

07-103

The Persuasive Appeal of Stigma

**Michael I. Norton
Elizabeth W. Dunn
Dana R. Carney
Dan Ariely**

Copyright © 2007 by Michael I. Norton, Elizabeth W. Dunn, Dana R. Carney, and Dan Ariely.

Working papers are in draft form. This working paper is distributed for purposes of comment and discussion only. It may not be reproduced without permission of the copyright holder. Copies of working papers are available from the author.

RUNNING HEAD: The Persuasive Appeal of Stigma

The Persuasive Appeal of Stigma

Michael I. Norton

Harvard Business School

Elizabeth W. Dunn

University of British Columbia

Dana R. Carney

Harvard University

Dan Ariely

Massachusetts Institute of Technology

Abstract

Stigmatized minorities may have an advantage in persuading majority group members during some face-to-face interactions due to the greater self-presentational demands such interactions elicit. In contrast to models which predict greater persuasive impact of members of ingroups, White participants were more convinced by persuasive appeals delivered by a Black interaction partner than by a White interaction partner. When interacting with a Black partner, Whites engaged in greater self-presentation, which in turn made them more susceptible to their partner's persuasive appeal (Studies 1 and 2). This persuasive benefit of stigma was eliminated when participants were exposed to the same partners making the same arguments on video, decreasing self-presentational demands (Study 2). We conclude by discussing when stigma is likely to facilitate versus impair persuasion.

The Persuasive Appeal of Stigma

Interactions between members of stigmatized groups and members of majority groups are among the most perilous social occasions in contemporary America, fraught with opportunities for things to go awry. Members of stigmatized groups may worry that the majority group member holds prejudiced attitudes, which can lead to discriminatory or offensive behavior; members of majority groups, on the other hand, may worry that stigmatized individuals may suspect them of holding such prejudiced attitudes, which can lead to damaging accusations of bias (such as being labeled racist). In short, interracial interactions can be highly problematic for members of both groups. Research on such interactions first focused on the many negative consequences for stigmatized individuals (e.g., Allport, 1954; Goffman, 1963; Jones et al., 1984), and has slowly moved to explore the difficulty such interactions can pose for members of both stigmatized and majority groups (e.g., Crosby, Bromley, & Saxe, 1980; Hebl & Mannix, 2003; Kurzban & Leary, 2001; see Crocker, Major, & Steele, 1998). In general, both of these areas of research have explored the negative aspects of such interactions, where mutual distrust and fear hinder smooth social exchange.

At the same time, a different line of investigation has suggested that stigma need not have negative consequences for the stigmatized in every case (see Crocker & Major, 1989). The apprehension that majority group members feel when interacting with members of different races – which unfortunately often serves as their rationalization to avoid or cut short interracial interactions – may in some situations have seemingly positive consequences for members of stigmatized groups, sometimes in quite counterintuitive ways. Shelton (2003), for example, showed that Whites who tried to be nonprejudiced while interacting with a Black person experienced greater anxiety than those who were not trying, and their Black interaction partners

liked them more for their efforts. Indeed, positive behavior toward members of stigmatized groups has been shown in domains ranging from higher rates of admittance to expensive restaurants when dressed inappropriately (Dutton, 1971) to overly positive feedback on writing samples (e.g., Harber, 1998; Hastorf, Northcraft, & Picciotto, 1979). These findings are generally traced to the notion that Whites' fear of appearing biased causes them to engage in greater efforts to convey a lack of bias (see Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006), rather than reflecting a true lack of bias.

What might be the consequences of White individuals' efforts to make a favorable impression in interracial interactions? We propose that the anxiety that members of majority groups feel during such interactions – and the increased self-presentational concerns that result – can lend members of stigmatized groups increased persuasive power, such that persuasive appeals from members of stigmatized groups are more effective than identical appeals from fellow members of majority groups. Nor do we expect that this appeal is limited to public displays of approval for stigma-relevant topics: While Kleck, Ono, and Hastorf (1966) showed that people express support for stigma-relevant issues in the presence of members of stigmatized groups, we expect that the impact of stigma will be evident even on stigma-irrelevant issues, and will affect individuals' private attitudes, measured after an interaction has ended and the stigmatized individual is no longer present. In the studies below, we demonstrate this increased persuasive power of stigmatized individuals in the context of interracial interactions between Black and White Americans, and further show that increased self-presentational concerns are specifically implicated in attitude change.

Interactions between Members of Majority and Minority Groups

Why are Whites so anxious during interracial interactions? With the advent of norms of

political correctness, many White Americans have become increasingly concerned with monitoring themselves for signs of prejudice (e.g., Gaertner & Dovidio, 1986; Plant & Devine, 2003), and these norms have taken hold to such an extent that even highly prejudiced individuals feel that they should be less prejudiced toward Blacks (Monteith & Walters, 1998). In addition, members of majority groups also believe that members of minority groups expect them to be prejudiced (Frantz, Cuddy, Burnett, Ray, & Hart, 2004; Vorauer, Main, & O'Connell, 1998), a belief that has some basis in fact (e.g., Massey, Charles, Lundy, & Fischer, 2003). At the same time, being – or at minimum being seen as – nonprejudiced is an important goal for many Whites (e.g., Plant & Devine, 1998; Sommers & Norton, 2006). This creates a kind of perfect storm for members of majority groups, whose concern with appearing free from bias is exacerbated by their belief that they are and will be seen as biased, concerns which likely come to a head during interactions with members of stigmatized groups, where the slightest gesture or stutter might be interpreted as evidence of prejudice. Thus, while members of majority groups may experience initial negative emotional reactions to members of stigmatized groups – with the accompanying costs that such reactions have for stigmatized individuals – this reaction may in some cases motivate them to be more concerned about how they actually treat members of such groups (see Pryor, Reeder, Yeadon, & Hesson-McInnis, 2004), leading them to experience heightened physiological and psychological anxiety (e.g., Britt, Boniecki, Vescio, Biernat, & Brown, 1996; Devine, Evett, & Vasquez-Suson, 1996; Ickes, 1984; Kleck & Strenta, 1980; Stephan & Stephan, 1985; see Hebl, Heatherton, & Tickle, 2000, for a review).

How do members of majority groups cope with this anxiety? One strategy – a continuing barrier to decreasing prejudice – is to keep interracial interactions brief, or avoid them altogether (e.g., Kleck & Strenta, 1980; Snyder, Kleck, Strenta, & Mentzer, 1979; Swim, Ferguson, &

Hyers, 1999), but avoidance is not always possible: on elevators, on trains, at social events, and in office environments, these interactions arise. When interacting with stigmatized individuals, then, majority group members are likely to strive to make such interactions go smoothly, attempting to convey their lack of bias by putting their best face forward in order to avoid appearing prejudiced (Norton et al., 2006; Shelton, 2003). Indeed, recent research has demonstrated that Whites motivated to hide their racial bias in interracial interactions can overcorrect for their bias and demonstrate overly positive nonverbal behavior when interacting with Blacks, to such an extent that Blacks rate Whites who score higher on implicit measures of racism more positively after interacting with them (Shelton, Richeson, Salvatore, & Trawalter, 2005). Such self-presentation on the part of Whites, designed to ensure that the potentially perilous interaction goes smoothly, may also produce other unintended consequences. In particular, if majority group members try to behave agreeably towards a stigmatized interaction partner, we suggest that they may end up actually agreeing with what the stigmatized individual says during the interaction, potentially producing genuine attitude change. Thus, if a stigmatized person makes a persuasive appeal during a face-to-face interaction, majority group members may be quite easily persuaded because of their own concern with appearing friendly and agreeable.

Groups Membership and Persuasion

Our hypothesis that members of majority groups are more persuaded by members of a stigmatized group (an outgroup) than by fellow members of the majority group (ingroup) stands in seeming contrast to several existing lines of research. Pool, Wood, and Leck (1998), for example, showed that college students can gain self-esteem when their attitudes are aligned with members of majority groups (e.g., other college students) – and lose it when they find their attitudes aligned with members of stigmatized groups (e.g., radical lesbian feminists). In general,

research has suggested that ingroups have a stronger impact on attitudes than outgroups (e.g., Mackie, Worth, & Asuncion, 1990; Norton, Monin, Cooper, & Hogg, 2003; Wilder, 1990);

Mackie et al. (1990) found that participants were more convinced by persuasive appeals from members of ingroups, and these effects were driven by increased attention to these appeals.¹

These general ingroup preference effects hold true for both White and Black perceivers (White & Harkins, 1994). For example, members of both races respond more positively to advertisements featuring actors of their own race (Whittler, 1991; Whittler & Spira, 2002).

Other research has suggested, however, that the relationship between race and persuasion may be more complicated and may depend in part on the quality of a persuasive appeal. White participants – particularly those low in prejudice – process persuasive messages more deeply when they believe these messages were written by a Black person than by a White person (Petty, Fleming, & White, 1999; White & Harkins, 1994). According to this perspective, strong arguments from a minority source should be more persuasive than strong arguments from a majority source, while weak arguments should be less persuasive coming from a minority versus majority group member. In contrast to this prediction, our self-presentation hypothesis suggests an across-the-board persuasive benefit for members of stigmatized groups; we argue that majority group members are motivated to behave positively during interactions with minorities and will therefore be susceptible to persuasive appeals made by minorities, even if the persuasive appeals are low in quality. The fact that our hypothesis places self-presentation as the driving force behind the impact of stigma necessarily leads to another prediction: persuasive appeals from members of stigmatized groups will only be more effective when an actual interracial interaction takes place. White and Harkins (1994) and Petty et al. (1999) used either photographs or labels to indicate race of source before presenting participants with persuasive messages,

thereby making it impossible to observe persuasion effects stemming from behavioral self-presentation during an interracial interaction. In the studies below we examine the impact of these different formats experimentally.

The Persuasive Appeal of Stigma

Two classic lines of research on attitudes support our hypothesis that increased efforts to self-present with members of stigmatized groups should produce greater susceptibility to persuasive appeals. First, a great deal of research has shown that attitude similarity promotes successful social interactions and relationships (e.g., Byrne, 1971; Byrne, Clore, & Smeaton, 1986), and individuals who are motivated to get along with an interaction partner are therefore likely to align their attitudes with their partner's (Davis & Rusbult, 2001); indeed, several theorists have proposed that this kind of social adjustive function is one of the primary components of attitudes (e.g., Katz, 1960; Smith, Bruner, & White, 1956). As we reviewed above, Whites may be highly motivated to get along with a Black interaction partner (Norton et al., 2006; Shelton et al., 2005), leading them to behave agreeably in response to a Black partner's persuasive appeal.

In addition, a second classic line of research demonstrates that simply behaving in an agreeable fashion during a persuasive appeal may make people more susceptible to genuine persuasion: Social demands to exhibit a particular attitude or emotion can promote the actual adoption of that attitude or emotion (e.g., Baumeister & Cooper, 1981; Dunn, Biesanz, Human, & Finn, in press; Schlenker & Weigold, 1992). More generally, because people infer their attitudes in part by observing their own behavior (Bem, 1972; Fazio, 1987), engaging in behavior that seems to *imply* support for something can lead to *actual* support as a result (see Albarracín & Wyer, 2000); one of the most cited studies in social psychology, for example, demonstrated

that acting as though one enjoyed a boring task caused individuals to like that task more (Festinger & Carlsmith, 1959). Countless studies have replicated this finding, showing that when people behave as though they support a given issue they come to endorse that position (see Harmon-Jones & Mills, 1999, and see Fazio, Zanna, & Cooper, 1977 for a review of self-perception and dissonance). Such effects may be particularly pronounced when this behavior is public (e.g., Baumeister & Tice, 1984), as is necessarily the case in interracial interactions. Thus, in the context of interracial interactions, Whites' self-presentational concerns may lead them to respond agreeably to their Black partner's arguments, and Whites may then interpret their own agreeable behavior as reflecting actual agreement with their partner's position.²

Overview

To test the hypothesis that elevated self-presentation concerns make Whites more susceptible to persuasive appeals from Black than White interaction partners, we conducted a study in which White participants interacted with either a Black or White confederate who delivered a persuasive appeal (Study 1). We predicted that participants would try harder to self-present with the Black versus White confederate and would therefore be more persuaded by the Black confederate's arguments. In Study 2, participants either interacted with Black or White confederates who delivered persuasive appeals, or watched these same appeals on video. According to our self-presentation hypothesis, the persuasive benefits of stigma emerge because of majority group members' efforts to behave positively during social interactions with minority group members; we therefore expected that the effects of race on persuasion in face-to-face interactions would be eliminated when participants merely watched these confederates on video.

Study 1: Face-to-Face Persuasive Appeals

Method

Overview. Participants interacted with either a Black or White confederate who delivered either strong or weak arguments in favor of instituting comprehensive exams at their university. Following this interaction, participants reported their attitudes toward comprehensive exams, as well as how hard they had tried to self-present during the interaction; in addition, we asked our confederates to rate participants' efforts to self-present. The experiment thus had a 2 (Race of Source: Black or White) X 2 (Argument Quality: strong or weak) between-participants design. In line with previous research, we expected that participants would be more persuaded by strong than weak arguments (Petty & Cacioppo, 1986). We also predicted, however, that participants would be more persuaded by Black versus White confederates, and that this persuasion would be linked to greater efforts to self-present with Black confederates. Because we expected participants to engage in greater self-presentational efforts with Black confederates regardless of argument strength, we predicted only two main effects, and no interaction.

Participants. Forty-four White female undergraduates at the University of Virginia (UVA) participated in return for partial course credit.

Procedure. Participants were recruited for a study on "Social Interaction." On arrival to the lab, participants signed consent forms and were introduced to the confederate, who was either a Black or White student posing as another participant. The experimenter explained that the study was designed to explore dynamics in social interactions, and that therefore the two students would be asked to interact, with one playing the role of "speaker" and other playing the role of "listener." Participants were told that in order to provide a framework for the interaction, the speaker would be asked to tell the listener their opinion on whether comprehensive exams – rigorous examinations that students would be required to pass in order to graduate – should be

instituted at the university. The students drew lots to determine their roles, but the lottery was rigged such that the real participant always drew the role of listener and the confederate drew the role of speaker. The experimenter told the confederate that she would have a few minutes to review a fact sheet regarding the issue and to think about her opinion before sharing it with the listener. The confederate was then led out of the room, supposedly to review the fact sheet. Meanwhile, the real participant completed a brief survey, which included demographic items. A few minutes later, the confederate returned, sat down across from the participant, explained that she was in favor of comprehensive exams, and then delivered five strong or five weak arguments. To ensure that the exchange felt like a real interaction, we deliberately made the script that confederates delivered informal and colloquial (see Appendix A for a complete transcript). Afterward, the confederate left the room and participants were asked to complete a packet of questionnaires; this post-experimental survey assessed support for comprehensive exams as well as participants' thoughts, feelings and behavior during the interaction. The confederate also rated the participant's behavior during the interaction.

Independent Variables

Confederate race. Two black female and two white female undergraduates served as confederates for the study. None of the confederates were aware that their race was a relevant variable in the study. We trained the confederates in mixed-race pairs and emphasized that it was important for the confederates to deliver the arguments in the same standardized way. The confederates watched each other's rehearsals and practiced behaving similarly.

Argument strength. The strong and weak arguments were modeled on those used by White and Harkins (1994; see also Petty & Cacioppo, 1986) with modifications made in order to suit casual, oral delivery and make the arguments more relevant to students at UVA (see

Appendix A). To ensure that the arguments did differ in quality, we asked a separate sample of 15 UVA undergraduates to rate all 10 arguments on a scale from (1) *very weak argument* to (5) *very strong argument*. On average, the strong arguments were seen as stronger ($M = 3.59$, $SD = .63$) than the weak arguments ($M = 2.28$, $SD = .53$), $t(14) = 7.10$, $p < .001$.

Dependent Variables

Attitude index. We used the same measures of attitudes toward comprehensive exams as Petty et al. (1999). Participants rated their agreement that comprehensive exams should be instituted on a scale ranging from (1) *do not agree at all* to (11) *agree completely*, then indicated their feelings toward comprehensive exams on four 7-point semantic differential scales anchored with the words *good-bad*, *beneficial-harmful*, *wise-foolish*, and *favorable-unfavorable*.

Following Petty et al. (1999), we standardized and averaged these five measures to create a composite attitude index (Cronbach's $\alpha = .90$).

Thought positivity. Participants next were given two minutes to list any thoughts and feelings they had about comprehensive exams during the interaction. After completing the thought-listing, participants were asked to go back and rate their statements as positive, neutral, or negative. Again following Petty et al. (1999), we created an index of thought positivity by subtracting the number of negative thoughts from the number of positive thoughts and dividing by the total number of thoughts.

Self-presentation: Participant reports. According to Baumeister (1982), people engage in self-presentation to satisfy the related motives of pleasing their audience and constructing their public self to match their ideal self. In the context of interracial interactions, Whites can both please their audience (the Black interaction partner) and re-affirm their non-prejudiced self-image by engaging in self-presentational behavior directed toward seeming likable and making

the interaction go smoothly. Thus, to measure participants' self-presentation during the interaction, we asked them to rate their agreement with seven statements related to trying to seem likable (e.g., "I made an effort to put my best face forward during the interaction") and trying to make the interaction go well (e.g. "I wanted the interaction to go smoothly"). Participants rated their agreement with each item on a scale ranging from (1) *strongly disagree* to (7) *strongly agree*. Averaging these items created a single-factor, reliable measure of self-presentation (Cronbach's $\alpha = .78$).

Self-presentation: Confederate reports. Finally, we wanted to assess whether our confederates were able to detect participants' public efforts to act agreeably. Given other research suggesting that positive behaviors such as head-nodding are associated with increased persuasion (e.g., Brinol & Petty, 2003; Wells & Petty, 1980), we asked our confederates to rate each participant on three dimensions: Frequency of smiling, frequency of nodding, and frequency of expressing verbal agreement. For each dimension, confederates had three response options: *never*, *occasionally*, or *frequently*. We coded these response options as 0, 1 and 2, respectively, and averaged them to create a composite measure.

Results

Attitudes. We submitted the attitude index to a 2 (race of source: Black or White) X 2 (argument quality: strong or weak) ANOVA. Not surprisingly, participants reported significantly more positive attitudes toward comprehensive exams after listening to the strong arguments ($M = .41$, $SD = .61$) versus the weak arguments ($M = -.37$, $SD = .91$), $F(1, 40) = 11.52$, $p < .002$. More importantly, however, we also observed a significant main effect of race of source, $F(1, 40) = 4.29$, $p < .05$; as predicted, participants held more positive attitudes toward comprehensive exams after listening to a Black person argue in favor of the proposal ($M = .25$, $SD = .86$) than

after listening to a White person make the same argument ($M = -.23, SD = .82$).³ There was no evidence of a Race of Source X Argument Quality interaction, $F(1, 40) = .06, ns$ (see Figure 1).

Thought positivity. While the thought positivity index was related to our composite measure of support for comprehensive exams, $r(42) = .42, p < .01$, this measure was not influenced by our manipulations; there were no main effects of race of source or argument quality, and no interaction, all F 's < 1 . Thus this classic measure of the processes underlying attitude change did not track with the strong effects for attitude change we described above.

Self-presentation: Participant reports. Importantly, however, and as predicted, our measures of self-presentation did so. We submitted the self-presentation index to the same ANOVA as above. This revealed only the expected main effect of race, whereby participants reported trying harder to self-present with the Black confederate ($M = 5.91, SD = .58$) than with the White confederate ($M = 5.28, SD = .78$), $F(1, 40) = 8.94, p < .005$. There was no main effect of argument quality, and no interaction, F s < 1 .

Self-presentation: Confederate reports. Also as predicted, our confederates did note more agreeable behavior by participants interacting with Black confederates ($M = 1.35, SD = .48$) than with White confederates ($M = .94, SD = .48$), $F(1, 40) = 7.56, p < .01$. As with participants' reports of self-presentation, there was no main effect of argument quality, and no interaction, F s < 1 . These confederate ratings of agreeability were significantly correlated with participants' self-reported efforts at self-presentation, $r(44) = .30, p < .03$, suggesting that these self-reports of self-presentation are – literally – face valid, while also showing that participants' increased efforts to be agreeable were overt enough to be detected by observers.

Mediation. As in Study 1, participant self-reports and confederate ratings of self-presentation were significantly correlated, $r(27) = .40, p < .05$. Because confederate ratings and

self-reported ratings were correlated, we created an overall measure of self-presentation by standardizing and averaging them. We expected that interacting with a Black (versus White) confederate would lead participants to engage in greater positive self-presentation, which would in turn lead them to agree more with the confederate's position in favor of comprehensive exams. Following Baron and Kenny (1986), we tested this mediational hypothesis by first entering race of source, argument quality, and the two-way interaction into a regression predicting attitudes toward comprehensive exams. As in the previous analysis, race of source significantly predicted attitudes, $\beta = .28, p < .05$. Next, we found that race of source predicted self-presentation (the presumed mediator), $\beta = .50, p < .001$, and that self-presentation in turn predicted positive attitudes toward exams, $\beta = .33, p < .04$. Finally, in the last step, we simultaneously entered self-presentation along with race of source, argument quality, and the Race of Source X Argument Quality interaction into a regression predicting attitudes. In this analysis, race of source was no longer a significant predictor of attitudes, $\beta = .13, p = .40$, while self-presentation remained a marginally significant predictor, $\beta = .30, p = .056$, suggesting that self-presentation mediates the impact of race on persuasion.

Discussion

Replicating previous investigations, we showed that participants were more persuaded by strong than weak arguments; more interestingly, we demonstrated the persuasive impact of stigma, showing that Black confederates were more persuasive than White confederates. Consistent with our prediction, the effect of race on persuasion was mediated by participants' efforts to self-present, as indexed by both self-reports and confederate ratings. Importantly, participants reported their attitudes in private, after the interaction had ended and the confederate had left the room, suggesting that the differences in attitudes we observed are not merely due to

public compliance such as a desire to appear politically correct in front of a stigmatized individual.

Why did race influence persuasion? At first glance, it seems possible that White participants may have been more persuaded by the Black confederates because the cross-race interaction imposed distraction or cognitive load; interracial interactions can be both stressful and cognitively demanding for members of majority groups (e.g., Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001; Hyers & Swim, 1998; Richeson et al., 2003). Such an account, however, would predict an interaction between confederate race and argument quality, such that participants would be more likely to differentiate between strong and weak arguments under low (i.e., interacting with a White confederate) than under high (i.e., interacting with a Black confederate) distraction, as in previous investigations (e.g., Petty, Wells, & Brock, 1976). Given the absence of any evidence for the Race of Source X Argument Quality interaction predicted by the cognitive load account, our self-presentational account for the appeal of stigma seems to provide a better account.

Study 2: Face-to-Face vs. Videotaped Persuasive Appeals

Our self-presentational account draws important support from our analysis in Study 1 which revealed that participants' self-presentation during the interaction mediated the effect of race on persuasion. To further demonstrate the importance of these self-presentational concerns in driving the increased persuasive impact of stigmatized individuals, in Study 2 we altered the self-presentational demands endemic to face-to-face interaction. As in Study 1, we asked some participants to interact with Black and White confederates, expecting to replicate the increased persuasive impact of Black over White confederates in such interactions; in addition, however, we asked some participants simply to watch Black and White confederates deliver appeals on

videotape, expecting this manipulation to eliminate the difference in persuasive appeal of Black and White confederates.

This design allows us to demonstrate the important role of self-presentation via moderation – Black confederates are expected to be more persuasive only in face-to-face interactions – but also allows a closer examination of the mediating mechanisms underlying these effects: *How* does self-presentation lead to attitude change? Previous work suggests that self-presentation contains both private and public elements – individuals are motivated to present themselves both to others and to themselves in a positive light (Greenwald & Breckler, 1985). Both private and public efforts at self-presentation have been observed in the domain of stereotypes and prejudice. As demonstrated in Study 1, face-to-face interactions with members of stigmatized groups can lead to visible, *public* self-presentation efforts. In addition, Whites have been shown to engage in *private* self-presentation even when minority sources will not be met; for example, merely attaching a picture to other materials can cause Whites to be vigilant to bias (Petty et al., 1999), leading them to provide more positive ratings of such individuals in an effort to appear unbiased to themselves (e.g., Crosby & Monin, in press; Harber, 1998; 2004).

We suggest that private self-presentational efforts – rating minorities more positively than members of majority groups – are not sufficient to induce the type of attitude change we observed in Study 1, but that such attitude change requires the kinds of public behaviors shown to impact persuasion – such as nodding and expressing agreement (Brinol & Petty, 2003; Wells & Petty, 1980) – that occur in face-to-face interactions. In short, while we might expect White participants to rate Black speakers more highly than White speakers whether they view them on video or interact face-to-face as a form of *private* self-presentation, only when coupled with

public self-representation – those behaviors that occur only in face-to-face interactions – do we predict differences in persuasive appeal of Black and White sources.

Method

Overview. Participants were either assigned to interact with or watch a video of a Black or White confederate who delivered arguments in favor of instituting comprehensive exams at their university; we used only the strong arguments from Study 1, since the effect of race was similar for strong and weak arguments. The experiment thus had a 2 (race of source: Black or White) X 2 (format: interaction or video) between-participants design. We expected participants to be more persuaded by a Black than a White confederate when interacting face-to-face with that confederate, replicating Study 1, but predicted that this effect of confederate race on attitudes would be eliminated in the video condition. In addition, we expected that self-presentational concerns would again mediate the impact of confederate race on attitude change in face-to-face interactions.

Participants. Seventy-six White undergraduates (42 females) at Harvard University participated in return for partial course credit or payment.

Procedure. Participants assigned to the interaction condition followed the same procedure as in Study 1; they were randomly assigned to interact with a Black or White confederate who was asked to tell the listener her opinion on whether comprehensive exams should be instituted at their university. After the interaction, the confederate again left the room while participants were asked to complete a post-experimental survey as the “last part of the experiment” (in order to ensure that they knew they would not interact with the confederate again). Confederates – in this study, four White and two Black female undergraduates – again rated the participant’s behavior on a number of dimensions.

Participants in the video condition watched a video of a Black or White student delivering these same arguments; to create these tapes, we recorded two of our confederates while they delivered the arguments to two randomly drawn participants in the interaction condition. After watching the video, participants completed the same post-experimental survey.

Dependent Variables

Attitude index. As in Study 1, we used the same measures of attitudes toward comprehensive exams as Petty et al. (1999), standardizing and averaging the five measures to create a composite attitude index (Cronbach's $\alpha = .94$).

Thought positivity. As before, participants were given two minutes to list any thoughts and feelings they had about comprehensive exams, then rated their statements as positive, neutral, or negative, from which we created the same index of thought positivity.

Private self-presentation. In order to assess participants' private self-presentational efforts – their ratings of minority sources (Harber, 1998) – participants rated their agreement with seven statements taken from Rubin's (1970) Liking Scale (e.g., "Most people would react very favorably to the other participant after a brief acquaintance"). Participants rated their agreement with each item on a scale ranging from (1) *strongly disagree* to (7) *strongly agree*; we created a composite measure (Cronbach's $\alpha = .92$).

Public self-presentation. In addition, we assessed participants' visible efforts to self-present, by assessing our confederates' impressions of their behavior. Confederates rated participants' frequency of nodding and frequency of expressing verbal agreement; as in Study 1 we averaged these to create a composite measure.

Results

Attitudes. We submitted the composite attitude measure to a 2 (race of source: Black or White) X 2 (format: interaction or video) ANOVA. As predicted, we observed a significant interaction, $F(1, 72) = 6.54, p < .02$. Replicating Study 1, participants were significantly more persuaded by Black ($M = .59, SD = .77$) than White ($M = -.20, SD = .98$) confederates in face-to-face interactions, $t(29) = 2.31, p < .03$. In contrast, there was no difference in persuasion for participants who watched the confederates on video, $t(43) = 1.11, ns$; if anything, participants were more persuaded by White ($M = .06, SD = .82$) than Black ($M = -.22, SD = .86$) confederates. There were no main effects of source or format, $ps > .18$ (see Figure 2).

Thought positivity. As in Study 1, while the thought positivity index was related to our composite measure of support for comprehensive exams, $r(68) = .75, p < .001$, this measure was not influenced by our manipulations; there were no main effects of race of source or argument quality, and no interaction, all $ps > .13$.

Private self-presentation. First, we observed an unsurprising main effect of format such that participants reported greater liking for the confederate when they interacted ($M = 4.71, SD = .94$) versus viewed them on video ($M = 3.75, SD = 1.23$), $F(1, 70) = 16.77, p < .001$; as in other investigations, the excitement of meeting a stranger face-to-face led to increased liking for that person (e.g., Darley & Berscheid, 1967; Norton, Frost, & Ariely, 2007). More importantly, we observed the predicted effect for race of confederate on private self-presentation, such that participants reported greater liking for Black confederates ($M = 4.67, SD = 1.24$) than White confederates ($M = 3.84, SD = 1.09$), $F(1, 70) = 12.31, p < .01$. This greater liking for Black confederates held both in the interaction condition (Black: $M = 5.40, SD = .72$; White: $M = 4.34, SD = .83$), $t(29) = 3.54, p < .01$ and in the video condition (Black: $M = 4.19, SD = 1.29$; White:

$M = 3.46$, $SD = 1.13$), $t(41) = 1.97$, $p = .056$), such that there was no interaction mirroring our results for persuasion, $F < 1$.

Thus as in previous work, evaluations of minority sources were more positive (Harber, 1998; 2004), regardless of format. Our account suggests that this increased liking, however, is not sufficient to induce attitude change absent the behaviors that occur in face-to-face interactions. In line with this reasoning, this measure of private self-presentation was associated with persuasion only in the interaction condition, $r(31) = .43$, $p < .02$, and not in the video condition, $r(43) = .13$, $p = .39$.

Public self-presentation. What accounts for the fact that liking for the source of a persuasive appeal leads to greater persuasion only when that communication is made face-to-face? We suggest that liking is not sufficient to induce attitude change absent the increased public self-presentation participants exhibit when interacting with Black confederates. Importantly, as in Study 1, our confederates did note more agreeable behavior by participants interacting with Black confederates ($M = 2.00$, $SD = .50$) than with White confederates ($M = 1.68$, $SD = .37$), $t(29) = 2.06$, $p < .05$.

Mediation. Did these public self-presentational efforts, coupled with the private self-presentational efforts we observed in ratings of confederates, predict persuasion? Confederate ratings of public and participant reports of private self-presentation were correlated, $r(31) = .34$, $p = .06$, so we standardized and averaged them to create an overall composite measure. As in Study 1, we expected that interacting with a Black (versus White) confederate would lead to greater self-presentation, which would in turn lead to persuasion. Race of source significantly predicted attitudes, $\beta = .39$, $p < .03$, and predicted the mediator, self-presentation, $\beta = .55$, $p < .01$, while self-presentation in turn predicted positive attitudes toward exams, $\beta = .48$, $p < .01$.

When we entered self-presentation along with race of source into a regression predicting attitudes, race of source was no longer a significant predictor of attitudes, $\beta = .19, p = .35$, while self-presentation remained a marginally significant predictor, $\beta = .38, p = .06$ (Baron & Kenny, 1986), suggesting that – as in Study 1 – self-presentation mediated the impact of race on persuasion in face-to-face interactions.

Discussion

As we expected, removing the self-presentational demands present in Study 1 by showing our Black and White confederates delivering arguments on video eliminated the persuasive impact of stigma, such that Black and White sources were equally persuasive. When participants interacted with these confederates, however, we again observed greater persuasive impact by Black confederates. In addition, measuring both private and public self-presentation (Greenwald & Breckler, 1985) allowed us to explore more fully the mechanism underlying the increased persuasive appeal of stigmatized sources; while private self-presentation – liking for the speaker – did vary by race of confederate, only when coupled with public self-presentation – nodding and expressing agreement – did this self-presentation induce changes in attitudes.

One obvious alternative explanation for our lack of a persuasion effect in the video condition is simply that participants did not pay as close attention to the videos as they did during interactions. Results from an additional study suggest that a lack of attention is unlikely to account for the lack of difference in persuasion. Participants ($N = 24$) watched a video of a Black or White student delivering either strong or weak arguments. As in Study 2, participants reported similar attitudes toward comprehensive exams after watching videos of Black ($M = .06, SD = .94$) and White confederates ($M = -.10, SD = .85$), $F(1, 20) = .02, p = .90, \eta_p^2 = .00$. We did, however, observe a main effect for argument strength, $F(1, 20) = 10.07, p < .005, \eta_p^2 = .34$;

participants were more persuaded by strong ($M = .58$, $SD = .51$) than weak arguments ($M = -.49$, $SD = .87$). The fact that we observed a significant effect of argument quality suggests that participants are attending to the content of the videotapes, but simply are not differentially impacted by confederate race under these conditions.⁴

Finally, in Study 1 we suggested that increased cognitive load was unlikely to account for the difference in persuasion when interacting with Black versus White confederates because participants were able to distinguish between strong and weak arguments when interacting with both confederates. We further assessed a possible role of cognitive load in Study 2 by asking participants in the interaction condition to recall the arguments the confederate delivered, then asking an independent coder to check these reports for accuracy. Were participants under greater load during interactions with Black than White confederates, we might expect their memory for these arguments to be impaired (e.g., Baddeley, 1986, 1996; Macrae, Bodenhausen, Schloerscheidt, & Milne, 1999). We found, however, that memory was strikingly similar: Participants remembered the same number of correct arguments when interacting with White ($M = 4.90$) and Black ($M = 5.27$) confederates, made the same number of errors when recalling those arguments (White $M = .40$, Black $M = .36$), and even used the same number of words to describe the arguments (White $M = 51.3$, Black $M = 51.7$), all $t_s < 1$. The fact that participants are both able to distinguish between strong and weak arguments (Study 1) and remember the arguments equally well (Study 2) when interacting with Black and White confederates suggest that a cognitive load explanation may not provide the best account for our results.

General Discussion

The present studies demonstrate a novel and counterintuitive way in which stigma shapes social interactions: Members of stigmatized groups can have greater persuasive impact due to the

heightened self-presentational concerns experienced by members of majority groups in such situations. Our results demonstrate that majority group members are more susceptible to such persuasive appeals because of self-presentation concerns that are unique to real, face-to-face interactions with members of stigmatized groups. In Study 1, a face-to-face persuasive appeal was more effective in convincing White participants when delivered by a Black versus White interaction partner. Mediation analyses revealed that this effect of race on persuasion stemmed from White participants' self-presentational concerns; when participants interacted with a Black student, they were more concerned about making a positive impression and engaged in greater self-presentation, which in turn made them more susceptible to their partner's persuasive appeal. In Study 2, we eliminated the persuasive impact of stigma by removing the self-presentational demands inherent in face-to-face interactions; participants were exposed to the same confederates making the same arguments on video, rather than in person, a change that was sufficient to eliminate differences in persuasion. Study 2 further demonstrated that mere liking for members of stigmatized groups – a form of private self-presentation – is not sufficient to induce attitude change absent accompanying efforts at public self-presentation in face-to-face interactions.

Self-presentation and Self-regulation

An emerging body of research has explored the ways in which the demanding nature of stressful social interactions can deplete executive function, and impair subsequent attempts at self-regulation (e.g., Finkel et al., 2006; Vohs, Baumeister, Ciarocco, 2005), including investigations examining the impact on Whites of interracial interactions (e.g., Richeson et al., 2003; Richeson & Trawalter, 2005). Indeed, one line of research specifically showed that the extent to which Whites attempted to control their behavior in interracial interactions predicted

this decrease in self-regulation (Richeson & Shelton, 2003) – reminiscent of Whites’ efforts in our Studies 1 and 2 to nod and express agreement with Black confederates. Might self-regulation be a mediating mechanism underlying our findings? We have shown that interactions with Blacks lead Whites to engage in self-presentation, which in turn predicts the extent to which they are persuaded by that source; Wheeler, Brinol, and Hermann (2007) have shown that engaging in tasks which deplete self-regulatory resources leads to greater susceptibility to persuasive communications. It is thus possible, and even likely, that self-regulation in some sense mediates the relationship between our mediator – self-presentation – and our primary dependent measure, persuasion. One could imagine, for example, a socially skilled individual who engaged in positive self-presentation in an interracial interaction but was not depleted– or persuaded – as a result. Future research is needed to continue to explore the relationship between social interaction, self-presentation, and executive function, as well as their impact on the quality of interracial contact.

Alternative Explanations

As mentioned earlier, some research has suggested that race can serve as a cue for increased message processing, due to Whites’ fear of appearing prejudiced, and that this increased processing drives persuasion (e.g., Petty et al., 1999; White & Harkins, 1994). These previous studies, however, manipulated the race of the source of the persuasive appeal using photographs or racial labels attached to written persuasive appeals. Our Study 1 shows that Blacks had a persuasive advantage due to Whites’ enhanced efforts to self-present – and importantly, we show that this effect was dependent on the medium in which the message was presented in Study 2. If race simply serves as a cue for increased processing, then the confederate’s race should have had similar effects across the face-to-face and video conditions in

Study 2, since the same Black and White confederates delivered the same arguments in both conditions. In contrast, our self-presentation hypothesis uniquely predicts that the effect of race should vary depending on whether an actual interaction takes place, as was indeed the case. Indeed, the fact that our measures of thought positivity – a standard mediator in persuasion studies – do not track with our attitude effects may reflect the differences in process between persuasive appeals delivered in face-to-face interaction compared with less socially intense formats. The present studies might be reconciled with past research by a levels-of-analysis approach, moving from category labels and photographs attached to written persuasive appeals, to spoken persuasive appeals viewed on videotape, to the most stressful situation of all: face-to-face interaction. Future studies can address this levels-of-analysis question by varying all three levels – photograph, video, and face-to-face interaction – in one study to explore the impact of race across these media, an understanding of which has implications for how persuasive appeals are designed, for example, in print vs. media vs. door-to-door marketing efforts.

Another explanation for our results is that participants may have experienced an expectancy violation when confronted with a Black student arguing in favor of comprehensive exams, given that Blacks are stereotypically viewed as having difficulty with challenging academic tests. Indeed, Black confederates may have been seen as arguing against their self-interest, which has been shown to lead to greater persuasive impact (Eagly, Wood, & Chaiken, 1978) due in part to such arguments being more surprising (Petty, Fleming, Priester, & Feinstein, 2001). Again, however, this explanation would predict equivalent results across both formats in Study 2: A Black student arguing in favor of comprehensive exams should be surprising both in person and on videotape. Thus while expectancy violation can be a powerful motivator for attitude change, it does not provide a plausible account for our pattern of results.

The Limited Appeal of Stigma

Our results suggest that stigmatized individuals can have surprising persuasive power in some social interactions, echoing recent conceptualizations which move from viewing stigmatized individuals as passive targets to active agents in interracial interactions (see Shelton, 2000; Shelton & Richeson, 2006), and in line with several other investigations which reveal apparent benefits of stigma in social interactions due to Whites' fear of appearing biased (e.g., Dutton, 1971; Shelton et al., 2005). Of course, these results do not suggest that stigma provides power in all situations. Countless studies have demonstrated the negative impact of bias against members of stigmatized groups, as in recent studies which demonstrated discrimination against minorities in both housing and medical care (Green et al., 2007; Turner et al., 2007; see Fiske, 1998; Major & O'Brien, 2005, for extensive reviews), while only a relative handful have revealed preferences toward such individuals (see Aberson & Ettlín, 2004). One clear limiting factor on the kinds of effects we observe here is the fact that members of majority groups generally either avoid or cut short interactions with stigmatized individuals (e.g., Kleck & Strenta, 1980), meaning there is generally not enough time for any power to reveal itself. Still another factor likely to limit the power of stigma is status: While participants and confederates in our studies were of equal status – college undergraduates randomly assigned to speak or listen – such interactions in the real world frequently are between actors of different status, a factor likely to reduce or eliminate any power that stigma might afford (see Pettigrew, 1998; Pettigrew & Tropp, 2006).

Finally, our investigation focused on one stigmatized group – Black Americans – but not all stigmas are created equal. For example, distinctions have been drawn between visible and invisible stigmas (Goffman, 1963) and between biological and social stigmas (see Phelan, 2002). We suggest that one overlooked distinction is crucial in understanding the impact of stigma: The strength of social norms dictating the acceptability of bias against a given stigmatized group (see Crandall, Eshleman, & O'Brien, 2002). While openly expressing negative views towards some groups (e.g., Black Americans and disabled individuals) is highly proscribed, many stigmatized groups are still open to criticism or ridicule (e.g., the obese). The persuasive power of stigma observed in the present research is likely to extend to groups in the former category, but not to those in the latter. More broadly, the strength of political correctness norms pertaining to a given group may be a critical determinant both of the extent to which people try to self-present when interacting with members of that group and of the subsequent social power members of such groups may experience as a result.

A different metric for thinking about the relative appeal of stigma is thinking about to which topics this appeal might extend: While our results show that members of stigmatized groups may be more persuasive in face-to-face interactions than members of majority groups on an issue unrelated to their status, would stigmatized individuals be more persuasive on stigma-relevant issues? Some research suggests that this might be the case. As mentioned earlier, Kleck et al. (1966) showed that people were likely to express more favorable attitudes toward the disabled when in the presence of disabled individuals; more recently, von Hippel and Gonsalkorale (2005) showed that White students were more likely to eat a chicken foot (described as a Chinese dish) when asked to do so by an Asian confederate than a White confederate. These studies assessed public compliance in the presence of a stigmatized

confederate – rather than the private shifts in attitudes we observe in Study 1 – but taken together do suggest that stigmatized individuals can have an impact on stigma-related issues. Affirmative action, which pits stigma against self-interest, would be an interesting test case, with the increased persuasive appeal of stigmatized groups (Blacks arguing in favor of affirmative action) vying for impact against the increased persuasive appeal of those arguing against their self-interest (Whites arguing in favor of affirmative action). Such a design would allow measurement of the relative contributions of both effects.

We end with one possible reason why stigma may be *more* persuasive than expected, at least in equal status interracial interactions. People resist persuasive appeals to the extent that they are aware that they are the target of one (e.g., Friestad & Wright, 1994; Petty & Cacioppo, 1977; Wood & Quinn, 2003); if our participants are unaware of the persuasive impact of stigma, they may not be as primed to counterargue. Indeed, one of the classic studies in social psychology suggests that people can underestimate the extent to which they will act positively towards members of minority groups: When Richard LaPiere visited 250 establishments across the United States with a Chinese couple in the early 1930's, the three were refused service only once, yet when LaPiere contacted each of the establishments and asked them about their policy toward Chinese patrons, some 92% claimed that they would refuse service (LaPiere, 1934). In an additional study, we assessed White college undergraduates' ($N = 57$) intuitions of the impact of stigma on persuasion by describing the procedure from Study 1 and asking them to predict by whom they would be more persuaded and with whom they would try harder to make the interaction go well: a Black student, a White student, or neither. Just 14% of participants predicted that they would be more persuaded by the Black confederate with the vast majority (77%) predicting no difference; in addition, just 21% predicted greater effort with Black partners

while the vast majority (75%) again predicted no difference, $\chi^2s > 48.10$, $ps < .001$. Of course, these results may themselves reflect self-presentational concerns, with individuals loathe to draw distinctions between individuals of different status. However, when we asked these same participants to make the same predictions about interactions with attractive or unattractive students – groups that vary on a different status dimension – fully 60% admitted they would try harder with attractive students and 63% thought they would be more persuaded by the attractive students (while just 35% and 33% predicted no difference), $\chi^2s > 23.68$, $ps < .001$. These results suggest that Whites indeed may be unaware of the impact of some stigmas on their attitudes and behavior.

Does Positive Self-Presentation Indicate a Lack of Bias?

Our White participants reported trying harder to behave positively while interacting with Blacks, and confederate ratings confirmed that this was so; at first glance, then, these findings seem to conflict with previous research demonstrating that subtle anti-Black prejudice remains rampant and predicts negative behavior during interracial interactions (e.g., Dovidio, Kawakami, & Gaertner, 2002; Fazio, Jackson, Dunton, & Williams, 1995; McConnell & Liebold, 2001; Word, Zanna, & Cooper, 1974). Yet previous research also indicates that Whites' perceptions of their own behavior during interracial interactions are driven primarily by their more overt behaviors, rather than by their less controlled behaviors (Dovidio et al., 2002). In the context of a persuasive appeal, our participants – concerned with making a positive impression – nodded and expressed agreement with our Black confederates; at the same time, however, these participants may have neglected to exhibit positive behavior through less controlled channels (e.g., posture, fidgeting). This possibility suggests that it would be interesting to assess a wide range of participants' verbal and nonverbal behaviors – varying on the dimension of controllability –

during persuasive appeals from Black and White partners. In addition, measuring our participants' levels of implicit and explicit prejudice would also be fruitful. Because explicit prejudice predicts Whites' self-perceived behavior during interracial interactions (Dovidio et al., 2002) and self-perceived behavior during a persuasive appeal predicts attitude change (Study 1), we would expect our basic findings to hold for the large population of Whites who are low in explicit prejudice but possess varying levels of implicit prejudice. Beyond explicit prejudice level, people who are highly motivated to control prejudice (Dunton & Fazio, 1997; Plant & Devine, 1998) may be especially prone to engage in positive self-presentation when interacting with stigmatized individuals and therefore may be particularly swayed by persuasive appeals from minorities.

Methodological Implications

A great deal of research has explored the differences between face-to-face interaction and communication via other media, often focusing on the consequences for forming and maintaining relationships (see Walther, 1992); we extend this work by demonstrating how dynamics between members of different social groups can be altered through removal from face-to-face interaction. While far from a practical solution to the issues surrounding difficulty in interactions between members of stigmatized and majority groups, results from Study 2 do suggest that the dynamics in such encounters may be fluid and open to change depending on the medium in which such exchanges are conducted. Thus, the present research highlights the notion that important processes unique to real, face-to-face interactions can shape behavior toward stigmatized individuals—processes that cannot be observed in studies that substitute labels, photographs, or videos for real interactions (see also Chaiken & Eagly, 1983).

As such, the present studies have implications for the ways in which psychologists approach the study of stereotypes, prejudice, and discrimination, an approach which has deemphasized exploring discrimination – behavior towards members of stigmatized groups – in favor of understanding stereotypes and prejudice – attitudes and emotions towards members of such groups (see Hebl & Dovidio, 2005). To take one example, Kunda, Davies, Adams, and Spencer (2002) showed that while stereotypes of African-Americans may be salient immediately following exposure to such an individual, this activation can dissipate over time unless some event (such as disagreement with a Black target) triggers reactivation. In these studies, however – which are admirable in their effort to track stereotype activation across time as it occurs in the real world – participants viewed the Black actor on video, as in our Study 2. Note that had we conducted these studies using only video, we would have concluded that Black and White sources were equal in persuasive impact. Indeed, many studies which have explored stigma and persuasion have used résumés with attached pictures to examine the impact of stigmatized sources, and much of the work exploring stereotypes necessarily uses photographs or category labels (e.g., Fazio et al., 1995; Greenwald, McGhee, & Schwartz, 1998), including some of the authors' own work (e.g., Norton, Vandello, & Darley, 2004). Our results suggest that these kinds of studies, while extremely useful in understanding the content of and processes underlying stereotyping and prejudice, should be used in tandem with studies of actual interactions in an effort to best understand the impact of stereotypes and prejudice on everyday social life (see Shelton & Richeson, 2006).

Conclusion

The present research demonstrates that stigmatized minorities may sometimes have an edge in persuading majority group members during face-to-face interactions; these findings

contribute to the growing recognition that stigma may be a two-sided construct, marked with a host of costs but occasional benefits. Our self-presentation hypothesis also reflects and reinforces a recent shift in understanding race relations; rather than viewing Whites' anti-Black prejudice as the central force in interracial behavior, Whites' *concern* over appearing prejudiced has also become an agent shaping race relations in America. Indeed, the stigma of being labeled racist may in some situations be potent enough to promote an ironic power reversal in some interracial interactions, such that Whites assume the more solicitous role typically associated with stigmatized minorities – though we hasten to add that the discomfort that accompanies such efforts may simply constitute yet another problem for members of stigmatized groups to manage in these already difficult situations. More generally, the hypothesis that motivating people to self-present leads them to be more persuaded suggests a fruitful avenue for further research. Finally, the present research underscores the need to examine social interactions in order to understand the dynamics of stigma in real world contexts, from organizations to interpersonal relationships, to the frequent fleeting encounters between members of majority and stigmatized groups explored here.

References

- Aberson, C.L. & Ettlin, T.E. (2004). The aversive racism paradigm and favoring African Americans: Meta-evidence of two types of favoritism. *Social Justice Research, 17*, 25-46.
- Albarracín, D. & Wyer, R.S. (2000). The cognitive impact of past behavior: Influences on beliefs, attitudes and future behavioral decisions. *Journal of Personality and Social Psychology, 79*, 5-22.
- Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Perseus.
- Alvaro, E.M. & Crano, W.D. (1997). Indirect minority influence: Evidence for leniency in source evaluation and counterargumentation. *Journal of Personality and Social Psychology, 72*, 949-64.
- Baddeley, A. (1986). *Working memory*. Oxford, England: Oxford University Press.
- Baddeley, A. (1996). Exploring the central executive. *Quarterly Journal of Experimental Psychology, 49*, 5-28.
- Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin, 91*, 3-26.
- Baumeister, R. F., & Cooper, J. (1981). Can the public expectation of emotion cause that emotion? *Journal of Personality, 49*, 49-59.
- Baumeister, R.F. & Tice, D.M. (1984). Role of self-presentation and choice in cognitive

- dissonance under forced compliance: Necessary or sufficient causes? *Journal of Personality and Social Psychology*, 46, 5-13.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, (Vol. 6, pp. 1-62). New York: Academic Press.
- Blascovich, J., Mendes, W.B., Hunter, S.B., Lickel, B., & Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology*, 80, 253–267.
- Brinol, P. & Petty, R.E. (2003). Overt head movements and persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, 84, 1123–1139.
- Britt, T.W., Boniecki, K.A., Vescio, T.K., Biernat, M. & Brown, L.M. (1996). Intergroup anxiety: A person X situation approach. *Personality and Social Psychology Bulletin*, 22, 1177-1188.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Byrne, D., Clore, G. L., & Smeaton, G. (1986). The attraction hypothesis: Do similar attitudes affect anything? *Journal of Personality & Social Psychology*, 51, 1167-1170.
- Chaiken, S. (1979). Communicator physical attractiveness and persuasion. *Journal of Personality and Social Psychology*, 37, 1387-1397.
- Chaiken, S. & Eagly, A.H. (1983). Communication modality as a determinant of persuasion: The role of communicator salience. *Journal of Personality and Social Psychology*, 45, 241-256.
- Crandall, C.S, Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, 82, 359-378.

- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, *96*, 608-630.
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, 4th edition (pp. 504-553). New York: McGraw-Hill.
- Crosby, F., Bromley, S., & Saxe, L. (1980). Recent unobtrusive studies of Black and White discrimination and prejudice: A literature review. *Psychological Bulletin*, *87*, 546-563.
- Crosby, J.R. & Monin, B. (in press). Failure to warn: How student race affects warnings of potential academic difficulty. *Journal of Experimental Social Psychology*.
- Darley, J.M. & Berscheid, E. (1967). Increased liking caused by the anticipation of personal contact. *Human Relations*, *20*, 29-40.
- Davis, J. L., & Rusbult, C. E. (2001). Attitude alignment in close relationships. *Journal of Personality and Social Psychology*, *81*, 65-84..
- Devine, P.G., Evett, S.R., & Vasquez-Suson, K.A. (1996). Exploring the interpersonal dynamics of intergroup contact. In R.M. Sorrentino & E.T. Higgins (Eds.), *Handbook of motivation and cognition: The interpersonal context* (Vol. 3, pp. 423–464). New York: Guilford Press.
- Dovidio, J.F., Kawakami, K., & Gaertner, S.L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, *82*, 62-68.
- Dunn, E. W., Biesanz, J.C., Human, L. J., & Finn, S. (in press). Misunderstanding the affective consequences of everyday social interactions: The hidden benefits of putting one's best face forward. *Journal of Personality and Social Psychology*.
- 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.
- Dutton, D.G. (1971). Reactions of restauranters to Blacks and Whites violating restaurant dress requirements. *Canadian Journal of Behavioural Science*, 3, 298-302.
- Eagly, A.H., Wood, W., & Chaiken, S. (1978). Causal inferences about communicators and their effect on opinion change. *Journal of Personality and Social Psychology*, 36, 424-435.
- Fazio, R. H. (1987). Self-perception theory: A current perspective. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 129-150). Hillsdale, N.J.: Erlbaum.
- Fazio, R.H., Jackson, J.R., Dunton, B.C. & Williams, C.J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology*, 69, 1013-1027.
- Fazio, R. H., Zanna, M. P., & Cooper, J. (1977). Dissonance and self-perception: An integrative view of each theory's proper domain of application. *Journal of Experimental Social Psychology*, 13, 464-479.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58, 203-210.
- Finkel, E.J., Campbell, W.K., Brunell, A.B., Dalton, A.N., Scarbeck, S.J., & Chartrand, T.L. (2006). High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology*, 91, 456-475.
- Fiske, S.T. (1998). Stereotyping, prejudice, and discrimination. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, 4th edition (pp. 357-414). New York: McGraw-Hill.
- Frantz, C.M., Cuddy, A.J.C., Burnett, M., Ray, H., Hart, A. (2004). A threat in the computer:

- The race Implicit Association Task as a stereotype threat experience. *Personality and Social Psychology Bulletin*, 30, 1611-1624.
- Friestad, M. & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21, 1-31.
- Gaertner, S.L. & Dovidio, J.F. (1986). The aversive form of racism. In J. F. Dovidio, & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61-89). Orlando, FL: Academic Press.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice Hall.
- Green, A. R., Carney, D. R., Pallin, D. J., Ngo, L. H., Raymond, K. L., Iezzoni, L., & Banaji, M. R. (2007). The presence of implicit bias in physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine*.
- Greenwald, A.G. & Breckler, S.J. (1985). To whom is the self presented? In B.R. Schlenker (Ed.), *The self and social life* (pp. 126-145). New York: McGraw-Hill.
- Greenwald, A.G., McGhee, D.E., & Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74, 1464-1480.
- Harber, K.D. (1998). Feedback to minorities: Evidence of a positive bias. *Journal of Personality and Social Psychology*, 74, 622-628.
- Harber, K.D. (2004). The positive feedback bias as a response to out-group unfriendliness. *Journal of Applied Social Psychology*, 34, 2272-2297.
- Harmon-Jones, E. & Mills, J. (Eds.) (1999). *Cognitive dissonance: Progress on a pivotal theory in social psychology*. Washington, DC: American Psychological Association.

- Hastorf, A. H., Northcraft, G. B., & Picciotto, S. R. (1979). Helping the handicapped: How realistic is the performance feedback received by the physically handicapped. *Personality and Social Psychology Bulletin*, *5*, 373-376.
- Hebl, M.R. & Dovidio, J.F. (2005). Promoting the “social” in the examination of social stigmas. *Personality and Social Psychology Review*, *9*, 156-182.
- Hebl, M., Heatherton, T. F., & Tickle, J. (2000). Awkward moments in interactions between nonstigmatized and stigmatized individuals. In T. F., Heatherton, Kleck, R. E., Hebl, M. R., & Hull, J. G. (Eds.). *Stigma: Social psychological perspectives* (pp. 273-306). New York: Guilford Publications, Inc.
- Hebl, M.R. & Mannix, L.M. (2003). The weight of obesity in evaluating others: A mere proximity effect. *Personality and Social Psychology Bulletin*, *29*, 28-38.
- Hyers, L.L. & Swim, J.K. (1998). A comparison of the experiences of dominant and minority group members during an intergroup encounter. *Group Processes and Intergroup Relations*, *1*, 143-163.
- Ickes, W. (1984). Compositions in black and white: Determinants of interaction in interracial dyads. *Journal of Personality and Social Psychology*, *47*, 330–341.
- Jones, E.E., Farina, A., Hastorf, A.H., Markus, H., Miller, D.T., & Scott, R.A. (1984). *Social stigma: The psychology of marked relationships*. New York: W. H. Freeman & Company.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, *24*, 163-204.
- Kleck, R., Ono, H., & Hastorf, A.H. (1966). The effects of physical deviance upon face-to-face interaction. *Human Relations*, *19*, 425-436.

- Kleck, R.E. & Strenta, A. (1980). Perceptions of the impact of negatively valued physical characteristics on social interaction. *Journal of Personality and Social Psychology*, 39, 861-873.
- Kunda, Z., Davies, P.G., Adams, B.D., & Spencer, S.J. (2002). The dynamic time course of stereotype activation: Activation, dissipation, and resurrection. *Journal of Personality and Social Psychology*, 82, 283–299.
- Kurzban, R. & Leary, M.R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin*, 127, 187-208.
- LaPiere, R.T. (1934). Attitudes vs. actions. *Social Forces*, 13, 230-237.
- Link, B.G. & Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 363-385.
- Mackie, D.M., Worth, L.T., & Asuncion, A.G. (1990). Processing of persuasive in-group messages. *Journal of Personality and Social Psychology*, 58, 812-822.
- Macrae, C. N., Bodenhausen, G. V., Schloerscheidt, A. M., & Milne, A. B. (1999). Tales of the unexpected: Executive function and person perception. *Journal of Personality and Social Psychology*, 76, 200–213.
- Major, B. & O'Brien, L.T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393-421.
- Massey, D.S., Charles, C.Z., Lundy, G.F., & Fischer, M.J. (2003). *The source of the river: The social origins of freshman at America's selective colleges and universities*. Princeton, NJ: Princeton University Press.
- McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test,

- discriminatory behavior, and explicit measures of racial attitudes. *Journal of Experimental Social Psychology*, 37, 435-442.
- Monteith, M.J. & Walters, G.L. (1998). Egalitarianism, moral obligation, and prejudice-related personal standards. *Personality and Social Psychology Bulletin*, 24, 186-199.
- Norton, M.I., Frost, J.H., & Ariely, D. (2007). Less is more: The lure of ambiguity, or why familiarity breeds contempt. *Journal of Personality and Social Psychology*, 92, 97-105.
- Norton, M.I., Monin, B., Cooper, J., & Hogg, M.A. (2003). Vicarious dissonance: Attitude change from the inconsistency of others. *Journal of Personality and Social Psychology*, 85, 47-62.
- 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.
- Norton, M.I., Vandello, J.A., & Darley, J.M. (2004). Casuistry and social category bias. *Journal of Personality and Social Psychology*, 87, 817-831.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85.
- Pettigrew, T.F. & Tropp, L.R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783.
- Petty, R.E. & Cacioppo, J.T. (1977). Forewarning, cognitive responding, and resistance to persuasion. *Journal of Personality and Social Psychology*, 35, 645-655.
- Petty, R.E. & Cacioppo, J.T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Petty, R.E., Fleming, M.A., Priester, J.R., & Feinstein, A.H. (2001). Individual versus group

- interest violation: Surprise as a determinant of argument scrutiny and persuasion. *Social Cognition, 19*, 418-442.
- Petty, R.E., Fleming, M.A., & White, P.H. (1999). Stigmatized sources and persuasion: Prejudice as a determinant of argument scrutiny. *Journal of Personality and Social Psychology, 76*, 19-34.
- Petty, R.E., Wells, G.L., & Brock, T.C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus effort justification. *Journal of Personality and Social Psychology, 34*, 874-884.
- Phelan, J.C. (2002). Genetic bases of mental illness – a cure for stigma? *Trends in Neurosciences, 25*, 430-431.
- Plant, E. A. & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology, 75*, 811-832.
- Plant, E. A., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin, 29*, 790-801.
- Pool, G.J., Wood, W., & Leck, K. (1998). The self-esteem motive in social influence: agreement with valued minorities and disagreement with derogated minorities. *Journal of Personality and Social Psychology, 75*, 967-975.
- Pryor, J.B., Reeder, G.D., Yeadon, C., & Hesson-McInnis, M. (2004). A dual-process model of reactions to perceived stigma. *Journal of Personality and Social Psychology, 87*, 436-452.
- Richeson, J. A., Baird, A. A., Gordon, H. L., Heatherton, T. F., Wyland, C. L., Trawalter, S., & Shelton, J. N. (2003). An fMRI examination of the impact of interracial contact on executive function. *Nature Neuroscience, 6*, 1323-1328.

- Richeson, J. A. & Shelton, J. N. (2003). When prejudice does not pay: Effects of interracial contact on executive function. *Psychological Science, 14*, 287-290.
- Richeson, J. A. & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology, 88*, 934-947.
- Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology, 16*, 265-273.
- Schlenker, B.R. & Weigold, M.F. (1992). Interpersonal processes involving impression regulation and management. *Annual Review of Psychology, 43*, 133-168.
- Shelton, J.N. (2000). A reconceptualization of how we study issues of racial prejudice. *Personality and Social Psychology Review, 4*, 374-390.
- Shelton, J.N. (2003). Interpersonal concerns in social encounters between majority and minority group members. *Group Processes and Intergroup Relations, 6*, 171-185.
- Shelton, J. N., & Richeson, J. A. (2006). Interracial interactions: A relational approach. *Advances in Experimental Social Psychology, 38*, 121-181.
- Shelton, J.N., Richeson, J.A., Salvatore, J., & Trawalter, S. (2005). Ironic effects of racial bias during interracial interactions. *Psychological Science, 16*, 397-402.
- Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality*. New York: Wiley.
- Snyder, M.L., Kleck, R.E., Strenta, A., & Mentzer, S.J. (1979). Avoidance of the handicapped: An attributional ambiguity analysis. *Journal of Personality and Social Psychology, 37*, 2297-2306.
- Sommers, S.R. & Norton, M.I. (2006). Lay theories about White racists: What constitutes racism (and what doesn't). *Group Processes and Intergroup Relations, 9*, 117-138.

- Stephan, W.G., & Stephan, C.W. (1985). Intergroup anxiety. *Journal of Social Issues, 41*, 157–175.
- Swim, J. K., Ferguson, M. J., & Hyers, L. L. (1999). Avoiding stigma by association: Subtle prejudice against lesbians in the form of social distancing. *Basic and Applied Social Psychology, 21*, 61-68.
- Turner, M.A., Freiberg, F., Godfrey, E., Herbig, C., Levy, D.K., & Smith, R.R. (2002). *All other things being equal: A paired testing study of mortgage lending institutions*. Washington, D.C.: The Urban Institute.
- Vohs, K.D., Baumeister, R.F., & Ciarocco, N.J. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful self-presentation depletes regulatory resources. *Journal of Personality and Social Psychology, 88*, 632-657.
- von Hippel, W. & Gonsalkorale, K. (2005). “That is bloody revolting!”: Inhibitory control of thoughts better left unsaid. *Psychological Science, 16*, 497-500.
- Vorauer, J.D., Main, K.J., & O’Connell, G.B. (1998). How do individuals expect to be viewed by members of lower status groups? Content and implications of meta-stereotypes. *Journal of Personality and Social Psychology, 75*, 917-937.
- Walther, J.B. (1992). Interpersonal effects in computer-mediated interaction – a relational perspective. *Communication Research, 19*, 52-90.
- Wells, G. L. & Petty, R. E. (1980). The effects of overt head movements on persuasion: Compatibility and incompatibility of responses. *Basic and Applied Social Psychology, 1*, 219–230.
- Wells, G. L. & Windshitl, P. D. (1999). Stimulus sampling and social psychological

- experimentation. *Personality and Social Psychology Bulletin*, 25, 1115-1125.
- Wheeler, S. C., Briñol, P., & Hermann, A. (2007). Resistance to persuasion as self-regulation: Ego-depletion and its consequences for attitude change processes. *Journal of Experimental Social Psychology*, 43, 150–156
- White, P.H. & Harkins, S.G. (1994). Race of source effects in the elaboration likelihood model. *Journal of Personality and Social Psychology*, 67, 790-807.
- Whittler, T.E. (1991). The effects of actors' race in commercial advertising: Review and extension. *Journal of Advertising*, 20, 54-60.
- Whittler, T.E. & Spira, J.S. (2002). Model's race: A peripheral cue on advertising messages? *Journal of Consumer Psychology*, 12, 291-301.
- Wilder, D.A. (1990). Some determinants of the persuasive power of in-groups and out-groups: Organization of information and attribution of independence. *Journal of Personality and Social Psychology*, 59, 1202-1213.
- Wood, W., Lundgren, S., Ouellette, J., Busceme, S., & Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, 115, 323–45.
- Wood, W. & Quinn, J.M. (2003). Forewarned and forearmed? Two meta-analytic syntheses of forewarning of influence appeals. *Psychological Bulletin*, 129, 119-138.
- Word, C. O., Zanna, M. P., & Cooper, J. (1974). The nonverbal mediation of self-fulfilling prophecies in interracial interaction. *Journal of Experimental Social Psychology*, 10, 109-120.

Author Note

Michael I. Norton, Harvard Business School, Harvard University; Elizabeth W. Dunn, Department of Psychology, University of British Columbia; Dana R. Carney, Department of Psychology, Harvard University, Dan Ariely, Sloan School of Management, Massachusetts Institute of Technology.

The first two authors contributed equally to this article. The authors thank Jamie Barden, Robyn Mallett, Jolie Martin, Leif Nelson, Todd Rogers, Nicole Shelton, and Sam Sommers for their helpful comments on an earlier version of this manuscript, and Heather Dotzler, Julie Duncan, Rebecca Dyer, Cecilia Ekperi, Beth Mela, Katherine Mims, Melissa Shields and Ashley Witt for their assistance in conducting the experiments.

Correspondence concerning this article should be addressed to Michael I. Norton, Harvard Business School, Soldiers Field Road, Boston, MA, 02163, or to Elizabeth W. Dunn, Department of Psychology, University of British Columbia, Vancouver, British Columbia V6T 1Z4. Electronic mail may be sent to mnorton@hbs.edu or edunn@psych.ubc.ca.

Footnotes

1. Research on “minority influence” has demonstrated that ingroup minorities can be persuasive (e.g., Alvaro & Crano, 1997; see Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994 for a review); in these paradigms, however, “minority” generally refers to those who hold a minority *opinion* – a low consensus or rare attitude – rather than minority *status* (e.g., stigma). In this paper, we use the word “minority” to refer to stigmatized status rather than popularity of opinion.

2. In a seemingly unrelated line of research, highly attractive sources have been shown to be more persuasive in interactions (e.g., Chaiken, 1979). We suggest that the persuasive impact of attractive sources and stigmatized sources may arise in part from the same mechanism: increased efforts to self-present.

3. This experiment was conducted over two semesters and we employed different Black and White confederates during each semester. To test whether the results were consistent across semesters using our different confederates, we conducted a subsidiary analysis in which semester was entered as an additional independent variable. The main effects of race and argument quality remained significant with semester included in the model, p s < .05, and semester did not interact with either of these variables, F s < 1. We used a new set of six confederates in Study 2, and again results were consistent across confederates, offering support for the generalizability of these results (see Wells & Windshitl, 1999).

4. In addition, the confederates we used in this study were those we used in Study 1 (and therefore different from those we used in the video condition of Study 2). The fact that we again

see no difference in persuasion by race suggests that this null effect in the video format is not simply due to the specific confederates we chose.

Appendix A: Confederate Scripts

Introduction Preceding Arguments

Hey. Ok, so I guess I'm just supposed to tell you what I think about this proposal to start giving fourth-years comprehensive exams. Umm... I've heard a little about this and I actually do have a pretty strong opinion about it, especially after reading the fact sheet. I really think UVA should institute comprehensive exams.

Strong Arguments

(Scan sheet) Ummm... Oh, one of the points that I really liked was, um, that Duke University recently started using the comprehensive exams and they found, that um... (look at sheet) grades went up like a (glance at sheet) 31% since then, whereas other schools that don't have the exam only had like (glance at sheet) an 8% increase in grades.

(Scan sheet) Ummm... Another cool thing to keep in mind is how, um, a lot of schools who have started this comprehensive exam thing have eliminated finals for fourth-years in their final semester. The idea is, uh, that this will give students time to review core requirements for their major in order to pass comprehensive exam.

(Scan sheet) Aahhhh.... Let's see, one of the statistics shows that you would be more likely to get into grad school if UVA did this. Um, it said how Harvard Law, for example, really likes to see undergrads who have passed these comprehensive exams.

(Scan sheet) Humm, okay well, there are statistics that show that alumni donations have increased after implementing these exams, showing that alumni are really pushing for colleges to use this higher standard of testing. So, not only could UVA graduates probably really benefit from these tests but, um, the school itself is more likely to get more money from alumni if they start it.

(Pause and look at sheet) Aaahhh... Oh here's an interesting fact: employers are more likely to offer higher starting salaries for, um, people who graduate from schools with the comprehensive exams. The average starting salary is something like \$4000 more than if you don't take the exam. Uh, along the same lines, the chances of landing a good job are 55% greater. So, it seems pretty clear to me that UVA should start having students take comprehensive exams.

Weak Arguments

(Scan sheet) Ummm... So, one of the points that I really liked was, that, Princeton and Harvard have just approved the institution of comprehensive exams beginning with the class of 2007 was it? (look at sheet) Yeah 2007. So, if public schools like UVA want to stay at the same level as the Ivy leagues, then they probably need to make the comprehensive exam a requirement for their students as well.

(scan sheet) Umm... Another cool thing to keep in mind is how, um, the comprehensive exam would provide a standard measure for comparing achievement across universities nationwide. So for example we would be able to compare our scores with, um, maybe Berkley's scores and then we would really see which one is the number one public school in the country.

Ahhhh... Let's see... (scans sheet for a second or two) one of the facts on the sheet says that the National Scholarship (glance at sheet)... The National scholarship Achievement Board did a study that showed that certain levels of anxiety leads to motivation in students. After they started the comprehensive exams at Duke University, there was like a (glance at sheet) 31% increase in anxiety I think but at other schools without the exam, there was only like (glance at sheet) an 8% increase in anxiety. Because Duke students did well on the test run of the comprehensive exam, school officials say that the test scores are due to the rise in motivation because of that anxiety.

(Pause and look a sheet) Aaaahh... Another reason there should be comprehensive exams is that in order to get your masters or your PhD you have to take a comprehensive exam so it totally makes sense that in order to earn your Bachelor's degree a comparable test should be given.

(scan sheet) Huuummm... Oh, here's an interesting fact: the son of IBM's vice president wrote an article in his college newspaper that pointed out that comprehensive exams date back to Ancient Greece. So... like Plato and Aristotle felt that comprehensive exams were the best way of measuring intelligence. It would be worth it to follow this tradition. Since UVA is based on tradition and all and this would probably be an important tradition to maintain. So, it seems pretty clear to me that UVA should start having students take comprehensive exams.

Figure 1.

White participants are more persuaded by strong than weak arguments, and by Black than White confederates (Study 1).

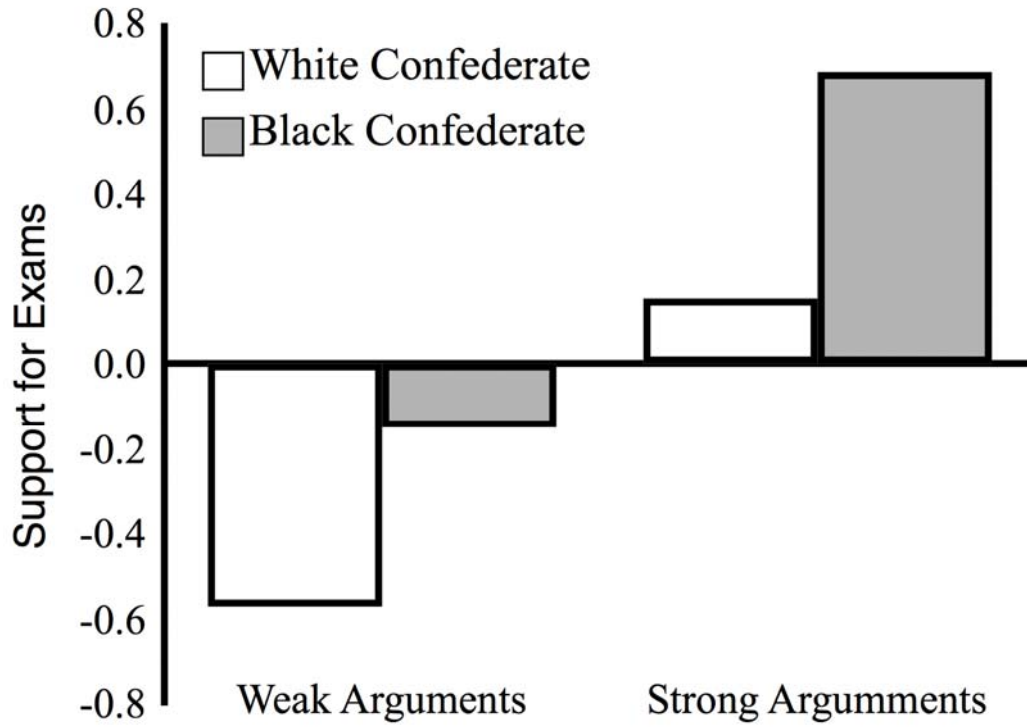


Figure 2.

White participants are more persuaded by Black confederates than by White confederates in face-to-face interactions, but not when viewing the confederates on video (Study 2).

