ENDS: THE ENDURANCE, DEPTH, AND SCOPE OF CONFRONTING AS A PREJUDICE REDUCTION STRATEGY

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ABSTRACT OF THE THESIS

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Previous work has found that individuals who have been confronted for discrimination demonstrate a reduction in explicit prejudice and attempt to compensate for their actions (Czopp, Monteith, & Mark, 2006; Mallett & Wagner, 2011; Monteith Ashburn-Nardo, Voils, & Czopp, 2002). Although confronting prejudice has been touted as a tool for prejudice reduction, it is not known how these effects translate over time (i.e., endurance), across stigmatized groups (i.e., scope), nor if the prejudice reduction occurs at an implicit level (i.e., depth). The present research recruited 147 White participants who were either confronted or not confronted for using negative Black stereotypes and then completed measures of implicit and explicit prejudices towards Blacks and Latinos immediately after confrontation and one week later. Participants who were confronted demonstrated less implicit prejudices against Blacks immediately after confrontation and used less negative Black stereotypes one week later compared to participants who were not confronted. Confrontation had no effect on implicit attitudes towards Latinos immediately after confrontation or one week later, and no effect on implicit attitudes

towards Blacks one week later. Thus, confrontations endure, demonstrate depth (i.e., implicit attitude change), but do not influence attitudes towards other stigmatized groups (i.e., scope).

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Introduction

Incidences of prejudice and discrimination continue to be an everyday reality for racial minorities (Sue et al., 2007; Swim, Hyers, Cohen, & Ferguson, 2001). As prejudice has negative affective (angry and uncomfortable; Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003), cognitive (poorer academic achievement; Walton & Cohen, 2007), and health (poorer overall well-being; Pascoe & Richman, 2009) outcomes for racial and ethnic minorities, prejudice reduction is a key step to improve the lives of racial minorities.

Confronting, defined here as a verbal challenge directed at the person or persons who commits a blatant, subtle, or unspoken act of discrimination, has been identified as an effective prejudice reduction strategy. Specifically, after being confronted, Whites immediately report lower levels of explicit prejudice (Czopp, Monteith, & Mark, 2006), use fewer stereotypic responses during an inference task (Czopp et al., 2006), and are more likely to engage in compensatory behavior towards the individual who has confronted them (Mallett & Wagner, 2011). Despite these effects, it is unclear how enduring, broad, and generalizable they may be. Thus, the present research examined if confronting can result in changes of implicit racial biases (i.e., depth) and has enduring effects (i.e., lasting over time) with a wide scope (e.g., does being confronted for using Black stereotypes effect attitudes towards both Blacks and Latinos).

Below I summarize past research exploring the malleability, endurance, and scope of prejudiced attitudes at the implicit level as well as present work on the motivation to change one's racial biases. Further, I highlight past research on confronting to demonstrate its unique position within the prejudice reduction literature.

Malleability of Implicit Biases

Implicit racial biases have been identified as major contributors to the continued presence of discrimination (e.g., Fiske, 1998; Gaertner & Dovidio, 1986) but are difficult to change as they occur despite explicit non-prejudiced attitudes and, thus, people are often unaware of them (Bargh, 1999; Devine, 1989; Gaertner & Dovidio, 1986). Despite being outside of awareness, empirical evidence has demonstrated that White's negative implicit biases against Blacks are associated with poorer quality interracial interactions as judged by outside observers (McConnell & Leibold, 2001). Further, implicit pro-White biases are associated with a reduced likelihood of doctors giving Black patients life-saving emergency medical treatments (Green et al., 2007).

The malleability of implicit biases has been a focal point of prejudice reduction research. Numerous effective strategies have been identified, ranging from college level diversity education (Rudman, Ashmore, & Gary, 2001) to reverse stereotype association training (Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000; see Blair, 2002 for review of malleability of implicit biases). Implicit prejudice reduction strategies can generally fall in to two categories: changing stereotype content or controlling stereotype application. Prejudice reduction strategies aimed at changing stereotype content include reverse stereotype association training (Kawakami et al., 2000), implicit evaluative conditioning (Olson & Fazio, 2006), and exposure to counter-stereotypical exemplars (Dasgupta & Greenwald, 2001). By changing the negative content of stereotypes of stigmatized groups, these strategies aim to prevent implicit prejudice at the first step (preventing activation of negative stereotypes).

Many other strategies have, however, aimed at the second step of prejudice reduction, specifically, inhibiting stereotype application. These strategies have largely been guided by research demonstrating that stereotypes are automatically activated (Devine, 1989) and are products of socialization (Olson & Fazio, 2003). Devine and Monteith's self-regulation model (also referred to as habit breaking model; Devine & Monteith,1993; Monteith, 1993) argues that although stereotypes are automatically activated and applied, being made aware of the discrepancy between this behavior and societies' egalitarian norms and an egalitarian self-concept (Blanchard, Lilly, & Vaughn, 1991; Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Plant & Devine, 1998) can lead to the development of cues for control (Monteith, Ashburn-Nardo, Voils, & Czopp, 2002). It is believed that over time, inhibiting stereotype application may ultimately change stereotypes (or stereotypes may become automatically inhibited; Moskowitz, Salomon, & Taylor, 2000), thus acting on the first step of prejudice reduction and improving future interracial interactions. Strategies aimed at cues for control include setting egalitarian goals (Mann & Kawakami, 2012), retrospective reflection (Devine, Montieth, Zuwerink, & Elliot, 1991; Monteith, 1993), and confronting one's own prejudice (Monteith et al., 2002). Importantly, these strategies generally require that individuals be both aware of their own prejudiced attitudes and motivated to change them.

Motivations to Change

Motivation to "break the prejudice habit" is believed to stem from two sources: awareness of bias and concern about the consequences of one's bias, including self- and other- directed consequences. Specifically, individuals must first be aware of the

discrepancy between how one should behave (i.e., egalitarian) and how one does behave (i.e., discriminatory) as well as experience guilt (Devine et al., 1991; Monteith, 2003; Monteith et al., 2002) and concern about the effects of prejudice (Devine & Monteith, 1993; Plant & Devine, 2009).

Despite a general consensus that guilt is required to motivate change, past work has found divergent outcomes associated with feelings of guilt. Specifically, while one line of work found that guilt leads to avoidance of similar future experiences (Monteith, 1993) another demonstrated that guilt leads to approach behavior, including apologizing and changing one's behavior (Baumeister, Stillwell, & Heatherton, 1995). A recent attempt to synergize this work has helped explain these opposing findings. An EEG study (Amodio, Devine, & Harmon-Jones, 2007) demonstrated that after learning that one has demonstrated prejudiced behaviors and feels guilty, avoidance is evidenced by left-sided frontal asymmetry activity reduction (associated with reduced approach motivation; see Coan & Allen, 2003 for review). However, when given a chance to compensate by reading newspaper titles about prejudice reduction strategies, individuals' guilt led to approach behavior (evidenced by increased left-frontal asymmetry activity). Thus, individuals demonstrate initial avoidance behavior in which they disengage to prevent further interpersonal damage and to employ self-regulation, but when given the chance, engage in compensatory behaviors aimed at relieving the guilt and repairing one's self-image. Thus, guilt offers prejudice reduction in two stages, an initial inhibition of behavior, followed by compensatory behavior aimed at correcting the wrong doing and improving one's self-image.

As discussed above, awareness is a critical first step in motivating prejudice reduction but is perhaps the hardest to achieve as people lack awareness of their own implicit biases, and the prejudiced behaviors they lead to often occur despite conscious non-prejudiced attitudes and intentions (Bargh, 1999; Devine, 1989; Gaertner & Dovidio, 1986). When examining guilt (a downstream consequence of awareness of prejudice), researchers often have participants complete an implicit measure of prejudice and then tell participants that they have negative implicit biases against Blacks (Amodio et al., 2007; Devine, Forscher, Austin, & Cox, 2012). By telling participants that they hold these prejudice attitudes, past research creates awareness by essentially confronting individuals by a virtual third person.

Direct examination of individuals who have been confronted by an actual third person demonstrate that confronting does in fact lead to feelings of guilt, negative self-directed affect, and apologetic corrective responses and behavior (Czopp & Monteith, 2003). Further, confronting creates the initial withdrawal associated with guilt (Czopp et al., 2006), as well as compensatory behavior (Mallett & Wagner, 2011), the distal approach outcomes of guilt. Thus, confronting provides the initial awareness of prejudice and the feelings of guilt required to motivate change through stereotype inhibition (Czopp et al., 2006) and reparative actions (Mallett & Wagner, 2011). Moreover, confronting holds a unique position within the prejudice reduction literature because it does not require self-driven awareness of one's prejudice. Instead, it allows outside forces to generate awareness and guilt, which I propose leads to sufficient motivation to change implicit biases.

Secondary Transfer Effects

The overwhelming majority of the above discussed prejudice reduction strategies are aimed at improving implicit biases towards Blacks. Interestingly, prejudices against stigmatized groups are closely linked, perhaps by social dominance orientation (SDO; Backstrom & Bjorklund, 2007; Pratto, Sidanius, Stallworth, & Malle, 1994; Zick, Wolf, Kupper, Davidov, Schmidt, & Heitmeyer, 2008). Thus, individuals who hold prejudiced attitudes towards Blacks often also hold prejudiced attitudes towards Latinos, women, and LGBT individuals, among other low status, stigmatized groups.

As prejudices are closely associated, it has been proposed that changing attitudes about one stigmatized group (e.g., Blacks) could also change attitudes about another stigmatized group (e.g., Latinos). The intergroup contact literature has termed this a "secondary transfer effect" (Pettigrew, 2009; Schmid, Hewstone, Kupper, Zick, & Wagner, 2012). Specifically, individuals who engaged in a positive interaction with an immigrant (primary outgroup) demonstrated improved explicit attitudes towards immigrants, as well as secondary outgroups (e.g., LGBT individuals). Further, a five minute evaluative training intervention employing the Go/No-go Association Task (GNAT; Nosek & Banaji, 2001) demonstrated improved implicit associations towards Blacks (primary outgroup) as well as marginally improved attitudes towards Latinos and Asians (secondary groups; Lai et al., 2014) suggesting these secondary transfer effects could also influence implicit biases. Notably, most research on secondary transfer effects have to date focused almost solely on the effects of intergroup contact and have rarely been applied to other prejudice reduction strategies, and never to confronting.

Endurance of Change

While implicit biases are malleable and can have a larger scope than simply one stigmatized group, the lasting effects of these prejudice reduction strategies have been minimally explored. Past work that has explored the length of these effects has suggested some lasting changes. For example, participants who were exposed to counter-stereotypical individuals demonstrated improved implicit biases both immediately after exposure, as well as after 24-hours (Dasgupta & Greenwald, 2001). In another study, participants completed the IAT and received feedback based on their performance, with 90% of participants being informed that they implicitly favored White people over Black people (Devine et al., 2012). Half of the participants then took part in a 45-minute training session in which they were informed and trained on one of five different prejudice reduction strategies (e.g., retrospective reflection, counter-stereotypic imagining), as well as informed about biases and the IAT. Individuals who received the training *and* reported greater concerns about discrimination demonstrated improved implicit associations towards Blacks both four and eight weeks after training. These studies suggest that implicit biases can experience lasting change, especially after thorough interventions aimed at prejudice reduction. Confronting may be especially effective in creating lasting change because of its dyadic (and often public) nature that creates high levels of guilt.

Current Research and Hypotheses

While previous research has demonstrated that being confronted can result in prejudice reduction, these findings have been limited and measured only immediate outcomes on explicit measures of prejudice and stereotype application of Blacks. Thus, although confronting prejudice has been touted as a tool for prejudice reduction, it is not

known how these effects translate over time (i.e., endurance), across stigmatized groups (i.e., scope), nor if the prejudice reduction occurs at an implicit level (i.e., depth).

Thus, the present research attempted to expand upon previous findings suggesting confronting is a prejudice reduction tool in numerous ways. Specifically, after being confronted for using stereotypes about Blacks during an inference task, participants completed measures of implicit bias against both Blacks and Latinos to demonstrate that implicit attitude change towards both Blacks and Latinos would occur immediately after confrontation (Hypotheses 1a-1b). Further, in-line with past research, I hypothesized that participants would experience greater negative self-directed affect after being confronted (Hypothesis 2).

After one week, participants again completed a White/Black and a White/Latino IAT to determine if implicit prejudice reduction had endured, as predicted (Hypotheses 3a-3b). Participants also completed a short version of the inference task to determine if Black stereotypical responses are reduced (Hypothesis 4), and completed measures of explicit prejudice towards Latinos and Blacks, which I hypothesized would remain reduced (Hypotheses 5a-5b).

Further, participants completed measure of discrimination recognition, out-group contact, and rumination about the lab experience at Time 2 to explore factors related to attitude change. Specifically, being confronted may lead to seeking more out-group contact, which is an effective prejudice reduction strategy (Pettigrew, 2009) or make participants more vigilant about discrimination and think more deeply about one's attitudes (i.e., increased awareness; Devine & Monteith, 1993). I explored whether individuals who had been confronted would recognize more discrimination (Hypothesis

6), attempt greater out-group contact (Hypothesis 7), and ruminate more (Hypothesis 8) than participants in the control condition. Participants in the control condition were not confronted for using stereotypes, and thus their measures throughout served as the control comparison scores. Lastly, participants' egalitarian ideology was included as a possible covariate of all effects as participants' beliefs regarding group equality may influence the extent to which negative affect and intergroup attitudes are affected by a confrontation.

Method

Participants

One hundred and fifty-eight participants who identified as White/Caucasian during a large pre-screen survey at the beginning of the semester were recruited. Six participants were ultimately excluded from analyses for not identifying as White upon arrival to the laboratory. Further, five participants did not use any stereotypes during the initial inference task and were thus excluded from analyses, leaving a final sample of 147 participants (51% female) with a mean age of 18.78 years (SD = 0.99). Participants received partial course credit for completing Time 1 of the study in the laboratory and additional credit for completing Time 2. While 133 participants (90.48%) completed T2, only 111 (75.51%) were able to complete the implicit measures due to technology issues that arose from an unexpected software update in Qualtrics which crashed the Java code used for the Time two IATs for 1.5 weeks.

Procedure

Participants were told the purpose of the study was to examine the use of memory and inferences in daily life and informed that the initial laboratory study (T1) involved a one-hour lab session, while Time two involved completing a 20-minute online survey one

week after the lab session online. Upon arrival in the lab, participants were greeted by one of four White female experimenters and provided consent for the study. Upon providing consent, participants first completed an inference task that has been employed in prior work to elicit participants' stereotypical comments of Blacks (Czopp et al., 2006; Monteith et al., 2002). This task involves making inferences about a person whose image is presented along with a brief descriptive sentence (e.g., This person works with numbers). Critically, some trials typically elicit stereotypically negative inferences about Blacks (see detailed description below). Participants were randomly assigned to experience confrontation for stereotypical remarks or no confrontation.

After completing all trials, participants who were randomly assigned to the confront condition were confronted by the experimenter, who said, "I thought some of your answers seemed a little offensive. The Black guy wandering the streets could be a lost tourist. People shouldn't use stereotypes, you know?" (tailored to participants' responses). Participants in the control (non-confrontation) condition received no feedback. All experimenters were instructed to remain neutral and if participants responded, to simply respond "Okay," before moving on to the next portion of the study. Further, experimenters recorded any of these responses.[1] Participants who were randomly assigned to the confront condition but did not use any stereotypes during this task were ultimately excluded from analyses because they did not have a racist comment to confront (n = 5). Participants next completed measures of affect, followed by several filler inference tasks.

Participants then completed two racial IATs, a White/Black IAT and a White/Latino IAT, with order of completion counterbalanced across participants.[2] One

week after their lab session, participants received an email instructing them to complete a follow up survey that included the White/Black IAT, White/Latino IAT, Attitudes towards Blacks and Latino scales again, and a short version of the inference task, as well as measures of discrimination recognition, out-group contact, and rumination during the past week. Participants were required to complete this survey within 24 hours.

Materials

Prescreen questions.

***Social Dominance Orientation*.** During a prescreen survey completed at the beginning of the academic semester participants completed the egalitarian subscale of the Social Dominance Orientation (SDO-E) scale (Ho et al., 2015) for use as a possible covariate. This eight-item measure was completed on a scale from 1 (*Strongly Oppose*) to 7 (*Strongly Favor*). Mean scores were calculated such that greater scores indicate a greater orientation towards equality and the scale was reliable ($\alpha = 0.87$). See Appendix A for all items.

Time One measures.

Inference task. During the inference task participants viewed 16 images of White and Black men and women (images selected from the aging mind face database; Minear & Park, 2004) each paired with a descriptive sentence (e.g., This person works with numbers; entire paradigm borrowed from Czopp et al., 2006; Monteith et al., 2002). Participants were instructed to make an inference about this person (e.g., They are an accountant). Three of the 16 images paired Black male faces with descriptive sentences intended to evoke stereotypical responses (e.g., This person can be found behind bars; response: criminal) but which could also evoke neutral responses (e.g., bartender).

Participants were instructed to say their responses aloud and press a key on the computer as soon as they announced their answer to record response times. The experimenter recorded the participant's verbal answers on a separate computer (see Appendix B for all images, descriptive sentences, and possible responses).

Participants who were randomly assigned to the confront condition were confronted by the experimenter at the end of the trials. As a confrontation, the experimenter stated, "I thought some of your answers seemed a little offensive. The Black guy wandering the streets could be a lost tourist. People shouldn't use stereotypes, you know?" (tailored to participants' responses). Participants in the control condition received no feedback.

Affect. Participants completed measures regarding negative self-directed (Neg-Self), negative other-directed (Neg-Other) affect, and discomfort during their session. Participants were presented with 23 affective words or phrases (Czopp et al., 2006) and asked to rate the extent to which they experienced these feelings during the session so far on a scale from 1 (*Does not apply to me*) to 7 (*Applies very much*). Sample Neg-self items include guilty and angry at myself, Neg-other included items such as frustrated and angry at experimenter, while discomfort items included items such as anxious and embarrassed. These scales were all reliable (Neg-Self: $\alpha = 0.95$; Neg-Other: $\alpha = 0.88$; Discomfort: $\alpha = 0.91$). See Appendix C for full list of items.

Race Implicit Association Tasks (IAT). The race IATs measured participants' association of stereotypically White and Black names (or White and Latino names) with good and bad words (Greenwald et al., 1998). All stimuli for these IATs were taken from previous Race IATs (Greenwald et al., 1998) and most common name lists (Hispanic

Baby Center, 2014). Participants completed the standard seven block version of the IAT (Nosek, Greenwald, & Banaji, 2005) twice, once to assess White/Black bias and once to assess White/Latino bias. Order of these IATs was counterbalanced across participants. White names and good and bad word stimuli were different in the two IATs. All trials with response latencies under 400 ms or over 10,000 ms were removed (Nosek, Smyth, et al., 2007). As participants must correct all errors, latencies of corrected responses were used, providing a built-in error penalty (Greenwald, Nosek, & Banaji, 2003). Participants were excluded from analyses if more than 10% of the critical responses trials were faster than 400ms, the error rate on any critical block was higher than 40%, or the overall error rate across all combined response blocks is over 30% (Nosek et al., 2007). One participant's T1 W/B IAT *D* score was removed for an overall error rate across all combined response blocks being greater than 30%, as was one participant's T2 W/L IAT *D* score. *D* scores were then computed such that higher scores reflected stronger associations between White and good than Black and bad (or Latino and bad; see Appendix D for all stimuli).

Time Two Measures.

IATs. Participants completed identical White/Black and White/Latino IATs from their own computers, administered through QRTEngine (Barnhoorn, Haasnoot, Bocanegra, & van Steenbergen, in press). The order of these IATs was again counterbalanced across participants.

Inference task. Participants completed an abbreviated version of the inference task from the initial laboratory study (T1) which only included eight trials. Four of these trials were identical to those completed during the initial interaction at T1, including two

of the critical trials which paired Black faces with leading descriptions. The additional four items were new and included two additional critical trials. Participants could see a timer on each screen that counted down from 15 seconds, the time allotted for them to type in an answer for each trial. The order these trials were presented in was randomized (25.4% used no stereotypes; $M = 1.76$, $SD = 1.38$).

Perceptions of discrimination. Participants were asked if during the last week, they "witnessed or noticed discrimination at an interpersonal level aimed at a racial minority (e.g., hear a racist joke, a racial minority student was ignored in class, someone referred to a racial minority student by a racially derogatory name, someone clutched their bag when walking by a racial minority student." Participants simply responded "Yes" or "No" (35% Yes).

Similarly, participants were asked if during the last week they, "witnessed or noticed discrimination at an institutional level aimed at racial minorities (e.g., negative campus climate towards racial minorities, only White actors, portrayal of racial minorities as criminals and "thugs" in the media)." Again, participants simply responded "Yes" or "No" (27.8% Yes).

Out-group contact. Participants were asked how much they interacted with individuals of the following groups during the last week: White/Caucasian, Black/African American, Latino/Hispanic, Asian/Asian American, and LGBT. Participants responded to these items on a scale from 1 (*Never, not at all*) to 7 (*All of the time*). Frequency of interaction is a critical measure in the intergroup contact literature (e.g., Asbrock, Christ, Duckitt, & Sibley, 2012; Wagner, van Dick, Pettigrew, & Christ, 2003).

Rumination. Participants were asked, "Over the last week, how often did you find yourself thinking about the experience you had in the lab?" on a scale from 1 (*Not at all*) to 7 (*All of the time*), $M = 2.80$, $SD = 1.45$. See Appendix F for all new T2 items.

Results

See Table 1 for correlations between all measures across conditions and Table 2 and 3 for correlations between all measures by confronting condition. Descriptive statistics of each variable by condition are provided in Table 4.

Initial analyses were conducted employing a 2 (Time One IAT order: White/Black first vs White/Latino first) x 2 (Condition: confronted vs control) x 4 (Experimenter) for implicit and explicit attitudes. No main effect of IAT order, experimenter, nor any interaction of these factors was discovered, F's < 1.72, ps > .17. As such, all following analyses were conducted without IAT order or Experimenter.

Time 1

Inference task. To ensure there was no difference in baseline stereotype use (before confrontation), an ANOVA was conducted on stereotypes used during the inference task of T1 by condition, and was not significant, F (1, 145) = 0.68, p = .41 ($M_{confronted}$ = 2.24, SD = 0.62; $M_{control}$ = 2.16, SD = 0.57).

Implicit attitudes. As predicted, an ANOVA revealed a significant main effect of condition on White/Black IAT D scores, F (1, 144) = 4.07, p = .046, η_p^2 = 0.03, such that participants who were confronted demonstrated less initial implicit pro-White/anti-Black bias (M = 0.38, SD = 0.38) than participants who were not confronted (M = 0.50, SD = 0.37). An ANOVA did not reveal a significant effect of condition on White/Latino IAT D

scores, F (1, 145) = 0.01, p = .91, $\eta_p^2 < 0.01$ ($M_{confronted}$ = 0.50, SD = 0.41; $M_{control}$ = 0.51, SD = 0.41). See Figure 1 for means.

Affect. An ANOVA conducted to determine the effect of condition on discomfort emotions was significant, F (1, 145) = 6.73, p = .01, η_p^2 = 0.04, such that participants who were confronted reported greater discomfort (M = 2.24, SD = 1.26) than participants who were not confronted (M = 1.79, SD = 0.84). Similarly, an ANOVA revealed a significant effect of condition on Neg-Other emotions, F (1,145) = 18.68, $p < .001$, η_p^2 = 0.11. Participants reported experiencing greater negative other directed emotions after being confronted (M = 1.43, SD = 0.77) than when they were not confronted (M = 1.04, SD = 0.16). Further, an ANOVA revealed a significant effect of condition on Neg-Self emotions, F (1, 145) = 13.98, $p < .001$, η_p^2 = 0.09, such that participants reported experiencing significantly greater negative self-directed emotions after being confronted (M = 2.40, SD = 1.42) than participants who were not confronted (M = 1.66, SD = 0.95).

Time 2

In order to control for T1 measures of intergroup attitudes, hierarchical regressions were conducted for T2 variables, such that the corresponding T1 measure was controlled for. For example, I regressed T2 White/Black IAT D scores on T1 White/Black IAT D scores at Step 1 in the regression while condition was entered at Step 2 using effects coding (confronted = 1; control = -1). Covariate adjusted means are reported.

Implicit attitudes. For participants' White/Black IAT D scores, the regression was not significant, F (2,107) = 1.80, p = .17, R^2 = 0.03. Neither condition, B = -0.01, SE = 0.04, p = .90, 95% CI = [-0.09, 0.08], nor Time 1 W/B IAT D scores, B = 0.20, SE =

0.11, p = .07, 95% CI = [-0.02, 0.42] were significant predictors of Time 2 W/B IAT D scores. Participants who were confronted in the laboratory did not demonstrate significantly less pro-White/anti-Black Bias during T2 (M = 0.38, SE = 0.06) compared to participants who were not confronted (M = 0.39, SE = 0.06). See Figure 1 for means.

An identical hierarchical linear regression was conducted for participants' T2 White/Latino IAT D scores, F (2,108) = 2.24, p = .11, R^2 = 0.04. Again, neither condition, B = -0.08, SE = 0.06, p = .20, 95% CI = [-0.21, 0.04], nor T1 W/L IAT D scores, B = 0.25, SE = 0.16, p = .12, 95% CI = [-0.07, 0.58] were significant predictors of T2 W/LIAT D Scores. Participants who were confronted during T1 did not demonstrated significantly less pro-White/anti-Latino Bias during T2 (M = 0.21, SE = 0.09) than participants who were not confronted (M = 0.38, SE = 0.09).

Inference task. For participants' use of stereotypes during the T2 inference task, the hierarchical regression was significant, F (2,135) = 21.31, p < .001, R^2 = 0.24. While participants' T1 stereotype use was a significant predictor of T2 stereotype use, B = 0.51, SE = 0.17, p = .004, 95% CI = [0.17, 0.85], condition was also a significant predictor, B = -0.61, SE = 0.10, p < .001, 95% CI = [-0.81, -0.41]. Specifically, participants who were confronted for their use of stereotypes during T1 used significantly less stereotypes at T2 (M = 1.12, SE = 0.15) than participants who were not confronted during T1 (M = 2.34, SE = 0.14).

Discrimination recognition. Chi square tests were conducted on participants Yes/No responses to recognition of interpersonal and institutional discrimination, separately. For recognition of interpersonal discrimination, there was no effect of condition, X^2 (1, N = 133) = 0.01, p = 0.94 (Confronted: 35% yes; Control: 35% yes).

Similarly, participants who were confronted were no more likely to notice institutional discrimination than participants who were not confronted, X^2 (1, N = 133) = 1.14, p = .29 (Confronted: 32% yes; Control: 24% yes).[3]

Out-group contact. A MANOVA was conducted to determine the effect of condition on intergroup contact, but revealed no effect of condition on contact with Whites, Blacks, Latinos, Asians, or LGBT individuals, F (5,130) = 0.35, p = .88, η_p^2 = 0.01 (See Table 5 for means).[4]

Rumination. An ANOVA revealed a significant effect of condition on rumination about T1, F (1, 135) = 10.26, p = .002, η_p^2 = 0.07, such that participants reported more rumination about their experience at T1 when they were confronted (M = 3.20, SD = 1.49) than not confronted (M = 2.43, SD = 1.32).[5]

SDO-E Covariate Analyses

SDO-E did not vary by condition, F (1,143) = 1.94, p = .17, η_p^2 = 0.01 (M_{total} = 2.24, SD = 1.11) but was correlated with most outcomes (see Tables 1-3) and thus, was entered in all analyses as a covariate. Each reported analysis above was thus re-conducted with SDO-E as a covariate. While SDO-E was a significant predictor of T1 W/B IAT D scores, discomfort, Neg-Other, and T2 measured out-group contact, it did not significantly affect the above reported results. See Appendix G for full report of analyses.

Additional Analyses

Based on the examination of the correlation tables by condition (Table 2, 3), I tested the magnitude of the relationship between Neg-Self and pro-White/anti-Black T1 IAT D scores. This additional analysis would suggest whether affective and cognitive reactions to confrontation were predictive of implicit attitude reductions. This analysis

revealed that there was a stronger correlation between these two variables for participants who were confronted (r = -.26, p < .05) than participants in the control condition (r = .09, p >.05), Z = -2.11, p = .03. Similarly, the correlation between Neg-Self and rumination about T1 was significantly stronger for individuals who were confronted (r = .44, p < .01) than participants who were not confronted (r = .14, p > .05), Z = 1.97, p = .05.

Discussion

The present study suggests that while the effects of confrontations may endure and have depth, they may not have scope. Specifically, participants who were confronted used significantly less negative stereotypes about Blacks seven days later compared to those who were not confronted (endurance) and demonstrated significantly less pro-White/anti-Black bias on the T1 IAT compared to participants who were not confronted (depth), but there was no effect of confrontation on the White/Latino T1 IAT (scope). These findings suggest that prior work on immediate confrontation's effectiveness (e.g., Czopp et al., 2006) on stereotype reduction can be revised to indicate that confrontation may prove effective for stereotype use over time, and the expression of immediately more positive implicit attitudes. Thus, confrontations appear to create both awareness and guilt, critical components of breaking the prejudice habit (Devine & Monteith, 1993; Monteith, 1993), allowing immediate reductions in implicit biases (e.g., Monteith et al., 2002) and lasting changes to stereotype application (e.g., Devine et al., 2012).

Importantly, stereotype reduction from confrontation was achieved using a specific interference task based on prior research (Czopp et al., 2006). While the reduction of stereotypes on the inference task at T2 is achieved on the stereotype task that evoked the confrontation in T1, practice effects are unlikely because new stereotypes

were assessed. Thus, the present findings suggest that confrontations may create an awareness that one's prepotent responses are stereotypical and inhibit their application, at later time points. Importantly, the inference task employed in the present study is unique as there is clearly an alternative, non-biased response that could be given. While this task is thus ideal to examine confrontations in the lab, the presence of bias in day-to-day interactions is often much more ambiguous and complex, and thus it is often more difficult to identify an unbiased response which one could alternatively employ. Thus, future research should explore alternative stereotype use paradigms with greater external validity when examining the enduring effects of confrontations.

Notably, confrontations resulted in less pro-White/anti-Black implicit bias on the T1 IAT, providing preliminary evidence of the depth of attitude change due to confrontations. While the malleability of implicit attitudes has been previously demonstrated with other prejudice reduction strategies (e.g., Devine et al., 2012), the present findings are the first to demonstrate that confronting can significantly affect implicit attitudes. If this effect is replicable, confrontations may serve as a unique strategy for prejudice reduction at the implicit level as confrontations allow another individual to promote one's awareness of bias. While there was no effect of condition on T2 pro-White/anti-Black IATs, the pattern suggests that well-established practice effects yielded decreased implicit bias scores at T2, compared with T1, with one exception: confronted participants were remarkably stable across time, showing a decreased bias score commensurate with a practice effect at T1 that did not vanish at T2. Future work is thus needed to provide a more complete picture of implicit attitude changes due to confrontations both immediately and over time, and should also examine the effects of

confrontations on stereotype IATs as well as attitude IATs. Specifically, as the confrontation was specifically in regards to the use of stereotypes, participants may also show a decrease in implicit stereotype use.

While the present study found no evidence of confrontations affecting implicit attitudes towards other non-targeted but similarly stereotyped groups (i.e., Latinos) either at T1 or T2, future research should continue to explore the potential scope of confrontations on prejudice reduction. Specifically, the present study only assessed Black stereotypes in the inference task. I propose that if stereotypes of Latino had been included, participants who were confronted at T1 may have used less negative stereotype responses on Latinos during the T2 inference task, demonstrating scope, because the confrontation raised awareness of one's propensity towards stereotyping in general and perhaps specifically in situations such as the inference task. Future research should thus explore the potential for confrontations to promote attitude and behavioral changes across multiple stigmatized groups that assess scope using a similar context as the confrontation.

Further, as predicted and in support of past research (Czopp et al., 2006), confronted participants demonstrated greater negative self-directed and other-directed affect, as well as a general increase in discomfort at T1, compared to participants who were not confronted. Notably, participants who were confronted reported ruminating about their experience at T1 more frequently. While it is unclear what exactly about T1 participants were ruminating about, this finding again suggests some enduring effects of the confrontation on cognition. The additional analyses on the correlation between neg-self and rumination provide preliminary evidence that this rumination was associated with one's negative affect at T1. Future research should further explore the continued

effects of confrontations on individuals affect and cognition (i.e., what one is ruminating about, self-directed affect), as well as employ an additional control condition which more closely resembles the negative affect experienced by participants who were confronted (e.g., in which the experimenter is rude to the participant).

While the confrontation resulted in negative affect (directed at the self), provoked rumination about the experience afterwards, and reduced stereotypical inferences about Blacks one week later, there was no indication that confrontations promoted awareness of discrimination or that confronted participants were more willing to seek out contact with outgroup members. While this suggests that confrontation on Black stereotyping does not lead to the undesirable outcome of individuals avoiding Black individuals, it also means that confrontation does not provide a broad platform for prejudice reduction as it does not increase the use of well-established prejudice reduction behaviors (e.g., Pettigrew & Tropp, 2008). For example, attitude change (both direct and transfer) due to intergroup contact is due to a positive interaction which serves to minimize anxiety during interracial interactions (Turner, Crisp, & Lambert, 2007), enhance knowledge of the outgroup (Allport, 1954), and increase empathy and perspective taking (Vescio, Sechrist, & Paolucci, 2003; see Pettigrew & Tropp, 2008 for meta-analysis of mediators). Thus, intergroup contact as a prejudice reduction strategy provides three processes that result in secondary transfer effects and endurance due to decreased anxiety, an increase in familiarity, and greater empathy and perspective taking toward outgroup members. This is in contrast to confrontations, which are primarily intended to raise awareness of one's prejudiced attitudes, as in the present study.

Therefore, the guilt experienced due to a confrontation may result in the initial decrease in direct implicit attitudes, relative to controls, but it's lack of breadth suggests little increase in skills (beyond stereotype inhibition) which promote broad prejudice reduction, as evidenced by participants demonstrating no increase in discrimination recognition (something one may associate with increased empathy and perspective taking) or out-group contact (a likely outcome of reduced interracial anxiety). Though perhaps promising, the effect of condition on implicit attitudes during T1 should be considered tentatively as it is unclear what the process behind this attitude change may be, and future research needs to be conducted to replicate this effect and explore other potential processes of attitude change. The additional analysis of the correlation between neg-self and T1 W/B IAT *D* scores suggests that guilt may be a key component in the prejudice reduction due to confrontations though this effect is only corollary. If the present effect replicates, additional research will need to examine which confronting styles (e.g., joke, angry, express hurt) and confronter demographics (e.g., high or low status) are most effective in producing attitude change.

One possibility to consider for future research is whether pre-existing attitudes moderate the effectiveness of confrontation on prejudice reductions. Most of the participants in the present study held relatively favorable explicit attitudes towards Blacks and Latinos as reported during T1 (M_{ATB} = 2.14, *SD* = 0.88; M_{ATL} = 2.12, *SD* = 0.91; higher scores indicate negative attitudes). Given the present floor effects on explicit measures (see footnote 2) and the goal to change attitudes for those who hold negative beliefs to start, future research should target participants with more negative attitudes. Notably, when past research has demonstrated explicit prejudice reduction due to

confrontations, a portion of the participants were recruited for reporting high negative explicit attitudes towards Blacks during baseline assessment (Czopp et al., 2006).

Overall, the present research suggests that confronting discrimination may serve as an immediate implicit prejudice reduction tool that reduces stereotype use over time, but these effects do not transfer across groups. Further, confronting discrimination may continue to reduce stereotypical responses over time, though these effects may be context dependent such that participants can demonstrate inhibited stereotype responses only in the context in which they were confronted. Thus, the present research expands the literature on confrontation as a prejudice reduction strategy, providing initial support for it as a strategy with endurance and depth though no breadth at the implicit level.

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Footnotes

1. Of those confronted, 75% made no responses, nodded, said “okay,” or “mhm”; 12.7% apologized or agreed; 12.3% either tried to make an excuse, asked if they could continue, or laughed.
2. Although initially, this study had intended to examine the effect of confrontation on explicit attitudes towards Blacks (ATB) and Latinos (ATL), low means on these measures (see Table 4) suggested that I had floor effects. For example, one sample t-tests comparing scale means to the midpoint (3.5) suggested ATB, $t(146) = -18.30$, $p < .001$, and the ATL, $t(146) = -18.74$, $p < .001$ were much lower than the midpoint. Further, tests of normal distribution revealed skewed data (Shapiro-Wilk’s = 0.92, ps < .001) that could not be corrected by transformation. Thus, I was unable to conclude whether the inability of condition to influence ATB and ATL at T1 and T2 (ts > 0.45, ps > .50) were due to a floor effect.
3. Additional analyses were conducted to determine if the effect of condition on T2 W/B or W/L IAT *D* scores was moderated by discrimination recognition, collapsing across interpersonal and institutional discrimination recognition. The condition x discrimination recognition interaction term was not a significant predictor of T2 W/B IAT *D* scores, $B = -0.01$, $SE = 0.08$, $p = .95$, nor T2 W/L IAT *D* scores, $B = 0.01$, $SE = 0.13$, $p = .97$.
4. Additional analyses were conducted to determine if contact with Blacks and Latinos (composite score) moderated the effect of condition on W/B and W/L T2 IAT *D* scores. The interaction term, condition x Black and Latino contact was not significant predictor of T2 W/B IAT *D* scores, $B = -.04$, $SE = .03$, $p = .16$, nor T2 W/L IAT *D* scores, $B = -0.01$, $SE = 0.04$, $p = .87$.
5. Additional analyses were conducted to determine if the effect of condition on T2 W/B and W/L IAT *D* scores was moderated by rumination. The condition x rumination interaction term was not a significant predictor of T2 W/B IAT *D* scores, $B = -0.03$, $SE = 0.03$, $p = .40$, nor T2 W/L IAT *D* scores, $B = -0.04$, $SE = 0.05$, $p = .37$.

Table 1

Correlations of all variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1, Stereotypes T1														
2. B/W IAT T1	.01													
3. L/W IAT T1	.06	.40**												
4. ATB T1	.10	.24*	.11											
5. ATL T1	.11	.19*	.08	.73**										
6. Discomfort	-.04	-.13	-.03	-.13	-.09									
7. Neg Other	.09	-.08	-.10	-.03	.05	.43**								
8. Neg Self	-.04	-.16	.03	-.15	-.12	.75**	.43**							
9. Stereotypes T2	.21*	-.18*	.01	.20*	.17*	.03	-.09	-.16						
10. B/W IAT T2	.04	.18	.08	.04	.06	-.19*	-.08	-.19	.03					
11. L/W IAT T2	-.16	.23*	.16	.16	.16	.01	-.11	-.08	.22*	.10				
12. ATB T2	-.02	.19*	.09	.74**	.74**	-.10	.02	-.19*	.22*	.13	.23*			
13. ATL T2	.07	.17*	.17	.75**	.79**	-.13	.04	-.17	.17	.20*	.23*	.82**		
14. Rumination T2	.06	-.13	-.09	-.07	-.01	.29**	.26**	.38**	-.03	-.04	-.01	-.07	-.05	
15. SDO-E	.04	.17*	.12	.50**	.43**	-.17*	-.04	-.18*	-.12	.10	.06	.43**	.49**	-.02

*$p < .05$, **$p < .01$

Table 2

Confront condition correlations ($N = 71$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Stereotype T1														
2. B/W IAT T1	.01													
3. L/W IAT T1	.14	.35**												
4. ATB T1	.19	.28*	.12											
5. ATL T1	.20	.20	.05	.77**										
6. Discomfort	-.09	-.15	-.03	-.22	-.20									
7. Neg Other	.12	-.05	-.18	-.02	.06	.45**								
8. Neg Self	-.11	-.26*	.00	-.24*	-.24*	.73**	.43**							
9. Stereotypes T2	.24*	.20	.18	.20	.11	.16	.13	-.02						
10. B/W IAT T2	.25	.33*	.18	.09	.12	-.33*	-.11	-.31*	.06					
11. L/W IAT T2	-.12	.23	.19	.35*	.27	-.05	-.09	-.03	.27	.03				
12. ATB T2	.02	.33**	.15	.76**	.72**	-.22	.04	-.25*	.24	.22	.36**			
13. ATL T2	.19	.22	.22	.81**	.79**	-.20	.03	-.26*	.17	.33*	.36**	.86**		
14. Rumination T2	.12	-.19	-.19	-.21	-.08	-.28*	.23	.44**	.13	-.11	-.04	-.13	-.22	
15. SDO-E	.11	.15	-.07	.52**	.52**	-.35**	-.14	-.36**	-.08	.31*	.17	.52**	.54**	-.18

Notes. $*p < .05$, $**p < .01$.

Table 3

Control condition correlations ($N = 76$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Stereotype T1														
2. B/W IAT T1	.04													
3. L/W IAT T1	-.03	.46**												
4. ATB T1	.03	.18	.10											
5. ATL T1	.00	.18	.11	.70**										
6. Discomfort	-.01	-.02	-.02	.03	.09									
7. Neg Other	-.07	.04	.17	.05	.20	.26*								
8. Neg Self	.00	.09	.10	.01	.04	.74**	.20							
9. Stereotypes T2	.25*	.04	-.18	.16	.22	.14	-.07	-.04						
10. B/W IAT T2	-.14	.04	.01	.00	.01	-.04	.01	-.05	-.02					
11. L/W IAT T2	-.18	.18	.11	-.05	.04	.22	.01	-.05	.11	.16				
12. ATB T2	-.07	.02	.02	.72**	.76**	.08	.07	-.10	.21	.06	.06			
13. ATL T2	-.07	.12	.11	.73**	.81**	-.05	.04	-.08	.26*	.08	.07	.79**		
14. Rumination T2	.00	.02	.03	.12	.10	.18	.17	.14	.07	.06	.14	.03	.15	
15. SDO-E	-.07	.26*	.33**	.49**	.36**	.05	.13	-.03	-.11	-.05	-.05	.34**	.42**	.12

Notes. *$p < .05$, **$p < .01$

Table 4

Descriptive Statistics by Condition

	Confronted *N*	Confronted *M* (SD)	Not Confronted *N*	Not Confronted *M* (SD)
Stereotype Use T1	71	2.24 (0.62)	76	2.16 (0.57)
W/B IAT T1	71	0.38 (0.38)	75	0.50 (0.37)
W/L IAT T1	71	0.50 (0.41)	76	0.51 (0.41)
ATB T1	71	2.09 (0.90)	76	2.16 (0.93)
ATL T1	71	2.09 (0.92)	76	2.19 (0.85)
Discomfort	71	2.24 (1.26)	76	1.79 (0.84)
Neg-Self	71	2.40 (1.42)	76	1.66 (0.95)
Neg-Other	71	1.43 (0.77)	76	1.04 (0.16)
W/B IAT T2	52	0.36 (0.41)	59	0.40 (0.46)
W/L IAT T2	51	0.20 (0.78)	60	0.38 (0.57)
ATB T2	66	2.21 (1.02)	70	2.30 (0.95)
ATL T2	66	2.30 (1.12)	70	2.20 (0.91)
Stereotype Use T2	71	1.14 (1.23)	72	2.33 (1.26)

Table 5

Intergroup Contact Means

	Confronted *M*(SD)	Not Confronted *M*(SD)	*F*
Whites/Caucasians	6.03 (1.33)	6.07 (1.19)	0.09
Blacks/African Americans	4.00 (1.82)	4.04 (1.77)	0.21
Latinos/Hispanics	3.83 (1.88)	3.68 (1.74)	0.72
Asians/Asian Americans	4.34 (1.82)	4.06 (1.78)	0.01
LGBT	3.20 (1.88)	3.38 (2.14)	3.55

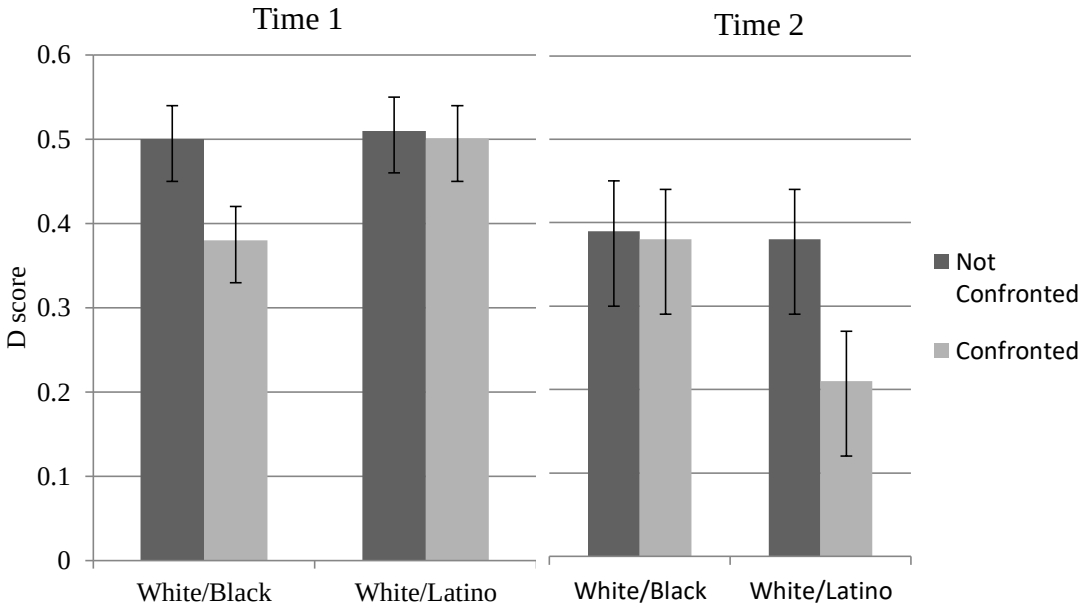


Figure 1. Mean IAT *D* scores by condition at T1 and T2. Error bars represent standard errors.

Appendix A

Social Dominance Orientation Egalitarian Subscale (SDO-E; Ho et al., in press)

Please indicate how strongly you agree or disagree with the following items 1(Strongly Oppose) to 7 (Strongly Favor)

1. We should not push for group equality
2. We shouldn't try to guarantee that every group has the same quality of life.
3. It is unjust to try to make groups equal.
4. Group equality should not be our primary goal.
5. We should work to give all groups an equal chance to succeed
6. We should do what we can to equalize conditions for different groups
7. No matter how much effort it takes, we ought to strive to ensure that all groups have the same chance in life
8. Group equality should be our ideal.

Appendix B

Critical Trials (paired with Black faces; 3)	**Possible answers**
This person depends on the government for money	*welfare*, federal employee
This person can be found behind bars	*criminal*, bartender
This person can be found wandering the streets	*homeless person*, *bum*, tourist

Filler Trials-positive (half Black faces; 10)	
This person works with numbers	accountant, math teacher
This person spends a lot of time in airports	traveler, pilot
This person has lots of books	librarian, English teacher
This person spends a lot of time driving	taxi driver, bus driver
This person uses a lot of power tools	construction worker, carpenter
This person is on TV a lot	actress, reporter
This person spends a lot of time outdoors	gardener, farmer
This person works at a hospital	doctor, nurse
This person helps others	volunteer, tutor
This person works with food	grocer, cook

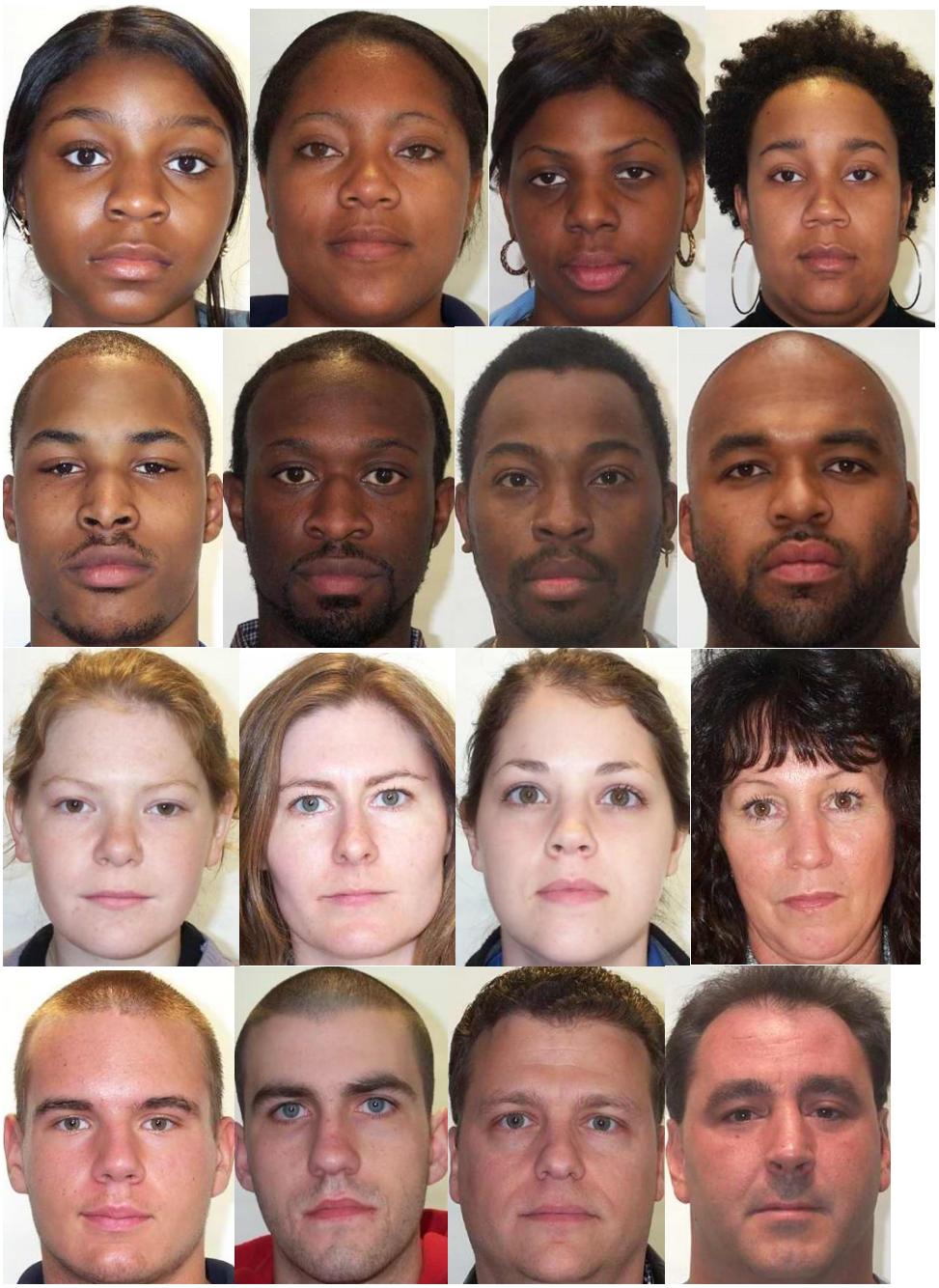
Filler Trials- negative (paired with White faces; 3)	
This person steals money	bank robber, thief
This person gets in a lot of fights	gang member, bully
This person breaks people's windows	vandal, rioter, thief

Follow up Inference task- Day 7

Previously Seen (first two with Black faces)	
This person can be found behind bars	*criminal*, bartender
This person can be found wandering the streets	*homeless person*, *bum*, tourist
This person is on TV a lot	actress, reporter
This person spends a lot of time outdoors	gardener, farmer

New Items (first two with Black faces)	
This person takes peoples cars	*car thief*, valet
This person is good at getting into locked doors	*robber*, locksmith
This person takes care of other people's dogs	vet, dog walker
This person plays games all day	kid, video games designer

*Italicized possible answers demonstrate stereotypical responses



Appendix C
Affective Reactions (Czopp, Monteith, & Mark, 2006)

Please indicate the extent to which you experienced each of these emotions during the experiment today on a scale from 1 (*does not apply at all*) to 7 (*applies very much*).

Neg-Self

1. Angry at myself
2. Annoyed at myself
3. Depressed
4. Disappointed in myself
5. Disgusted with myself
6. Guilty
7. Regretful
8. Low
9. Self-critical
10. Shameful

Neg-Other

1. Angry at the experimenter
2. Bothered with the experimenter
3. Disgusted with the experimenter
4. Irritated with the experimenter
5. Frustrated with the experimenter

Discomfort

1. Anxious
2. Embarrassed
3. Fearful
4. Sad
5. Tense
6. Threatened
7. Uncomfortable
8. Uneasy

Appendix D

IAT Words:
Good Words: sunshine, smile, angel, luck, rainbow, paradise, fortune, freedom, health, love, peace, cheer, friend, loyal, pleasure
Bad Words: filth, death, devil, slime, cancer, hell, poison, abuse, crash, murder, sickness, accident, grief, assault, stink
Black Names: Lamar, Terrence, Deion, Leroy, Darnell, Tyree, Jerome
White Names: John, Andrew, Peter, Brad, Ryan, Jack, Fred, Adam, Harry, Roger, Frank, Ian, Matthew, Paul, Hank
Latino Names: Santiago, Javier, Alejandro, Carlos, Diego, Hugo, Pablo

Appendix E

Attitudes Towards Blacks (Latinos) Scale (Brigham, 1993)
Rate the following statements on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*)

1. If I had a chance to introduce Black (Latino) visitors to my friends and neighbors, I would be pleased to do so.
2. I enjoy a funny racial joke about Blacks (Latinos), even if some people might find it offensive.
3. I would rather not have Blacks (Latinos) live in the same apartment building I live in
4. Racial integration (of schools, businesses, residences, etc.) has benefited both Whites and Blacks (Latinos).
5. It would not bother me if my new roommate was Black (Latino).
6. I probably would feel somewhat self-conscious dancing with a Black (Latino) person in a public place.
7. Interracial marriage between Blacks and Whites (Latinos and Whites) should be discouraged to avoid the "who-am-I?" confusion which the children feel.
8. It is likely that Blacks (Latinos) will bring violence to neighborhoods when they move in.
9. If a Black (Latino) person were put in charge of me, I would not mind taking advice and direction from him or her.
10. The federal government should take decisive steps to override the injustices Blacks (Latinos) suffer at the hand of local authorities.

Appendix F

1. How many times did you witness or notice discrimination over the last week (either at an interpersonal level (e.g., hear a racist joke) or at an institutional level (e.g., negative campus climate)?

2. Please provide your best guess of how many of the following types of people you interacted with during this past week.

A. Black people
B. Latino people
C. People identifying as LGBT
D. Asian people

3. Over the last week, how often did you find yourself thinking about the experience you had in the lab? 1(Not at all) – (All of the time).

Appendix G

Time 1.

Implicit attitudes. The effect of condition on participants' T1 W/B IAT D scores when controlling for SDO-E remained significant, F (1, 141) = 6.01, p = .02, η_p^2 = 0.04, though SDO-E also had a significant effect on D scores, F (1, 141) = 5.82, p = .02, η_p^2 = 0.04.

Condition did not have a significant effect on T1 W/L IAT D scores when controlling for SDO-E, F (1, 142) = 0.13, p = .72, η_p^2 = 0.001, nor did SDO-E, F (1, 142) = 2.08, p = .15, η_p^2 = 0.001.

Affect. SDO-E had a significant effect on reported discomfort, F (1,142) = 5.62, p = .02, η_p^2 = 0.04, and the effect of condition on discomfort with SDO-E entered as a covariate remained significant, F (1,142) = 8.36, p = .004, η_p^2 =0.06. Similarly, SDO-E had a significant effect on Neg-Self, F (1,142) = 7.77, p = .006, η_p^2 = 0.05, and the significant effect of condition on Neg-Self remained when SDO-E was entered as a covariate, F (1,142) = 16.50, p < .001, η_p^2 = 0.10. However, SDO-E did not have a significant effect on Neg-Other, F (1, 142) = 1.06, p = .30, η_p^2 = 0.01, though the effect of condition on Neg-Other remained significant when SDO-E was entered as a covariate, F (1,142) = 19.58, p < .001, η_p^2 = 0.12.

Time 2.

SDO-E was entered as a covariate in Step One in the hierarchical regressions conducted for T2 analyses,

Implicit attitudes. For participants' T2 W/B IAT D scores, the regression was not significant, F (3,104) = 1.75, p = .16, R^2 = 0.05. Condition, B = -0.01, SE = 0.04, p =

.79, 95% CI = [-0.10, 0.07], T1 W/B IAT D scores, B = 0.22, SE = 0.11, p = .06, 95% CI = [-0.01, 0.45], nor SDO-E, B = 0.03, SE = 0.04, p = .45, 95% CI = [-0.05, 0.11], were significant predictors of T2 White/Black IAT D scores.

Similarly, participants' T2 W/L IAT D scores, the regression was not significant, F (3,105) = 1.58, p = .20, R^2 = 0.21. Condition, B = -0.09, SE = 0.07, p = .16, 95% CI = [-0.22, 0.04], T1 W/L IAT D scores, B = 0.24, SE = 0.17, p = .16, 95% CI = [-0.10, 0.58], nor SDO-E, B = 0.03, SE = 0.06, p = .64, 95% CI = [-0.10, 0.16], were significant predictors of T2 W/L IAT D scores.

Inference task. The hierarchical regression for participants' stereotype use during the T2 inference task was significant, F (3,132) = 14.79, p < .001, R^2 = 0.25. Participants' SDO-E was not a significant predictor of stereotype use, B = -0.11, SE = 0.10, p = .24, 95% CI = [-0.30, 0.08], though participants' T1 stereotype use, B = 0.52, SE = 0.17, p < .01, 95% CI = [0.18, 0.86], and condition, B = -0.61, SE = 0.10, p < .001, 95% CI = [-0.82, -0.40] remained significant predictors.

Outgroup contact. When SDO-E was added as a covariate, there was still no significant effect of condition on out-group contact, F (1, 127) = 0.44, p = .82, η_p^2 = 0.02, though SDO-E was a significant predictor, F (1,127) = 5.19, p < .001, η_p^2 = 0.17.

Rumination. SDO-E did not significantly affect participants' rumination about T1, F (1,132) = 0.16, p = .69, η_p^2 < 0.01, though condition remained a significant predictor, F (1, 132) = 8.62, p = .004, η_p^2 = 0.06.