevant context in our studies featured a slavery clip in Study 1, and slavery as a discussion topic accompanied by newspaper articles in Study 3. In both instances, the presented materials emphasized the importance of the legacy of slavery for intergroup relations today, thus disrupting the mainstream narrative that tends to exclude the history of slavery (Alderman & Modlin, 2008; Loewen, 2000), and maximizing opportunities for impact. The affiliation–warmth effect might not emerge if the materials downplayed the importance of the history of slavery. If true, this would suggest that more full, accurate, and critical accounts of a history of injustice, like those presented in our studies, pave the way for amicable intergroup dialogues.

Second, it is unclear what communication strategies African Americans with a high implicit power motive might use in intragroup rather than intergroup discussions. Past research suggests that the affiliation–warmth strategy is effective for influencing Whites who experience anxiety and threat (Trawalter & Richeson, 2008). However, it may be less effective for intragroup situations where different processes are at play. To explore the generalizability of the affiliation–warmth strategy to intragroup settings, we conducted an archival study in which we coded for affiliation imagery in 40 speeches that President Obama, the first African American President of the United States, gave to predominately White versus predominately African American audiences. Past research shows that President Obama has an extraordinarily high implicit power motive (Winter, 2011), thus suggesting that he would use the communication strategy that would be most effective when speaking to these different audiences. Indeed, he used more affiliation imagery in speeches to predominately White audiences than predominantly African American audiences. This finding suggests that the effects we presented here are specific to intergroup contexts, but that they may generalize to the political context. Appendix B provides more information about this study.

The negative effect of affiliation imagery on action-intentions in Study 2 highlights that the effectiveness of the affiliation–warmth strategy for social change is extremely context-dependent. High implicit power motive African Americans appear to have the ability to recognize when use of the affiliation–warmth strategy will be effective. Yet, even in situations where it will likely be effective, some individuals might have a political motivation for preferring a more confrontational strategy.

In conclusion, integrating two formerly distinct research fields, implicit motives and intergroup relations, led us to two important insights: high implicit power motive individuals sometimes express their power motive in affiliation and warmth behaviors, and individual differences among members of nondominant groups shape intergroup interactions in profound and unexpected ways.

References

Alderman, D. H., & Modlin, A., Jr. (2008). (In)visibility of the enslaved within online plantation tourism marketing: A textual analysis of North Carolina websites. *Journal of Travel & Tourism Marketing, 25,* 265–281. http://dx.doi.org/10.1080/10548400802508333

Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology, 36,* 511–536. http://dx.doi.org/10.1002/ejsp.324

Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. *American Statistical Association, 103,* 1481–1495. http://dx.doi.org/10.1198/016214508000000841

Berlowitz, V., Fothergill, A., Hug-Jones, T., Keeling, J., Lemire, M., Malone, S. C., & Rennert, K. (Producers), & Fothergill, A. (Director). (2006). *Planet Earth: Mountains [Documentary].* London, United Kingdom: British Broadcasting Company.

Banfield, J. C., & Dovidio, J. F. (2013). White Americans' perception of discrimination against Blacks: The influence of common identity. *Journal of Experimental Psychology, 49,* 833–841.

Bergsieker, H. B., Shelton, J. N., & Richeson, J. A. (2010). To be liked versus respected: Divergent goals in interracial interactions. *Journal of Personality and Social Psychology, 99,* 248–264. http://dx.doi.org/10.1037/a0018474

Bernecker, K., & Job, V. (2011). Assessing implicit motives with an online version of the picture story exercise. *Motivation and Emotion, 35,* 251–266. http://dx.doi.org/10.1007/s11031-010-9175-8

Black Youth Project. (2012, March 1). Black 8th grader's essay comparing education system to slavery ignites outrage. *Black Youth Project.* Retrieved from http://www.blackyouthproject.com/2012/03/8th-grader-public-education-salvery-analogy/

Blake, M. (2011, June 23). Core curriculum. *The New Republic.* Retrieved from http://www.newrepublic.com/article/environment-and-energy/magazine/90545/nuclear-power-energy-industry-lobby-department-education-school

Bonilla-Silva, E. (2006). *Racism without racists: Color-blind racism and the persistence of racial inequality in the United States.* Lanham, MD: Rowman and Littlefield.

Bruneau, E., & Saxe, R. (2012). The power of being heard: The benefits of "perspective-giving" in the context of intergroup conflict. *Journal of Experimental Social Psychology, 48,* 855–866. http://dx.doi.org/10.1016/j.jesp.2012.02.017

Cacioppo, J. T., & Petty, R. E. (1981). Issue involvement as a moderator of the effects of advertising content and context. *Advances in Consumer Research Association for Consumer Research, 8,* 20–24.

Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues, 56,* 725–741. http://dx.doi.org/10.1111/0022-4537.00238

Carli, L. L., LaFleur, S. J., & Loeber, C. C. (1995). Nonverbal behavior, gender, and influence. *Journal of Personality and Social Psychology, 68,* 1030–1041. http://dx.doi.org/10.1037/0022-3514.68.6.1030

Cehajić-Clancy, S., Effron, D. A., Halperin, E., Liberman, V., & Ross, L. D. (2011). Affirmation, acknowledgment of in-group responsibility, group-based guilt, and support for reparative measures. *Journal of Personality and Social Psychology, 101,* 256–270. http://dx.doi.org/10.1037/a0023936

Cheryan, S., & Monin, B. (2005). "Where are you really from?" Asian Americans and identity denial. *Journal of Personality and Social Psychology, 89,* 717–730. http://dx.doi.org/10.1037/0022-3514.89.5.717

Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology, 40,* 61–149. http://dx.doi.org/10.1016/S0065-2601(07)00002-0

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44,* 113–126. http://dx.doi.org/10.1037/0022-3514.44.1.113

Derks, B., van Laar, C., & Ellemers, N. (2009). Working for the self or working for the group: How self-versus group affirmation affects col-

lective behavior in low-status groups. *Journal of Personality and Social Psychology, 96,* 183–202. http://dx.doi.org/10.1037/a0013068

Ditlmann, R. K., Mayville, E., & Purdie-Vaughns, V. (2013). Organizational and individual colorblindness approaches to past injustice. In V. Plaut, K. Thomas, & M. Tran (Eds.), *Diversity ideologies in organizations. Mahwah,* NJ: Erlbaum.

Dixon, J., Durrheim, K., & Tredoux, C. (2005). Beyond the optimal contact strategy: A reality check for the contact hypothesis. *American Psychologist, 60,* 697–711. http://dx.doi.org/10.1037/0003-066X.60.7.697

Dunton, B. C., & Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin, 23,* 316–326. http://dx.doi.org/10.1177/0146167297233009

Farrell, L. D., Gazit, C., James, D., & Pellett, G. (Producers and Directors). (2005). *Slavery and the making of America* [Documentary]. Grant, W. New York, NY: WNET 13.

Focella, E. S. (2013). *The elephant in the room: Using humor to acknowledge one's stigmatized identity and reduce prejudice* (Unpublished dissertation). University of Arizona, Tucson, AZ. Retrieved from http://arizona.openrepository.com/arizona/bitstream/10150/293595/1/azu_etd_12730_sip1_m.pdf

Fodor, E. M. (2009). Power motivation. In O. C. Schultheiss & J. C Brunstein (Eds.), *Implicit motives* (pp. 3–29). New York, NY: Oxford University Press Inc.

Gaines, S. O., & Reed, E. S. (1995). Prejudice: From Allport to DuBois. *American Psychologist, 50,* 96–103. http://dx.doi.org/10.1037/0003-066X.50.2.96

Greene, D. L., & Winter, D. G. (1971). Motives, involvements, and leadership among black college students. *Journal of Personality, 39,* 319–332. http://dx.doi.org/10.1111/j.1467-6494.1971.tb00045.x

Harvey, R. D., & Oswald, D. L. (2000). Collective guilt and shame as motivation for White support of Black programs. *Journal of Applied Social Psychology, 30,* 1790–1811. http://dx.doi.org/10.1111/j.1559-1816.2000.tb02468.x

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis.* New York, NY: The Guilford Press.

Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Personality and Social Psychology, 60,* 895–910. http://dx.doi.org/10.1037/0022-3514.60.6.895

Henry, C. P. (2003). The politics of racial reparations. *Journal of Black Studies, 34,* 131–152. http://dx.doi.org/10.1177/0021934703252212

Hibbard, L. (2012, August 1). Slavery examples used in Georgia school worksheet upsets parents. *The Huffington Post.* Retrieved from http://www.huffingtonpost.com/2012/01/08/examples-of-slavery-in-school-worksheet_n_1192512.html?ref=education

Jenkins, S. R. (1994). Need for power and women's careers over 14 years: Structural power, job satisfaction, and motive change. *Journal of Personality and Social Psychology, 66,* 155–165. http://dx.doi.org/10.1037/0022-3514.66.1.155

Langner, C. A., & Winter, D. G. (2001). The motivational basis of concessions and compromise: Archival and laboratory studies. *Journal of Personality and Social Psychology, 81,* 711–727. http://dx.doi.org/10.1037/0022-3514.81.4.711

Leach, C. W., Zeineddine, F. B., & Čehajić-Clancy, S. (2013). Moral immemorial: The rarity of self-criticism for previous generations' genocide or mass violence. *Journal of Social Issues, 69,* 34–53. http://dx.doi.org/10.1111/josi.12002

Leary, M. R. (2009). Affiliation, acceptance, and belonging: The pursuit of interpersonal connection. In S. Fiske, D. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed.).

Livingston, R. W., & Pearce, N. A. (2009). The teddy-bear effect: Does having a baby face benefit black chief executive officers? *Psychological Science, 20,* 1229–1236. http://dx.doi.org/10.1111/j.1467-9280.2009.02431.x

Livingston, R. W., Rosette, A. S., & Washington, E. F. (2012). Can an agentic Black woman get ahead? The impact of race and interpersonal dominance on perceptions of female leaders. *Psychological Science, 23,* 354–358. http://dx.doi.org/10.1177/0956797611428079

Loewen, J. W. (2000). *Lies across America.* New York, NY: Touchstone.

Lowery, B. S., Knowles, E. D., & Unzueta, M. M. (2007). Framing inequity safely: Whites' motivated perceptions of racial privilege. *Personality and Social Psychology Bulletin, 33,* 1237–1250. http://dx.doi.org/10.1177/0146167207303016

Matthews, G., Jones, D. M., & Chamberlain, A. G. (1990). Refining the measurement of mood: The UWIST mood adjective checklist. *British Journal of Psychology, 81,* 17–42. http://dx.doi.org/10.1111/j.2044-8295.1990.tb02343.x

McClelland, D. C. (1961). *The achieving society.* New York, NY: Free Press. http://dx.doi.org/10.1037/14359-000

McClelland, D. C. (1975). *Power: The inner experience.* New York, NY: Irvington.

McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review, 96,* 690–702. http://dx.doi.org/10.1037/0033-295X.96.4.690

Mehrabian, A. (1967). Orientation behaviors and nonverbal attitude communication. *Journal of Communication, 17,* 324–332. http://dx.doi.org/10.1111/j.1460-2466.1967.tb01190.x

Mendoza-Denton, R., Downey, G., Davis, A., Purdie, V. J., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology, 83,* 896–918.

Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research, 3,* 313–344. http://dx.doi.org/10.1007/BF01048081

Navarro, M., & Bhanoo, S. N. (2010, January 10). Teaching green, beyond recycling. *The New York Times.* Retrieved from http://www.nytimes.com/2010/01/11/nyregion/11green.html?_r=0

Nelson, J. C., Adams, G., & Salter, P. S. (2013). The Marley hypothesis: Denial of racism reflects ignorance of history. *Psychological Science, 24,* 213–218. http://dx.doi.org/10.1177/0956797612451466

Newshour, P. B. S. (2012, May 2). Teachers endure balancing act over climate change curriculum. *PBS Newshour Transcript.* Retrieved from http://www.pbs.org/newshour/bb/climate-change-jan-june12-teachclimate_05-02/

Norton, M. I., Sommers, S. R., Apfelbaum, E. P., Pura, N., & Ariely, D. (2006). Color blindness and interracial interaction: Playing the political correctness game. *Psychological Science, 17,* 949–953. http://dx.doi.org/10.1111/j.1467-9280.2006.01810.x

Pang, J. S. (2010). Content coding methods in implicit motive assessment: Standards of measurement and best practices for the picture story exercise. In O. C. Schultheiss & J. C. Brunstein (Eds.), *Implicit motives* (pp. 119–150). New York, NY: Oxford University Press Inc. http://dx.doi.org/10.1093/acprof:oso/9780195335156.003.0005

Pang, J. S., & Schultheiss, O. C. (2005). Assessing implicit motives in U.S. college students: Effects of picture type and position, gender and ethnicity, and cross-cultural comparisons. *Journal of Personality Assessment, 85,* 280–294. http://dx.doi.org/10.1207/s15327752jpa8503_04

Pearson, A. R., Dovidio, J. F., & Gaertner, S. L. (2009). The nature of contemporary prejudice: Insights from aversive racism. *Social and Personality Psychology Compass, 3,* 314–338. http://dx.doi.org/10.1111/j.1751-9004.2009.00183.x

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology, 19,* 123–205. http://dx.doi.org/10.1016/S0065-2601(08)60214-2

Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156–176. http://dx.doi.org/10.1177/074355489272003

Richeson, J. A., Trawalter, T., & Shelton, J. N. (2005). African American's implicit racial attitudes and the depletion of executive function after interracial interactions. *Social Cognition, 23,* 336–352.

Saguy, T., & Dovidio, J. F. (2013). Insecure status relations shape preferences for the content of intergroup contact. *Personality and Social Psychology Bulletin, 39,* 1030–1042. http://dx.doi.org/10.1177/0146167213487078

Saguy, T., Tausch, N., Dovidio, J. F., & Pratto, F. (2009). The irony of harmony: Intergroup contact can produce false expectations for equality. *Psychological Science, 20,* 114–121. http://dx.doi.org/10.1111/j.1467-9280.2008.02261.x

Samii, C. (January 25, 2016). *Inverse covariance weighing vs. factor analysis.* Retrieved from http://cyrussamii.com/?p=2177

Schmader, T., Croft, A., Whitehead, J., & Stone, J. (2013). A peak in the target's toolbox: How stigmatized targets deflect discrimination by invoking a common identity. *Basic and Applied Social Psychology, 35,* 141–149. http://dx.doi.org/10.1080/01973533.2012.746615

Schuldt, J. P., & Pearson, A. R. (2016). The role of race and ethnicity in climate change polarization: Evidence from a U.S. national survey experiment. *Climatic Change, 136,* 495–505. http://dx.doi.org/10.1007/s10584-016-1631-3

Schultheiss, O. C., & Brunstein, J. C. (1999). Goal imagery: Bridging the gap between implicit motives and explicit goals. *Journal of Personality, 67,* 1–38. http://dx.doi.org/10.1111/1467-6494.00046

Schultheiss, O. C., & Brunstein, J. C. (2002). Inhibited power motivation and persuasive communication: A lens model analysis. *Journal of Personality, 70,* 553–582. http://dx.doi.org/10.1111/1467-6494.05014

Schultheiss, O. C., & Brunstein, J. C. (2010). *Implicit motives.* New York, NY: Oxford University Press. http://dx.doi.org/10.1093/acprof:oso/9780195335156.001.0001

Schultheiss, O. C., Kordik, A., Kullmann, J. S., Rawolle, M., & Rösch, A. G. (2009). Motivation as a natural linchpin between person and situation. *Journal of Research in Personality, 43,* 268–269. http://dx.doi.org/10.1016/j.jrp.2008.12.018

Schultheiss, O. C., Wirth, M. M., & Stanton, S. J. (2004). Effects of affiliation and power motivation arousal on salivary progesterone and testosterone. *Hormones and Behavior, 46,* 592–599. http://dx.doi.org/10.1016/j.yhbeh.2004.07.005

Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A. J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2,* 18–39. http://dx.doi.org/10.1207/s15327957pspr0201_2

Shelton, J. N., Richeson, J. A., & Salvatore, J. (2005). Expecting to be the target of prejudice: Implications for interethnic interactions. *Personality and Social Psychology Bulletin, 31,* 1189–1202.

Shelton, N. (2000). A reconceptualization of how we study issues of racial prejudice. *Personality and Social Psychology Review, 4,* 374–390. http://dx.doi.org/10.1207/S15327957PSPR0404_6

Shnabel, N., Nadler, A., Ullrich, J., Dovidio, J. F., & Carmi, D. (2009). Promoting reconciliation through the satisfaction of the emotional needs of victimized and perpetrating group members: The needs-based model of reconciliation. *Personality and Social Psychology Bulletin, 35,* 1021–1030. http://dx.doi.org/10.1177/0146167209336610

Shnabel, N., Ullrich, J., Nadler, A., Dovidio, J. F., & Aydin, A. L. (2013). Warm or competent? Improving intergroup relations by addressing threatened identities of advantaged and disadvantaged groups. *European Journal of Social Psychology, 43,* 482–492.

Sidanius, J., Levin, S., Liu, J., & Pratto, F. (2000). Social dominance orientation, anti-egalitarianism and the political psychology of gender: An extension and cross-cultural replication. *European Journal of Social Psychology, 30,* 41–67. http://dx.doi.org/10.1002/(SICI)1099-0992(200001/02)30:1<41::AID-EJSP976>3.0.CO;2-O

Sieff, K. (2011, April 11). Va. teacher holds mock slave auction. *The Washington Post.* Retrieved from http://www.washingtonpost.com/local/education/va-teacher-holds-mock-slave-auction/2011/04/11/AFxZnsLD_story.html

SimanTov-Nachlieli, I., Shnabel, N., & Nadler, A. (2013). Individuals' and group's motivations to restore their impaired identity dimensions following conflicts: Evidence and implications. *Social Psychology, 44,* 129–137.

Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology, 89,* 583–592. http://dx.doi.org/10.1037/0022-3514.89.4.583

Smith, A. G. (2008). The implicit motives of terrorist groups: How the need for affiliation and power translate into death and destruction. *Political Psychology, 29,* 55–75. http://dx.doi.org/10.1111/j.1467-9221.2007.00612.x

Smith, C. P., Atkinson, J. W., McClelland, D. C., & Veroff, J. (1992). *Motivation and personality: Handbook of thematic content analysis.* New York, NY: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511527937

Thomsen, L., Green, E. G. T., Ho, A. K., Levin, S., van Laar, C., Sinclair, S., & Sidanius, J. (2010). Wolves in sheep's clothing: SDO asymmetrically predicts perceived ethnic victimization among white and Latino students across three years. *Personality and Social Psychology Bulletin, 36,* 225–238. http://dx.doi.org/10.1177/0146167209348617

Toosi, N. R., Babbitt, L. G., Ambady, N., & Sommers, S. R. (2012). Dyadic interracial interactions: A meta-analysis. *Psychological Bulletin, 138,* 1–27. http://dx.doi.org/10.1037/a0025767

Trawalter, S., & Richeson, J. A. (2008). Let's talk about race, baby! When Whites' and Blacks' interracial contact experiences diverge. *Journal of Experimental Social Psychology, 44,* 1214–1217. http://dx.doi.org/10.1016/j.jesp.2008.03.013

U.S. Department of Education, National Center for Education Statistics. (2015). *Digest of education statistics, 2013, chap. 3 (NCES 2015–011).* Retrieved from http://nces.ed.gov/pubs2015/2015011.pdf

Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious manhood. *Journal of Personality and Social Psychology, 95,* 1325–1339.

van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology, 87,* 649–664. http://dx.doi.org/10.1037/0022-3514.87.5.649

Winter, D. G. (1973). *The power motive.* New York, NY: Free Press.

Winter, D. G. (1987). Leader appeal, leader performance, and the motive profiles of leaders and followers: A study of American presidents and elections. *Journal of Personality and Social Psychology, 52,* 196–202. http://dx.doi.org/10.1037/0022-3514.52.1.196

Winter, D. G. (1991). Measuring personality at a distance: Development of an integrated system for scoring motives in running text. In D. J. Ozer, J. M. Healy Jr., A. J. Stewart (Eds.), *Perspectives in personality, Vol. 3: Part A: Self and emotion; Part B: Approaches to understanding lives* (pp. 59–89). London, England: Jessica Kingsley Publishers.

Winter, D. G. (1994). *Manual for scoring motive imagery in running text* (4th ed.). Unpublished manuscript.

Winter, D. (2002). Motivation and political leadership. In L. Valenty & O. Feldman (Eds.), *Political leadership for the new century: Personality and behavior among American leaders* (pp. 25–47). New York, NY: Cambridge University Press.

Winter, D. G. (2007). The role of motivation, responsibility, and integrative complexity in crisis escalation: Comparative studies of war and peace crises. *Journal of Personality and Social Psychology, 92,* 920–937. http://dx.doi.org/10.1037/0022-3514.92.5.920

Winter, D. G. (2010). Why achievement motivation predicts success in business but failure in politics: The importance of personal control.

Journal of Personality, 78, 1637–1667. http://dx.doi.org/10.1111/j .1467-6494.2010.00665.x

Winter, D. G. (2011). Philosopher-king or polarizing politician? A personality profile of Barack Obama. *Political Psychology, 32,* 1059–1081. http://dx.doi.org/10.1111/j.1467-9221.2011.00852.x

Wirth, M. M., Welsh, K. M., & Schultheiss, O. C. (2006). Salivary cortisol changes in humans after winning or losing a dominance contest depend on implicit power motivation. *Hormones and Behavior, 49,* 346–352. http://dx.doi.org/10.1016/j.yhbeh.2005.08.013

Wolsko, C., Park, B., & Judd, C. M. (2006). Considering the tower of Babel: Correlates of assimilation and multiculturalism among ethnic minority and majority groups in the United States. *Social Justice Research, 19,* 277–306. http://dx.doi.org/10.1007/s11211-006-0014-8

Appendix A

Letters Presented in Study 2

Table A1

Letter 1 Presented in Study 2

High affiliation	Low affiliation
Slavery was a dark period in American history. However, I would posit that it was also a bittersweet period. As the documentary stated, America has been a country of bondage longer than it's been a country of freedom. Yet, America is **also one of the richest countries in the world** *(Achievement-3)* because of my ancestors.	
I am a Black male, and I have heard many a story about how my ancestors were treated on the way from the West Coast of Africa across the Atlantic via the Middle Passage to the Americas. While watching this documentary, **it was disturbing to see the pain and utter despair that my people shouldered** *(Power-6)* as they built this country from the ground up, **propelling America into the international spotlight (Achievement-2). We were stripped of virtually all of our humanity, in the name of capitalism (Power-1)**. As W. E. B. Du Bois said in his speech at the Niagara Conference (early 1900s), we need to strive to make America the home of the brave, lest it become the "home of the slave."	
Now what does that say about America today, and the dialogue that occurs among Whites **whose ancestors may very well have enslaved mine and Blacks (Power-1)**? Well for one, I don't believe whatsoever that we live in a postracial society. I find that offensive whenever I hear that.	
Black people, and White people, have made many strides towards equality in this country throughout history *(Affiliation-3: the mention of both racial groups implies it was done together)*, but we all still have many miles to go before we sleep.[1] However, that being said, I do not think that Whites should have to feel encumbered with sorrow, or indebted towards Black people per se. My girlfriend[2] *(Affliation-1)* is in fact White and I don't look at her as some relic of past oppression. **However, I do realize that Blacks' disenfranchisement, subjugation, and ongoing repression is born out of slavery (Power-1 or 3)**. Slavery was the genesis of so much hate towards Blacks, divisiveness among Blacks (light-skinned niggers v. dark-skinned), and crimes against America in general; Whites and Blacks should be cognizant of these crimes and move forward as enlightened people. I implore you, my White friend[3] *(Affiliation-1)*, to always remember what went on in this country and be conscious of that when dealing with Black people someday. **Please don't buy the argument that slavery ended 150+ years ago, why can't Blacks get their acts together (Power-3)**? The answer is that the vestiges of slavery still exist in our society, and racial discrimination (against ALL races) is so entrenched in our system that we can't just turn a blind eye to it and move on like it's all good. We will all get to the mountaintop one day[4] *(Affiliation-3 if understood as MLK Jr. that racial equality means they will be able to sit down together at the table of brotherhood)* but we need to acknowledge and ALWAYS remember our past in order to reach that summit.	[1] [America has changed since slavery, but there is still a long way to go] [2] Deleted [My girlfriend is in fact White] and replaced with [I don't look at Whites as some relict of past oppression] [3] Deleted [4] [One day racial discrimination will be history.]

Note. Bolded portions were coded for power or achievement. Underlined portions were coded for affiliation. Numbers in parentheses next to highlighted areas refer to coding rule used. Bracketed notes indicate how affiliation images were modified to create stimuli for the no-affiliation condition.

(*Appendices continue*)

Table A2
Letter 2 Presented in Study 2

High affiliation	Low affiliation
One of the **most amazing things about [University] (Achievement-1)** is that we students come to this school with not only the expectation, but also the hope that we'll meet people[1] *(Affiliation-2, meeting people as in beginning a relationship, not simply in passing)* who are different from us. The multitude of extra-curriculars and cultural groups/houses make [University] a unique place, in that all students have the opportunity to fully appreciate other people's histories and experiences[2] *(Affiliation-2, appreciation is expression of positive feelings).* As an African American student here, I've loved how supportive of and interested in Black (African-American, African, Caribbean-American, etc.) culture many non-Black students are. Interracial relationships[3] *(Affiliation-1)* are far from rare, and most weekend parties/shows/etc. boast a gorgeously diverse mix of people. Now I am by no means trying to downplay the level of acceptance that [University] has managed to achieve[4] *(Affiliation-1, acceptance represents an affiliation goal),* but I wonder if there is a certain danger in having a carefree and, at times, "postracial" mindset at this school. Because we're all so happy to be here and so accepting[5] *(Affiliation-1),* people aren't having the difficult conversations about race, operating instead under the assumption that those conversations aren't necessary. I am currently in a rather diverse African-American history class. In section, our conversations often border on rather sticky topics, and I have noticed that as soon as the conversations reach this point, a student will try to change or dismiss the topic. However, I think it's necessary to push through those difficult points and examine the real issues that surround us. We are truly in a [University] bubble, and I think that the only way to move outside of it is to get to the point where we're talking about things that make us really uncomfortable. The fact is that we're not in a postracial society, and to believe so would be to ignore a host of issues that really need attention. **Only when we get to this point can we honestly begin to move forward (Achievement-1)**.	[1] [there will be people] [2] [all students have the opportunity to attend a large number of cultural activities] [3] [diversity on campus] [4] [diversity at University] [5] [Because of this mindset]

Note. Bolded portions were coded for power or achievement motivation. Underlined portions were coded for affiliation motivation. Numbers in parentheses next to highlighted areas explain which coding rule was used. For an overview over coding rules, refer to Table A1. Side notes indicate how affiliation motive images were altered or deleted to create stimuli for the no-affiliation condition.

Appendix B

Archival Study

This study tested the hypothesis that President Obama would use more affiliation imagery when speaking to a predominantly White versus predominantly African American audience. We adopted the archival analysis method used by Winter (2007). We identified speeches given by President Obama to either predominantly White or African American audiences. Speeches were matched according to type (e.g., eulogy, proclamation, university commencement, campaign speech). We selected 20 matched pairs of speeches (40 speeches total). A research assistant certified in motive coding coded all speeches for affiliation imagery and several potential moderator variables. Finally, we analyzed the usage of affiliation imagery to test if it differed significantly by type of audience. We predicted that President Obama would use more affiliation imagery when speaking to predominantly White versus African American audiences.

To test this hypothesis, we conducted independent samples *t* tests with type of audience as a grouping variable and number of affiliation images as outcome. To control for the varying speech lengths, the number of expressions coded for affiliation imagery was converted using the following formula: (Number of images scored/total number of words in speech) * average number of words across all speeches. Applying this formula produces an affiliation imagery score per 2,609 words (average number of words across all speeches). The *t* test confirmed our initial hypothesis: when speaking to predominantly White audiences, President Obama's affiliation imagery score was twice as large ($M = 10.26$, $SD = 5.62$) as when speaking to African American audiences ($M = 5.01$, $SD = 2.90$), $t(38) = 3.71$, $p < .001$.