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Social Tuning and Shared Reality: Downstream Consequences in Intergroup Attitudes and Relations

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SOCIAL TUNING AND SHARED REALITY:
DOWNSTREAM CONSEQUENCES IN
INTERGROUP ATTITUDES AND RELATIONS

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Abstract

In this dissertation, I first test the hypothesis that social tuning yields shared reality (Studies 1-3), and then I examine whether feeling as if one has shared reality with an ostensibly egalitarian partner influences behaviors in subsequent interracial interactions and/or produces lasting reductions in anti-Black prejudice over a weeklong delay (Studies 4 and 5). I show that social tuning does indeed predict a sense of shared reality. Further, sharing reality via tuning with an ostensibly egalitarian ingroup member improves the quality of an immediate, subsequent interracial interaction with a Black stranger. Results demonstrate that a social tuning intervention also produces implicit prejudice reduction that persists over a weeklong delay, and that treatment participants report more positive interracial encounters during the weeklong interim. Taken together, my dissertation results point to a promising intervention strategy to reduce implicit prejudice and improve intergroup interactions—all without requiring excessive effort on the individual's part and without placing any burden on the racial outgroup member.

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Social tuning and shared reality:

Downstream consequences in intergroup attitudes and relations

Although self-reported (i.e., explicit) ethnic prejudice has decreased in recent years, discrimination against members of different racial and ethnic groups persists (Dovidio, 2001). In response to this apparent contradiction, social psychologists have become increasingly interested in implicit prejudice, which involves the unconscious and automatic negative associations people hold about different outgroups (Fazio & Olson, 2003; Kraus, 1995; Greenwald, Poehlmann, Uhlmann, & Banaji, 2009). Understanding this form of prejudice is important because of its pervasiveness (Nosek et al., 2007) and its relationship to actual interracial behaviors (Greenwald et al., 2009). For example, although individuals may explicitly report that they are non-prejudiced, they may still engage in verbal and non-verbal behaviors that reflect their endorsement of outgroup stereotypes and biases (Dovidio, Kawakami, & Gaertner, 2002; Castelli, Pavan, Ferrari, & Kashima, 2009; Ruscher, 1998) and reduce the quality of intergroup interactions (Greenwald et al., 2009).

Though extant theory and research has implicated social regulation in the origin and perpetuation of prejudice (Crandall, Eshelman, & O'Brien, 2002; Schaller & Conway, 1999), much of the work seeking to reduce it emphasizes self-regulatory strategies. The lasting effects of these interventions remain unclear (for a review, see Paluck & Green, 2009). For example, some proposed implicit prejudice reduction strategies involve actively reflecting on discrepancies in one's egalitarian ideals compared to one's actual intergroup behaviors (Monteith, 1993) and increasing personal motivations to control prejudice (Legault, Green-Demers, Grant, & Chung, 2007). The

bulk of these efforts to ameliorate implicit prejudice specifically have yielded strategies that are cognitively effortful and do not necessarily extend beyond the context of the intervention (Monteith, Zuwerink, & Devine, 1994; Rudman, Ashmore, & Gary, 2001). Very little research has investigated the durability of implicit prejudice reduction over time, and even in existing work, researchers have used relatively short delays to test the persistence of intervention effects (e.g., one day; Dasgupta & Greenwald, 2001; for an exception, see Devine, Forscher, Austin, & Cox, 2012).

In contrast to these effortful, self-regulatory strategies, research on social tuning has implicated an interpersonal means by which implicit intergroup attitudes can be changed without much effort or cognitive control (e.g., Lowery, Hardin, & Sinclair, 2001). This promising work situates itself within the framework of shared reality theory, which postulates that people are inherently motivated to experience a socially shared understanding of their world and the people in it (Hardin & Higgins, 1996). So far, the existing work has only used social tuning to improve intergroup attitudes through isolated interpersonal exchanges; it has not examined the durability or persistence of its effects across contexts or over time. Further, research on social tuning of prejudice has yet to test directly whether it actually achieves a sense of socially shared understanding (i.e., shared reality).

According to Echterhoff, Levine, and Higgins (2009), achieving shared reality requires several specific elements. Despite being aware of or understanding the information someone presents about a target, knowledge is not the same as sharing a subjective internal state with someone else about a target. Therefore, achieving shared reality is believed to involve the following components: 1) the perception of similar

attitudes, beliefs, or emotions with another; 2) a common target about which to hold these common attitudes, beliefs, or emotions; 3) the appropriate motivation to achieve this mutual, shared understanding, and 4) a successful connection with someone by sharing an internal understanding of that target (Echterhoff, Higgins, & Levine, 2009). However, research has not yet tested the necessity of these theorized components for successfully sharing reality. I seek to directly test two of these theorized criteria: The necessity of (1) perceiving similar attitudes with another person about a common target (specifically a racial outgroup); (2) appropriate motivation to achieve shared reality.

Overall, the current research seeks to make both theoretical and practical contributions to research on reducing intergroup prejudice and improving intergroup interactions. Theoretically, this research investigates two of the components proposed to be required to achieve shared reality by systematically testing two of the tenets of shared reality theory: Perceiving oneself to have a similar attitude or belief with someone about a target and experiencing appropriate motivation to share reality. While doing so, this research also tests whether social tuning actually achieves a subjective sense of shared reality. Practically, I aim to identify social tuning as a simple way to reduce implicit prejudice and improve intergroup relations outside of the immediate intervention context. I argue that successfully sharing reality via social tuning with an egalitarian partner ought to elicit durable prejudice reduction and improve intergroup interactions. To do so, I first review evidence that shared reality shapes people's attitudes via interpersonal interactions, then review evidence that social tuning in particular improves implicit intergroup prejudice, and finally review research suggesting support for the hypothesis

that social tuning and sharing reality might yield effects that persist over time and relate to behaviors.

Experiencing Shared Reality through Interpersonal Interactions

Social psychological research is full of evidence that, in general, interpersonal interactions can influence people's attitudes and behaviors in a variety of contexts (e.g., Asch, 1952; Festinger, 1954; Hardin & Higgins, 1996). One possible reason for the strong effect of interpersonal exchanges on people's cognitions, affect, and behaviors is that—in order to navigate their social worlds—people purposefully look to others to serve as sources of information and social validation (Fiske, 2000; 2004). As such, interpersonal exchanges can serve to fulfill people's basic relational needs, shape their attitudes, and lead to the development of a sense of shared understanding about their social world—a shared reality (Hardin & Higgins, 1996).

Sharing reality through interpersonal communication shapes people's attitudes and beliefs about specific targets, and research has fruitfully employed the saying-is-believing paradigm to demonstrate these effects (for reviews, see Higgins, 1992; 1999). In this paradigm, one person (the communicator) is assigned to read an ambiguous essay about an unnamed, target person and then describe that target to another person (the audience). The communicator is told that the audience person knows who the target person is, and after his or her description, the audience will have to try to identify the target based only on that description. Then, the communicator is informed that the audience either likes or dislikes the target, which yields a tailored message from the speaker, reflecting this evaluative bias. This research has consistently shown that communicators end up both remembering and believing the content of their tailored

descriptions to the audience rather than the content of the original messages that they had read about the targets. This effect occurs only to the extent that communicators experience a shared reality with their audience about the target (Higgins & Rholes, 1978; Higgins, Echterhoff, Crespillo, & Kopietz, 2007); specifically, these memory biases result only if the communicator believes that the audience successfully identified the target—indicating to the communicator that the two have some shared understanding of the target—and only if the communicator is appropriately motivated to experience that shared understanding (Echterhoff et al., 2005). Furthermore, only after this successful communication—relative to when the audience failed to identify the target after the communicator description—did speakers report epistemic fulfillment (Echterhoff, Higgins, & Groll, 2005), a goal of sharing reality.

Just as sharing reality through interpersonal interactions influences one's attitudes about target persons specifically (e.g., Echterhoff, Higgins, & Groll, 2005), interpersonal interactions should also yield a shared reality about how to think about, feel toward, and react to outgroups more generally. In fact, researchers have suggested that people may be particularly motivated to establish a shared understanding with members of their ingroup about themselves in relation to outgroups (for a review, see Brewer, 1995). However, evidence for these assertions is circumstantial and has yet to be systematically tested.

Some research shows that, within the context of ongoing, interpersonal interactions, people are motivated to share understanding about the outgroup with ingroup members by expressing and/or reinforcing intergroup bias—even outside of people's conscious awareness. For example, when discussing a novel target about whom outgroup membership is known, conversation partners convey stereotype-consistent

information about that target, apparently out of an implicit motive to reach consensus and maintain a sense of shared understanding of the target (Lau, Chiu, & Lee, 2001; Ruscher, 1998; Ruscher, Hammer, & Hammer, 1996). Furthermore, people seem to like other people better when they convey stereotype-consistent information about a target. Castelli, Pavan, Ferrari, & Kashima (2009) found that people engaged in nonconscious mimicry—a sign of affiliation and social reinforcement—of speakers who relied on stereotypes rather than relying on stereotype-inconsistent information about outgroup targets. Since stereotypes are considered to reflect a set of shared information about target groups, these findings suggests that people implicitly prefer and reinforce the expression of such socially shared information, specifically in the context of intergroup attitudes. Although such work demonstrates that people spontaneously like ingroup members who seem to express a shared understanding of outgroup targets, social tuning research and shared reality theory suggest a means to harness this motive in a way that actually reduces outgroup bias.

According to shared reality theory, people should be especially likely to share understanding with individuals who provoke high affiliative motivation—people with whom they have a strong desire to get along. As a result, these people should influence one's own implicit attitudes and affect more than individuals with whom no such identification or close bonds exist. Initial evidence for these claims can be found in the context of ongoing relationships: There is greater concordance in explicitly reported political attitudes among friendship pairs (Crandall, Shiffhauer, & Harvey, 1997), in parents' and children's implicit prejudice (to the extent that children are highly identified with their parents; Sinclair, Dunn, & Lowery, 2005), and in a variety of attitudes held by

romantic partners (Davis & Rusbult, 2001). Even being reminded of one's romantic partner can elicit self-stereotyping in line with beliefs about a partner's attitudes (Sinclair, Hardin, & Lowery, 2006). Outside of the context of existing relationships, people with whom individuals merely anticipate interacting can influence their affect when affiliative motivation is experimentally manipulated, yielding mood alignment without direct contact (Huntsinger, Lun, Sinclair, & Clore, 2009). Taken together, these findings suggest that people with whom individuals are highly motivated to get along might influence one's attitudes and affect to yield a shared understanding with them. Thus, the current studies will focus on people's affiliative motivation to yield attitude change (although social tuning and shared reality research have also profitably harnessed epistemic motivation to shape attitudes).

Interpersonal Interactions Can Yield Prejudice Reduction through Sharing Reality

Although previous research often has emphasized self-regulation strategies for reducing prejudice, there are several important exceptions that point to interpersonal experiences as avenues for intergroup attitude change. For example, intergroup contact theory has argued that direct social experiences with outgroup members can improve intergroup attitudes and reduce prejudice (Allport, 1954; Pettigrew & Tropp, 2006). In order to be fruitful, these instances of intergroup contact require that individuals from different groups meet in contexts in which they possess equal status and engage in some cooperative task to achieve a mutually-held goal. Opportunities for this type of direct contact may not always exist, which can limit the utility of direct intergroup contact theory for improving intergroup attitudes. However, social tuning research suggests a way in which interactions with ingroup members can improve intergroup attitudes.

In this work, researchers have exploited people's underlying relational motives to change their intergroup attitudes via interpersonal interactions with individuals who are not members of the target outgroup. People's motivation to know their social world and need to belong are believed to motivate social tuning, or the process of unconsciously synchronizing one's attitudes with another's apparent beliefs (Lowery, Hardin, & Sinclair, 2001; Lun, Sinclair, Whitchurch, & Glen, 2007; Sinclair, Lowery, Hardin, & Colangelo, 2005). Indeed, social tuning research has demonstrated that one's intergroup attitudes can unconsciously align with an egalitarian interaction partner's when one is induced to experience affiliative or epistemic motivation (Lowery, Hardin, & Sinclair, 2001; Lun et al., 2007). For example, a series of experiments by Sinclair and colleagues (2005) demonstrated that when individuals wanted to get along with an experimenter who was wearing a t-shirt featuring an egalitarian message (an "Eracism" logo), their implicit prejudice was reduced. Importantly, these effects occurred because of unique social goals—not because of mere exposure to an anti-racist message: If participants read the message on a poster rather than on the experimenter's t-shirt, they did not exhibit implicit prejudice reduction (Sinclair et al., 2005).

Most research on social tuning has demonstrated its effect on implicit—rather than explicit—attitudes in particular, which points to its potential for also improving intergroup interactions. Implicit attitudes are important determinants of intergroup behaviors and are implicated as a major reason for the persistence of intergroup prejudice and group-based disparities (Dovidio, Gaertner, Kawakami, & Hodson, 2002; Greenwald et al., 2009). They are linked to a variety of behaviors in interracial interactions, especially in initial encounters. For example, White participants who are high in implicit

anti-Black prejudice demonstrate more nonverbal and verbal anxiety and discomfort during interactions with Black strangers (e.g., Dovidio, Kawakmi, & Gaertner, 2002), and in more meaningful relationships, White freshmen's implicit anti-Black prejudice even predicts conflict and dissolution of roommate relationships with randomly-assigned Black roommates (Towles-Schwen & Fazio, 2006). Thus, social tuning's efficacy in changing implicit attitudes with minimal effort suggests its promise for improving intergroup interactions. However, despite researchers suggesting that social tuning strategies should benefit the very downstream, behavioral consequences associated with implicit intergroup prejudice (Lun & Sinclair, 2011), existing work is confined to examining changes in implicit attitude within the immediate, interpersonal context. No research has yet examined whether social tuning effects carry forward, over time or in other social contexts. In addition, the findings from social tuning research have all been situated in the framework of shared reality theory, arguing that tuning occurs in the service of achieving a subjective sense of mutually shared understanding about the social world. However, this work has not formally tested this assumption.

It is also important to demonstrate that the effects of social tuning reflect genuine attitude changes and not simply self-presentation, or a type of strategic display intended to facilitate a social interaction (e.g., Schlenker, 2003). Social tuning research has consistently demonstrated that tuning one's implicit attitudes to another's ostensible attitudes occurs automatically and outside of one's control, suggesting that strategic self-presentation alone cannot account for these effects (Lun et al., 2007). However, research has not yet directly shown that—in contrast to social tuning—self-presentation will not

yield successfully shared realities. The proposed research also seeks to address this research question.

Sharing Reality Should Produce Durable Implicit Attitude Change and Shape Behaviors

Although sharing reality through social tuning suggests a mechanism whereby our opinions and beliefs about the world might be changed, the extant research raises but does not answer the question: Can it produce durable attitude change and affect behaviors?

Researchers argue and show that the targets and attitudes about which individuals share reality ought to be attended to and processed more deeply, in the service of social coordination (e.g., Shteynberg, 2010; Shteynberg, Gelfand, & Kim, 2009; Wan & Chiu, 2009; Zou et al., 2009; Higgins & Rholes, 1978; Higgins, Echterhoff, Crespillo, & Kopietz, 2007), and these processes should produce strong attitudes (e.g., Echterhoff et al., 2009; Shteynberg, 2010). Therefore, it is likely that successfully sharing reality about intergroup attitudes ought to yield the same downstream consequences that any deeply processed concepts or attitudes produce, including persistence over time and a relationship to behaviors (Ajzen & Fishbein, 2005; Fazio, 1990; Smith & Conrey, 2007). In a connectionist model of attitude representation, connections between semantically meaningful concepts are given some weight, and more heavily weighted concepts are more easily accessible and more stable over time (Conrey & Smith, 2007; Smith, 1996; 1998; Smith & Conrey, 2007). Initial support for the hypothesis that attitudes that align in the service of shared reality are deeply processed, more heavily weighted, and therefore both more stable and salient comes from work showing that social tuning yields attitudes

about which people both report feeling more subjectively certain and respond more quickly (Lun et al., 2007). Overall, based on theory and research suggesting that attitudes that align to achieve a sense of shared reality ought to be processed more deeply, social tuning should produce implicit prejudice reductions that persist over time and which could predict subsequent behaviors.

While research on implicit attitudes and the strength of one's automatic associations for outgroups suggest that tuning might shape intergroup behaviors via changed implicit attitudes directly, research on self-perception in the context of important interpersonal relationships suggests an alternate way in which social tuning and shared reality could influence intergroup interactions. Specifically, the experience of shared reality that results from tuning to an egalitarian partner could also predict behaviors in subsequent interracial encounters; by subjectively perceiving oneself to share reality with someone about a particular target, a person might change his/her behaviors toward that target to align with that sense of shared reality. That is, people will behave in ways consistent with their experience of shared reality. In line with this hypothesis, research on ongoing relationships demonstrates that this type of process occurs relatively frequently with significant relationship partners. For example, merely being reminded of a significant other can shape how a person thinks about, perceives, and reacts to a variety of social targets—including oneself—such that one's own responses and behaviors align with his or her understanding of that relational partner's opinions about the target (Fitzsimmon & Bargh, 2003; Hardin & Conley, 2001; Sinclair, Lowery, & Hardin, 2006). Moreover, these processes seem to occur automatically and outside of one's conscious awareness (Fitzsimmon & Bargh, 2003). Thus, in a newly-formed relationship in which

one has achieved a sense of shared reality via social tuning, this perception of shared reality—not the aligned attitudes themselves—might also uniquely predict subsequent behaviors.

Overall, social tuning should yield persistent attitude change and behavioral outcomes. These behavioral outcomes that result from social tuning to share reality might be fall out of (1) unconscious attitude change itself and/or (2) the subjective sense of shared reality itself. Without directly pitting these two processes against each other, the current research seeks to show that social tuning to an egalitarian partner in the service of shared reality ought to improve intergroup attitudes over time and improve subsequent interracial interactions.

Overview of Current Research

In the current research, I aim first to test the hypothesis that social tuning of implicit intergroup attitudes indeed yields the subjective experience of shared reality (Studies 1, 2, and 3). Not only is this test critical to social tuning theory, but also it is not necessarily self-evident that unconscious attitudes will yield this explicit sense of shared reality. In examining this hypothesis, I also show that social tuning to share reality is uniquely interpersonal (Study 2). Second, I examine whether sharing reality through social tuning with an egalitarian partner (1) produces reductions in anti-Black prejudice that last over a weeklong delay (Study 3, Study 5) and/or (2) influences behaviors in subsequent interracial interactions (Studies 4 and 5). While exploring the downstream consequences of social tuning, I also test two tenets of shared reality theory. Specifically, I directly manipulate participants' perceptions of sharing similar attitudes with an interaction partner to test a tenet of shared reality theory: The necessity of perceiving

common attitudes about a target (Studies 4 and 5). I also test the necessity of being appropriately motivated to share reality (Study 3). In Studies 1-3 and Study 5, I also assess social tuning of explicit intergroup attitudes and whether explicit attitudes account for perceptions of shared reality. Because self-reported intergroup attitudes can be subject to controlled, social desirability biases (Devine, 1989) and because less research on social tuning has investigated its effects on explicit attitudes relative to implicit ones (but see Lun et al., 2007), inclusion of these explicit measures was more exploratory in nature.

Studies 1 and 2: Social tuning to achieve shared reality

The purpose of these two experiments is two-fold: First, to pilot and assess a new, online chat paradigm for experiencing social tuning; and second, to investigate whether social tuning indeed achieves a subjective sense of shared reality.

Overview of Methodology

In Studies 1 and 2, participants engaged in a simulated chat with a partner, after which their implicit and explicit intergroup attitudes were assessed. Participants were then all asked how much they perceived themselves to share their worldview, outlooks, and perspectives with their interaction partner (Turban & Jones, 1988). In Study 1, participants were always led to believe that their chat partner was real, while I manipulated their affiliative motivation (to be high or low) and the apparent attitudes of their chat partner (to be egalitarian or unknown). In Study 2, participants experienced a near-identical chat room paradigm, but—to demonstrate that social tuning is a uniquely interpersonal process—participants were induced to be high or low in affiliative

motivation with a chat partner who was always apparently egalitarian but who was either believed to be “real” or simulated.

Predictions

In Study 1, I first predicted that participants would experience social tuning with their ostensible chat partners only when they were high in affiliative motivation and thought this person clearly opposed racism. Specifically, participants who wanted to get along with their ostensibly egalitarian chat partner should evidence reduced implicit and explicit anti-Black bias, relative to those participants who did not want to affiliate with their partner, or who did not know their partner’s intergroup attitudes. Second, if social tuning does indeed produce the experience of shared reality as previous research asserts (e.g., Lowery, Hardin, & Sinclair, 2001; Sinclair et al., 2005), then tuning ought to also produce outcomes associated with sharing reality. Shared reality theory asserts that an explicit recognition of socially shared internal states ought to fall out of successfully sharing reality (Echterhoff, et al., 2009). Thus, in line with theoretical assertions about shared reality (Echterhoff et al., 2009) and the assumptions of social tuning research (e.g., Sinclair et al., 2005), I predicted that those participants who were high in affiliative motivation, interacted with an ostensibly egalitarian partner, and expressed less implicit prejudice via social tuning ought to report that they shared reality with their partner (as measured by shared worldview items). Moreover, I predicted that those tuned, implicit attitudes would account, at least in part, for these perceptions of shared reality. Similarly, tuning of explicit intergroup attitudes might also account for perceptions of shared reality, but I had weaker predictions about the possible indirect effect of explicit attitudes

since less extant research has provided evidence for tuning of explicit—relative to implicit—intergroup attitudes.

Study 1

Method.

Participants. Ninety White, US residents (61% female; $M_{age} = 35.6$) were recruited from an online crowd-sourcing website, Mechanical Turk (MTurk) and compensated \$1.50 for participation, with the opportunity to earn up to \$0.25 more for accuracy. Participants were led to believe that the research was interested in communication and memory. To that end, they would be completing a series of individual tasks and an online chat with a randomly selected partner. Additionally, at the end of their chat, participants believed they would engage in a memory test. I included the instructions about memory to encourage participants to attend to the study stimuli.

Materials and Procedure. First, to induce high or low affiliative motivation, participants were randomly assigned to engage with a chat partner whose chat style was either high or low in inducing affiliative motivation. Chat content was the same across both conditions, but chat style was piloted to either induce a high desire to get along or a low desire to get along (see Appendix A). Before beginning the chat, participants were asked to enter a screen name and an image to represent them during the chat. Participants were given a choice of four images or the option of uploading their own image to represent them during the chat. After picking a screen name and an avatar, participants were led to believe they were entering a chat room with a real partner. All participants then engaged in a brief, simulated chat with a gender-matched partner with either clearly

egalitarian attitudes against racism or unknown attitudes. To convey these egalitarian attitudes, the simulated chat partner was always represented by a picture, ostensibly of himself/herself, wearing a t-shirt with the “Eracism” logo (See Appendix B). Because this image was not one of the pre-selected choices participants could have chosen and because participants had all seen the option to upload their own image to represent them during the chat, it was clear to participants that the “Eracism” avatar reflected their chat partner’s interracial attitudes. In the unknown attitudes condition, participants saw the same picture, but the t-shirt was blank. Thus, this study employed a 2 (Affiliative motivation: Low/High) $\times$ 2 (Partner’s views: “Eracism”/Blank) design.

Next, participants were led to believe that their chat was being temporarily interrupted with secondary tasks in the service of understanding how delays affect memory. In actuality, the chat portion of the study was over, and the “interruption task” consisted of evaluating their chat partner and completing implicit and explicit attitude measures. Participants responded to four questions assessing their affiliative motivation, including items aimed to measure their desire to get along with their chat partner (See Appendix C; $\alpha = .94$). Next, participants completed a full version of the Implicit Association Test (IAT; Greenwald, Nosek, & Banaji, 2003) to assess implicit anti-Black/pro-White bias. Then, they completed two attitude measures in random order (See Appendix C): (1) the Modern Racism scale to assess explicit attitudes toward Blacks (McConahay, 1986; $\alpha = .83$); and (2) items selected from the Fraboni Ageism scale (Fraboni, Saltstone, & Hughes, 1990; $\alpha = .81$), and demographics information. I included the non-race-related attitude measure to conceal the specific race-related hypotheses. Finally, participants then reported their perceived worldview similarity with their chat

partner as a measure of shared reality (adapted from Turban & Jones, 1988; See Appendix C; $\alpha = .90$). At the very end of the study, I assessed whether participants believed the cover story that their chat partner was real with the single item: “My chat partner was _____,” where the blank could have been (1) another person on MTurk at the same time as I was; (2) a simulation; (3) Don’t know.

Results.

Preliminary Analysis. I first checked whether participants believed the cover story that their chat partner was real. There was substantial variation in suspicion; 41.1% of participants either indicated that they thought their partner was simulated or that they did not know if their partner was simulated or not. Rather than excluding these participants, I controlled for their response to this suspicion probe across all analyses in this experiment.

Manipulation Checks. As expected, participants in the high affiliative motivation condition reported more affiliative motivation ($M=5.6$, $SD=1.1$) for their partner than did participants in the low affiliative motivation condition ($M=4.3$, $SD=1.5$; $F(1, 87)=23.93$, $p=.001$). There were no other significant effects ($ps \geq .20$).

Implicit Prejudice. I first set out to examine whether there was evidence of social tuning of implicit prejudice, consistent with past research, in this novel, online chat paradigm. That is, I tested the hypothesis that participants’ implicit prejudice would tune to the apparent views of their partner when they were affiliatively motivated toward their partner and the views of this person were known. In this case, support for this hypothesis would mean that participants who interacted with a chat partner with known egalitarian views for whom they felt affiliative motivation would express less implicit anti-Black

prejudice relative to participants in the other three conditions (i.e., low affiliative motivation or partner's attitudes are unknown).

As an initial test of this hypothesis, I conducted a 2 (Affiliative Motivation: High/Low) $\times$ 2 (Perceived views: "Eracism"/Blank) ANCOVA with implicit anti-Black prejudice as the dependent variable. This analysis yielded a main effect of affiliative motivation ($F(1,88) = 6.4, p < .05$; partial $\eta^2 = .071$). Participants in the high affiliative motivation condition were less prejudiced ($M = .38, SD = .44$) than those in the low affiliative motivation condition ($M = .56, SD = .29$). No other effects were statistically significant, including the interaction (all $ps > .21$).

As a more focused test of my hypothesis, I conducted an ANCOVA comparing the single condition predicted to yield lower implicit prejudice with the other three. Because I hypothesized that only those participants who were both high in affiliative motivation *and* interacting with a clearly egalitarian chat partner would have lower implicit prejudice, I computed a weighted contrast (3=high affiliative motivation, Eracism logo t-shirt condition; -1=all other conditions) to test this specific comparison. This contrast was significant; participants who were motivated to get along with an ostensibly egalitarian chat partner expressed less implicit anti-Black prejudice ($M = .29, SD = .45$) than did participants in the other conditions ($M_{\text{EracismLowAffil}} = .55, SD = .30$; $M_{\text{BlankLowAffil}} = .60, SD = .28$; $M_{\text{BlankHighAffil}} = .45, SD = .46$), $F(1, 88) = 5.18, p < .05$; partial $\eta^2 = .064$. To fully investigate the nature of the group differences, I also compared the high affiliative motivation /egalitarian views condition with each of the other conditions. All simple contrasts were significant ($p \leq .02$), except for the comparison between the high

affiliative conditions ($p=.22$). See Figure 1. In sum, the focused contrast fit the predicted pattern of means but the results from the other analyses were more mixed in their support.

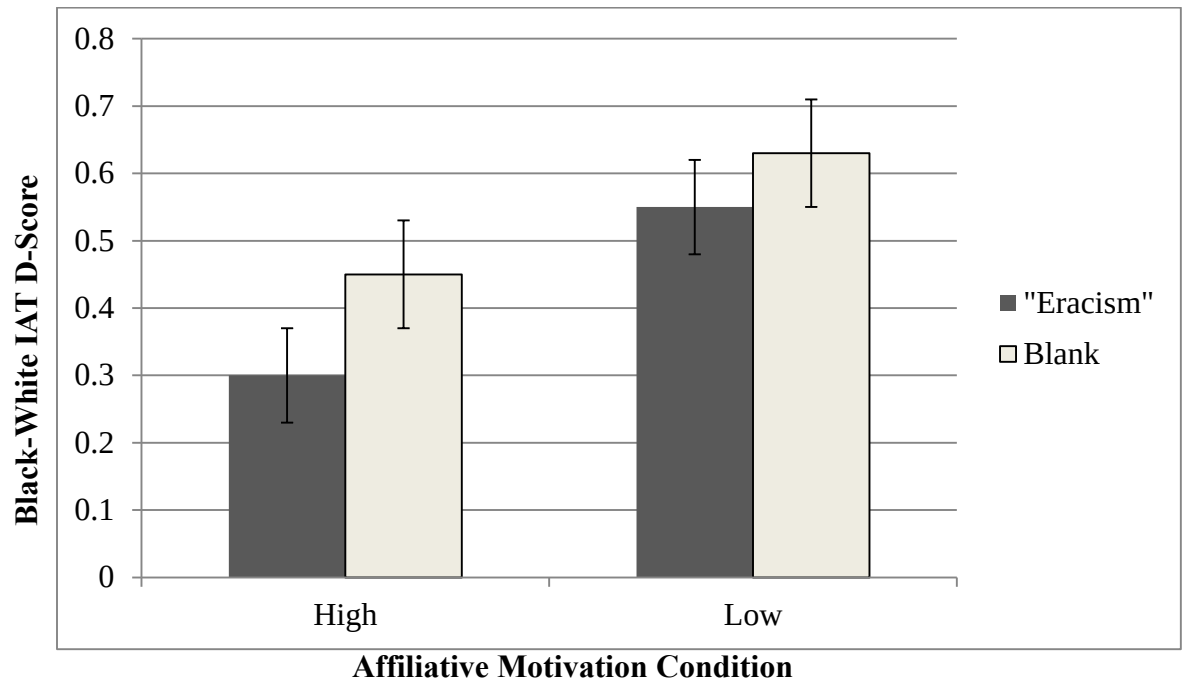


Figure 1. People who are affiliatively motivated to tune to an ostensibly egalitarian chat partner express less implicit anti-Black prejudice.

Shared Worldview. I next tested the prediction that participants who showed evidence of social tuning (i.e., those in the high affiliative motivation/known egalitarian views condition) would report perceiving greater shared worldviews with their partner than participants in the other conditions. Thus, I conducted analyses parallel to those above with shared worldview as the dependent variable. The 2 (Affiliative Motivation: High/Low) $\times$ 2 (Perceived views: "Eracism"/Blank) ANCOVA yielded a main effect of affiliative motivation ($F(1, 88) = 13.83, p < .05$, partial $\eta^2 = .14$; participants in the high affiliative motivation condition reported greater shared worldview ($M = 4.27, SD = 1.1$).

than those in the low affiliative motivation condition ($M=3.36$, $SD=1.1$). No other effects were statistically significant (all $ps > .34$).

Using the same weighted contrast as above to conduct a more focused test of our prediction produced a significant effect, $F(1, 85) = 7.01$, $p=.01$, $\eta^2=.076$. Participants who were motivated to affiliate with an egalitarian chat partner reported greater shared worldview with that partner ($M=4.4$, $SD=1.0$) than did participants in all other conditions ($M_{\text{EracismLowAffil}}=3.3$, $SD=1.2$; $M_{\text{BlankHighAffil}}=4.2$, $SD=1.2$; $M_{\text{BlankLowAffil}}=3.5$, $SD=.87$). Again, I also compared the high affiliative motivation/“Eracism” condition with each of the other conditions. All simple contrasts were significant ($p \leq .02$), except for the comparison between the high affiliative conditions ($p=.54$). Overall, the pattern of results for shared worldview mirrored that of implicit prejudice with the focused contrast fitting the predicted pattern of means, but the results from the others analyses being more mixed.

Implicit Prejudice and Shared Worldview. I sought to examine whether social tuning of implicit prejudice mediated perceptions of shared worldview. If this is the case, I would expect to find that only when participants were motivated to affiliate with a clearly egalitarian chat partner would their degree of implicit prejudice account for their perception of shared worldview with their partner. To test this prediction, I employed the standard Model 7 in the PROCESS macro on SPSS (Hayes, 2013) to conduct moderated mediation analyses in which (1) Affiliative motivation was indicated as the independent variable; (2) Implicit prejudice was indicated as the mediator; (3) Shared worldview was indicated as the dependent variable; and (4) Partner’s perceived views (“Eracism”/Blank) was input as a moderator at path a . As predicted, the test of the indirect effect was marginally significant only when participants knew their partner’s attitudes (90% CI:

.0052, .3452), but not when the partner's perceived views were unknown (90% CI includes zero: -.0050, .2682). See Figure 2.

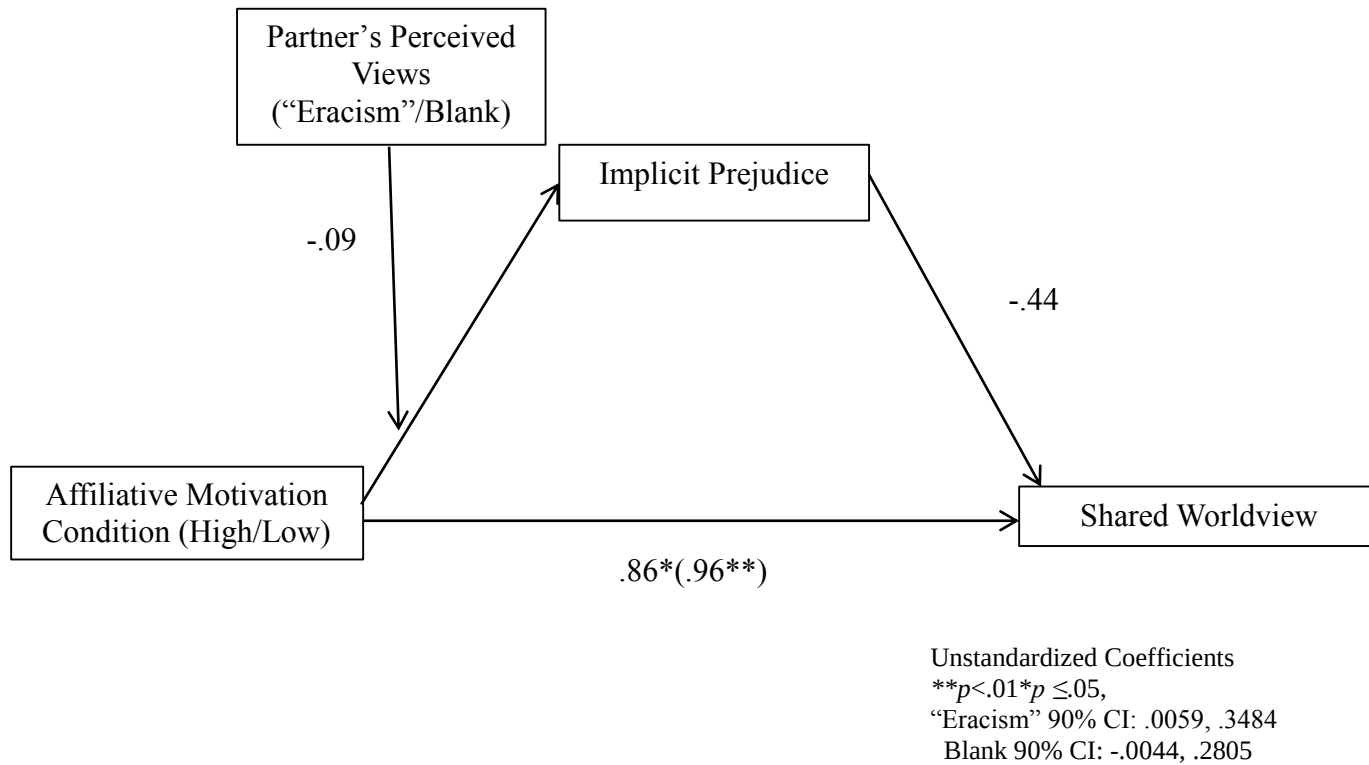


Figure 2. Moderated Mediation: Affiliative motivation predicts shared worldview for participants interacting with an ostensibly egalitarian partner, accounted for, in part, by implicit prejudice.

Explicit Prejudice. I next conducted analyses parallel to those above with explicit prejudice as the dependent variable in order to ascertain whether participants engaged in social tuning of their explicit attitudes and whether any tuning of explicit attitudes also yielded a sense of shared worldview. First, I conducted a 2 (Affiliative Motivation: High/Low) $\times$ 2 (Perceived views: "Eracism"/Blank) ANCOVA to predict implicit anti-

Black prejudice. I found no main effect of affiliative motivation ($p=.15$), no main effect of partner's perceived views ($p=.60$), and no significant interaction ($p=.10$).

Next, I again conducted the same, targeted test of our hypothesis using contrast analyses to compare the high affiliative motivation condition in which the partner's perceived views are known (weighted contrast code=3) with all other conditions (weighted contrast code=-1) to predict explicit anti-Black prejudice. I found a trend, $F(1, 88)=2.67$, $p=.10$, $\eta^2=.031$, such that participants in the high affiliative motivation condition reported less explicit anti-Black prejudice ($M=2.5$, $SD=1.2$) after chatting with an egalitarian partner than did participants who were not affiliatively motivated or who chatted with partners whose attitudes were unknown ($M_{\text{EracismLowAffil}}=3.4$, $SD=1.4$; $M_{\text{BlankLowAffil}}=2.8$, $SD=1.1$; $M_{\text{BlankHighAffil}}=2.8$, $SD=1.3$). Again, I also compared the high affiliative motivation/"Eracism" condition with each of the other conditions. Participants in this condition expressed less explicit anti-Black prejudice ($M=2.5$, $SD=1.2$) than participants in the low affiliative motivation condition when their partner's egalitarian views were known ($M=3.4$, $SD=1.4$), $t(48)=2.30$, $p<.05$. All other simple contrasts were non-significant ($ps\geq.44$). Overall, the results of the targeted contrast provide some evidence to suggest that participants tuned their explicit attitudes to their ostensibly egalitarian chat partner's, but these effects were weaker than they were for implicit prejudice.

Explicit Attitudes and Shared Worldview. Although there was less evidence that participants had tuned their explicit attitudes relative to their implicit attitudes, I next conducted parallel analyses to test the indirect effects of tuning one's explicit anti-Black attitudes to an egalitarian chat partner. As with implicit prejudice, I employed the

standard Model 7 in the PROCESS macro on SPSS (Hayes, 2013) to conduct a moderated mediation analysis in which (1) Affiliative motivation was indicated as the independent variable; (2) Explicit anti-Black prejudice was indicated as the mediator; (3) Shared worldview was indicated as the dependent variable; and (4) Partner's perceived views ("Eracism"/Blank) was input as a moderator at path *a*. I found no evidence that any indirect effect was significant, regardless of whether partner's perceived views were known (90% CI includes zero: -.2409, .1610) or were unknown (90% CI includes zero: -.0633, .1027). Thus, although there was some, weak evidence of tuning of explicit attitudes, explicit attitudes did not account for greater perceptions of shared worldview when participants wanted to get along with a partner whose egalitarian attitudes were known.

Discussion. Practically, Study 1 demonstrates the success of a new, online chat paradigm for implementing a social tuning intervention. Results provide initial evidence of social tuning of both implicit and explicit interracial attitudes when participants were affiliatively motivated with an ostensibly egalitarian chat partner, although these effects were stronger for implicit attitudes. More importantly, Study 1 is the first direct test of the assumption that—to the extent that people experience social tuning of their implicit attitudes—they achieve a sense of shared reality with a social interaction partner. I provide evidence that, when people are motivated to affiliate, aligning their implicit interracial attitudes with an apparently egalitarian chat partner leads to feeling more shared worldview with that partner.

Study 2

Study 2 aims to show that attitude alignment via social tuning occurs only in the service of relational goals (e.g., Echterhoff et al., 2009). To do so, I will manipulate whether people believe themselves to be chatting with a human interaction partner or chatting with a simulated chat program.

Predictions

I again predicted that participants would tune their implicit and explicit interracial attitudes to an egalitarian chat partner's when they want to get along with that person. However, social tuning should only occur in interpersonal contexts, and not when attitudes are not associated with a social interaction partner (Sinclair et al., 2005). More specifically, if people do not believe themselves to be engaged in a genuine, interpersonal interaction, they should not experience any social tuning or shared reality effects.

Method.

Participants. One-hundred-seventy-eight White, US residents (53.5% female; $M_{\text{age}}=34.58$) were recruited via MTurk and participated in exchange for monetary compensation (\$1.65 with up to \$0.25 bonus for accuracy).

Materials and Procedure. This study employed a similar online design and measures as Study 1. Participants were again induced to be high or low in affiliative motivation using the same chat content paradigm as in the Study 1 (see Appendix A). During the current chat paradigm, all participants engaged with a chat partner who was clearly egalitarian (wearing the "Eracism" logo t-shirt). However, half of the participants were told the truth about the chat: Their chat partner is not real but actually a simulated program. The other half of the participants were led to believe that their chat partner was

another person logged in to the study at the same time as they were (as in the Study 1). Thus, this study employed a 2 (Affiliative motivation: Low/High) $\times$ 2 (Chat partner: Real/Simulated) design. Just as in Study 1, the chat portion was again interrupted for secondary tasks: Evaluations of their chat partner including four questions assessing their affiliative motivation ($\alpha = .94$), the Black-White IAT (Greenwald, Nosek, & Banaji, 2003), the Modern Racism Scale (McConahay, 1986; $\alpha = .91$), the abbreviated Fraboni Ageism scale (Fraboni, Saltstone, & Hughes, 1990), and demographics. Finally, participants reported on their worldview similarity (Turban & Jones, 1988) with their chat partner. Similar to Study 1, at the end of the study, participants were asked about their beliefs about the realness of their chat partner. In this study, I assessed these beliefs with a different, single item, “How real was your chat partner?” answered on a 7-point Likert scale.

Results

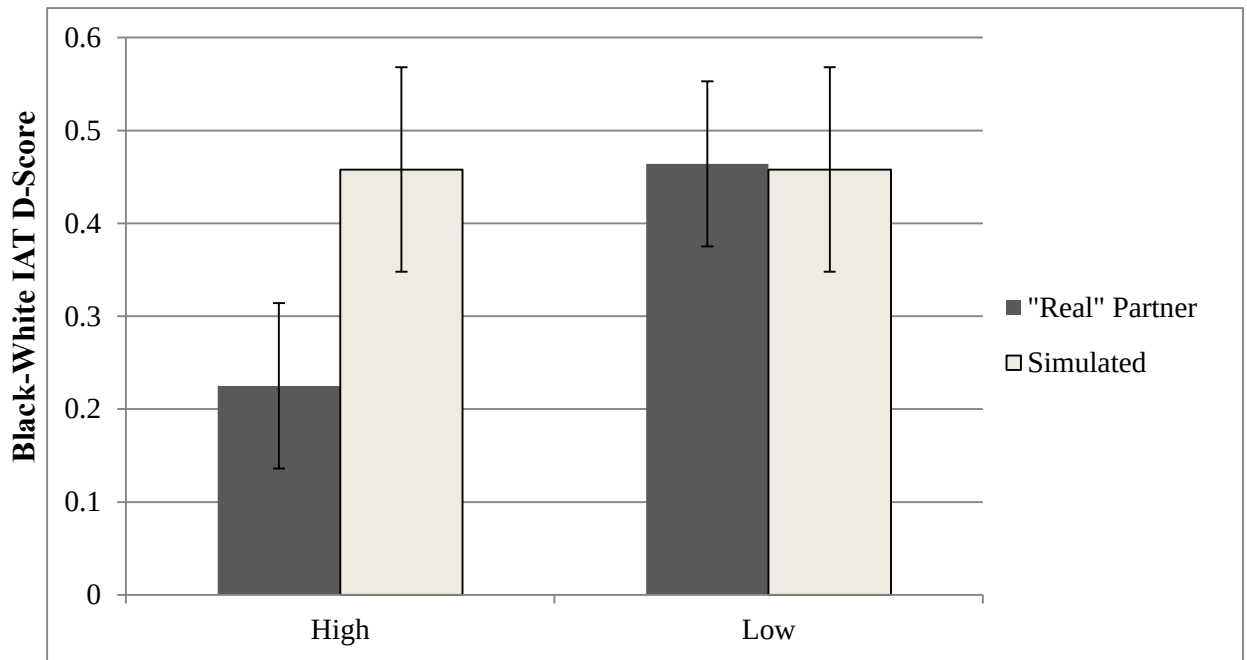
Preliminary analysis. First, I checked whether participants believed they were interacting with a real chat partner, dependent on chat partner condition (i.e., simulated vs. “real”). I found a main effect of condition, but participants who had been explicitly told their partner was simulated rated him/her to seem more real ($M=5.0$, $SD= 1.6$) than did partners who were led to believe their partner was another person online ($M=4.16$, $SD=2.1$), $F(1, 173) = 8.81$, $p=.003$. Although at first the direction of this effect might seem surprising, it is very likely driven by the nature of our instruction set for participants in the simulated chat partner condition. Namely, these participants were told that the researchers were “developing an online chat paradigm using a simulated partner” that they would have to evaluate, and it is highly possible that they were evaluating how real

the partner seemed *for a simulation* (indeed, their responses in open-ended suspicion probes suggest just that). As in Study 1, all analyses include this question as a covariate. If this covariate is excluded, all results follow the same pattern and are either marginally significant or significant.

Manipulation Checks. I ensured that participants in the high affiliative induction condition reported more affiliative motivation, regardless of whether their partner was real or simulated. This was the case: There was only a main effect of affiliative induction condition, $F(1, 176)=80.63, p<.001$, such that participants in the high affiliative induction condition reported more affiliative motivation ($M=5.8; SD=1.1$) than in the low affiliative induction condition ($M=4.0, SD=1.5$). No other effects were significant ($ps \geq .86$).

Implicit Prejudice. I first set out to examine the hypothesis that participants' implicit prejudice would tune to the apparent views of their partner when they were affiliatively motivated toward their partner *and* that partner was believed to be “real.” To do so, I conducted a 2 (Affiliative Motivation: High/Low) $\times$ 2 (Chat Partner: “Real”/Simulated) ANCOVA with implicit anti-Black prejudice as the dependent measure. I found no main effect of affiliative motivation ($p=.32$), a trend of chat partner ($F(1, 170)=2.64, p=.11$, partial $\eta^2=.015$), and a marginally significant interaction ($F(1, 170)=3.01, p=.08$, partial $\eta^2=.017$). Participants in the high affiliative motivation condition were significantly less prejudiced when interacting with a “real” partner ($M=.28, SD=.39$) than when interacting with a simulated chat partner ($M=.48, SD=.37$), $F(1, 170) = 5.78, p=.02$. There was no difference in implicit prejudice when participants were low in affiliative motivation ($M_{\text{“Real”}}=.44, SD=.39; M_{\text{Simulated}}=.43, SD=.36; p=.96$).

As in Study 1, to perform a more targeted test of my hypothesis, I conducted an ANCOVA comparing the single condition hypothesized to yield lower implicit prejudice with all other three conditions. Because I hypothesized that only those participants who were both high in affiliative motivation *and* interacting with a “real,” ostensibly egalitarian chat partner would have lower implicit prejudice, I computed a weighted contrast to make this comparison (3=high affiliative motivation induction, “real” partner condition; -1=all other conditions). I found a significant effect, $F(1, 173) = 8.26, p=.005$, partial $\eta^2=.035$, such that participants who were motivated to affiliate with their “real,” apparently egalitarian partner expressed less implicit anti-Black prejudice (D-Score: $M=0.24, SD=.44$) than did participants in all other conditions ($M^{\text{“Real”LowAffil}}=.43, SD=.40; M_{\text{SimulatedHighAffil}}=.49, SD=.37; M_{\text{SimulatedHighAffil}}=.44, SD=.36$). See Figure 3. To fully investigate the nature of the group differences, I also compared the high affiliative motivation / “real” partner condition with each of the other conditions. All simple contrasts were significant or marginally significant ($p \leq .07$). In sum, the results of all analysis strategies fit the predicted pattern of results.



Affiliative Motivation Condition
Figure 3. When high in affiliative motivation and interacting with a “real,” ostensibly egalitarian chat partner, participants express less implicit anti-Black prejudice.

Shared Worldview. I next tested the prediction that participants who showed evidence of social tuning (i.e., those in the high affiliative motivation/“real,” egalitarian views condition) would report perceiving greater shared worldviews with their partner than participants in the other conditions. To test the hypothesis that participants high in affiliative motivation interacting with a “real,” ostensibly egalitarian chat partner would express greater shared worldview with that partner, I conducted a 2 (Affiliative Motivation: High/Low) $\times$ 2 (Chat Partner: “Real”/Simulated) ANCOVA with shared worldview as the dependent variable. I found a significant effect of affiliative motivation ($F(1, 170)=37.3, p<.001, \text{partial } \eta^2=.18$); participants in the high affiliative motivation

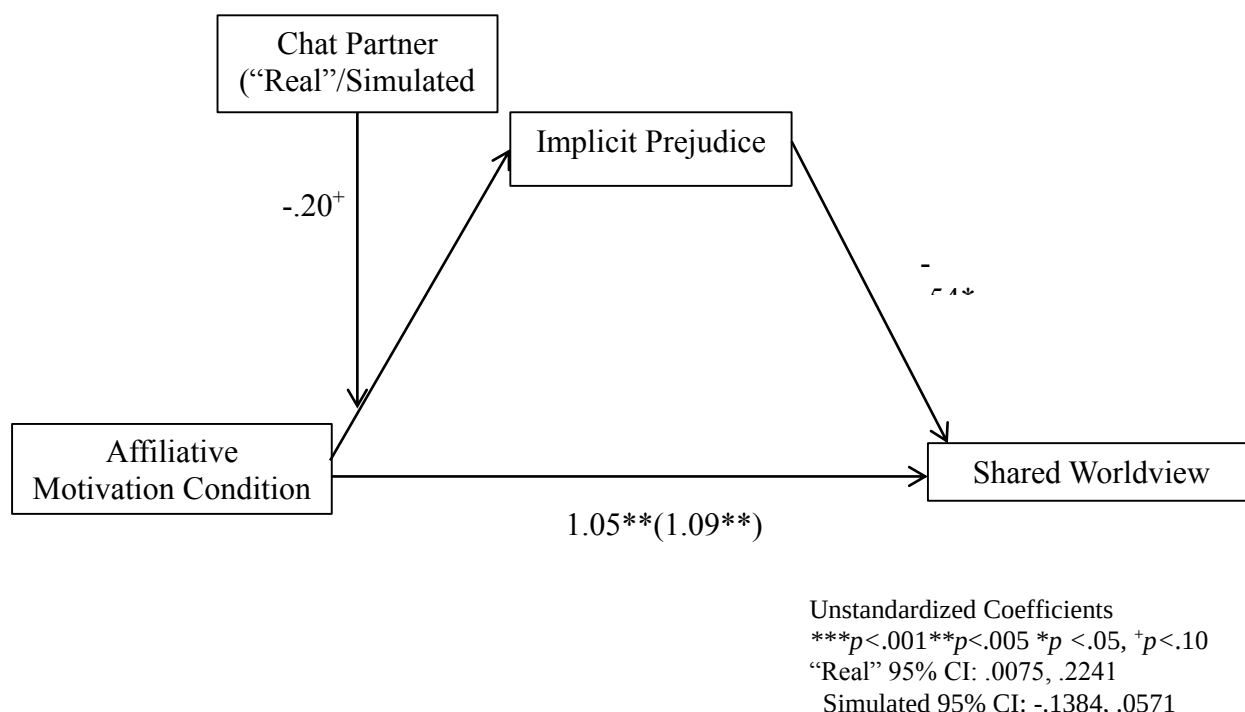
conditions reported significantly more shared worldview ($M=4.39$ $SD=1.4$) than participants in the low affiliative motivation conditions ($M= 3.29$, $SD=1.3$). I found a significant effect of chat partner ($F(1, 170)=3.90$, $p=.05$, partial $\eta^2=.022$), such that participants also reported more shared worldview when interacting with a “real” partner ($M=4.03$, $SD=1.5$) than when interacting with a simulated chat partner ($M=3.66$, $SD=1.3$). There was no significant interaction ($p=.47$).

Again, I used the weighted contrast to make a targeted test of my hypothesis that participants in the high affiliative motivation condition who believed they were chatting with a “real” person would feel greater shared reality with that person. I found a significant effect, $F(1, 172) = 14.37$, $p<.001$, partial $\eta^2=.077$. Participants who were motivated to affiliate with their “real,” egalitarian partner perceived themselves to share reality with their partner more ($M=4.5$, $SD=1.5$) than participants in all other conditions did ($M_{\text{“Real”“LowAffil”}} = 3.5$, $SD=1.5$; $M_{\text{SimulatedHighAffil}} = 4.2$, $SD=1.2$; $M_{\text{SimulatedLowAffil}} = 3.0$, $SD=1.4$). As with implicit prejudice, I also compared the high affiliative motivation /“real” partner condition with each of the other conditions. All simple contrasts were significant ($p\leq.001$), except for the comparison between the high affiliative conditions ($p=.36$). In sum, the targeted contrast test fit the predicted pattern of results, though the results of the other analyses were more mixed.

Implicit Attitudes and Shared Worldview. I next sought to examine whether social tuning of implicit prejudice mediated perceptions of shared worldview. If this is the case, I would expect to find that only when participants were motivated to affiliate with a “real,” clearly egalitarian chat partner would their degree of implicit prejudice account for their perception of shared worldview with their partner. To test this, as in Study 1, I

employed the standard Model 7 in the PROCESS macro on SPSS (Hayes, 2013) to conduct a moderated mediation analysis in which (1) Affiliative motivation was indicated as the independent variable; (2) Implicit prejudice was indicated as the mediator; (3) Shared worldview was indicated as the dependent variable; and (4) Chat partner (“Real”/Simulated) was input as a moderator at path *a*. The test of the indirect effect was significant only when participants believed their partner to be real (Effect=.0841, 95% CI: .0119, .2297), but not when the partner was simulated (95% CI includes zero: -.1258, .0595). Thus, these analyses provide evidence that implicit attitudes account, at least in part, for the perceptions of greater shared worldview when participants are affiliatively motivated with an ostensibly egalitarian, “real” chat partner, as predicted. See Figure 4.

Figure 4. Moderated Mediation: Affiliative motivation predicts shared worldview for participants interacting with a “real,” ostensibly egalitarian partner, accounted for, in part, by implicit anti-Black attitudes.



Explicit Prejudice. After examining participants’ implicit attitudes, I next investigated whether participants tuned their explicit intergroup attitudes and, if so, whether these explicit attitudes related to perceptions of shared worldview. First, to test the hypothesis that participants high in affiliative motivation interacting with a “real,” ostensibly egalitarian chat partner would express less explicit, anti-Black prejudice, I conducted a 2 (Affiliative Motivation: High/Low) $\times$ 2 (Chat Partner: “Real”/Simulated) ANCOVA indicating explicit anti-Black prejudice as the dependent variable. I found a marginally significant effect of affiliative motivation ($F(1, 170)=3.63$, $p=.06$, partial $\eta^2=.021$); participants in the high affiliative motivation conditions were marginally

significantly less prejudiced ($M=3.09$ $SD=.90$) than participants in the low affiliative motivation conditions ($M= 3.38$, $SD=1.1$). I found a trend of chat partner ($F(1, 170)=2.79$, $p=.10$, partial $\eta^2=.016$), such that participants were less prejudiced when interacting with a “real” partner ($M=3.11$, $SD=.96$) than when interacting with a simulated chat partner ($M=3.40$, $SD=.91$). There was no significant interaction ($p=.45$).

Following the same analysis strategy as was used with implicit prejudice and shared worldview, to perform a more targeted test of this hypothesis, I conducted an ANCOVA comparing the single condition hypothesized to yield lower explicit prejudice with the other three conditions. Using the same weighted contrast, I compared participants in the high affiliative motivation condition who were interacting with a “real” chat partner with all of the other three conditions to predict explicit interracial attitudes and found a trend, $F(1, 172) = 2.23$, $p=.13$, partial $\eta^2=.013$. Participants who were motivated to affiliate with a “real,” egalitarian chat partner expressed less explicit anti-Black prejudice ($M=3.0$, $SD=1.2$) than in all other conditions ($M_{\text{“Real”LowAffil}}=3.2$, $SD=.92$; $M_{\text{SimulatedHighAffil}}=3.2$, $SD=.88$; $M_{\text{SimulatedLowAffil}}=3.6$, $SD=1.2$). As above, I also compared the high affiliative motivation /“real” partner condition with each of the other conditions. The simple comparison of this condition with the low affiliative motivation/simulated partner condition was significant ($p=.02$), but no other simple contrasts were significant ($ps\geq.42$). In sum, only the focused contrast provides some evidence in line with predictions, but these analyses suggest that effects on explicit prejudice were relatively weak, especially compared to implicit anti-Black prejudice.

Explicit Prejudice and Shared Worldview. I next sought to examine whether social tuning of explicit prejudice mediated perceptions of shared worldview. Following a

parallel analysis strategy as with implicit prejudice to test for an indirect effect of explicit prejudice, I conducted a moderated mediation analysis predicting shared worldview. Specifically, employing the standard Model 7 in the PROCESS macro on SPSS (Hayes, 2013), I ran moderated mediation analyses in which (1) Affiliative motivation was indicated as the independent variable; (2) Implicit prejudice was indicated as the mediator; (3) Shared worldview was indicated as the dependent variable; and (4) Chat partner (“Real”/Simulated) was input as a moderator at path a . The test of the indirect effect was not significant whether participants believed their partner to be real (95% CI includes zero: -.0928, .0280) or simulated (95% CI includes zero: -.1382, .0569). Thus, there is no evidence that explicit prejudice accounts for the perceptions of greater shared worldview when participants are affiliatively motivated with a “real,” ostensibly egalitarian chat partner.

Discussion. These findings provide further evidence that—to the extent that people experience social tuning of their implicit interracial attitudes—they achieve a sense of shared reality with an egalitarian chat partner. Specifically, when one is motivated to affiliate with an apparently egalitarian partner, aligning his or her implicit interracial attitudes with that chat partner leads to feeling more shared worldview with him or her. This occurs only when one’s chat partner is perceived to be a “real” human, providing evidence that achieving shared reality is inherently interpersonal. Again, as in Study 1, although these results provide some, weaker evidence of tuning of one’s explicit interracial attitudes, participants’ explicit attitudes did not account for any indirect effects on perceptions of shared worldview.

Study 3: Appropriate motivation to share reality

In Study 3, I sought to test the role of appropriate motivation in achieving shared reality and how motivation relates to the persistence of attitude change. According to the theory, people need to have the appropriate motivation to experience shared reality; individuals do not merely spontaneously share attitudes with each other but instead the experience of mutual, shared understanding requires an underlying affiliative or epistemic motivation (Echterhoff et al., 2009). As such, being in a different motivational state ought to preclude the experience of social tuning and/or sharing reality with a partner.

Predictions

I predicted that participants who are affiliatively motivated would tune their implicit and explicit intergroup attitudes to an egalitarian chat partner's, and tuning of their intergroup attitudes should account for greater perceptions of shared reality, as in Studies 1 and 2. Based on the results of Studies 1 and 2, I predicted that any tuning of explicit attitudes would be weaker than of implicit attitudes. After a weeklong delay, these affiliatively motivated participants should maintain their tuned attitudes with their chat partner, since attitudes that align in the service of shared reality ought to be stronger, and strong attitudes persist over time (Eagly & Chaiken, 1993). When motivated to self-present during an initial interaction, participants' interracial attitudes might match their chat partner's (in line with Baumeister, 1982), but if so, this change in expressed attitudes should yield qualitatively distinct downstream consequences from those associated with social tuning. Importantly, intergroup attitudes that change in the service of self-presentation should not account for any perceptions of greater shared worldview with an

ostensibly egalitarian chat partner and should not persist over time. Thus, in contrast to participants who are genuinely affiliatively motivated and tune their intergroup attitudes to the ostensible views of an interaction partner, participants who are motivated for a strategic, social reason (i.e., to self-present as a purposeful strategy to get an interaction partner to like them)—rather than a genuine, automatic interpersonal process—should not evidence (1) any relation between their interracial attitudes and their perceptions of shared reality with their chat partner or (2) attitude changes that persist over a weeklong delay.

Method

Participants. Three-hundred-nineteen White, US residents (51.4% female) were recruited to participate via Mechanical Turk in exchange for monetary compensation for completing a Time 1 session (\$1.65) and Time 2 session (\$0.50), with the opportunity to receive up to (\$0.55) in bonuses for accuracy and full completion of both sessions. Only 127 participants fully completed both sessions 1 and 2 (58.7% attrition).

Materials and Procedure. The current study utilized an online chat paradigm again, employing a very similar design to Studies 1 and 2. There were several key changes: First, although participants again engaged in a chat with a partner whose ostensible attitudes were visible on their t-shirt, chat partner attitudes were either clearly egalitarian (“Eracism” logo) or clearly politically affiliated (“Republican and Proud” logo). I chose the Republican logo based on pre-testing that showed that a person associated with it was perceived as less egalitarian ($M=3.5$, $SD=1.5$) than someone associated with the “Eracism” logo ($M= 5.3$, $SD=1.8$; $t(14) = -2.99$, $p=.01$). Second, and most important to the test of the necessity of appropriate motivation to achieve shared

reality, participants were motivated either (1) to genuinely get along with their experimenter or (2) to get along for strategic, self-presentational reasons. Specifically, half of the participants experienced the same affiliative motivation induction based on the positive chat content used in Studies 1 and 2, while the other half of participants were instructed to intentionally act in ways to try to make their chat partner like them—to strategically self-present.

In the Self-presentation conditions, chat partners spoke in a more neutral tone but about the same content and asked the same questions of the participant as in the affiliative motivation condition (See Appendix D for full script of the Self-Presentation instructions and simulated chat). The content and tone of the neutral chat was pre-tested on MTurk to be neutral relative to the affiliative motivation induction chat ($p < .05$). Thus, this experiment employs a 2 (Motivation: Affiliative/Self-Presentation) $\times$ 2 (Perceived Views: “Eracism”/Republican) design.

As in Studies 1 and 2, during an ostensible interruption task, participants first made evaluations of their chat partner including four questions assessing their affiliative motivation, ($\alpha = .90$). Then, implicit and explicit prejudice were assessed. These intergroup attitude measures were completed both immediately (Time 1) and within five to seven days (Time 2). Implicit prejudice again was assessed using the full Black-White race IAT (Nosek, Greenwald, & Banaji, 2003). Explicit prejudice was again measured using the Modern Racism scale (McConahay, 1986; $\alpha = .92$). Shared worldview was assessed using the same 4-items adapted from the Turban and Jones (1988) scale. As in Study 1, at the very end of the Time 1 session, I assessed whether participants believed the cover story that their chat partner was real with the single item: “My chat partner was

_____,” where the blank could have been (1) another person on MTurk at the same time as I was; (2) a simulation; (3) Don’t know.

Results

Preliminary Analyses. First, I examined whether participants believed the cover story that their chat partner was real, assessed as in Study 1 with a single item at the end of the study. I had substantial variation in suspicion; 44.0% of participants indicated that they thought their partner had either been simulated or that they did not know who their partner was. Rather than excluding these participants, I controlled for their response to this suspicion probe across all analyses, as in Study 1.

Unless otherwise noted, all analyses also control for self-reported political affiliation because of the political nature of one of the independent variables. Participant age was also controlled for in all analyses because there was a pattern of participants being slightly younger in the “Eracism” condition relative to the Republican condition, and age was significantly correlated with self-reported affiliative motivation, regardless of condition ($r=.18$, $p=.001$).

Attrition. I examined attrition rates and the characteristics of our Time 1 and Time 2 samples. Only 127 participants completed their second session (58.7% attrition). Of these, only 100 answered a manipulation check assessing their memory for the first session of the study accurately, leaving just one-third of our original sample to be considered. Because of the low sample size and non-significant effects at Time 2, analyses detailed below only consider the Time 1, full sample. For Time 2 results, see Appendix E.

Manipulation checks. I sought to confirm that experiencing the affiliative motivation induction yielded a greater desire to get along with one's chat partner, regardless of partner's ostensible views. Because participants in the self-presentation condition were explicitly instructed to "get their partner to like [them]" and that their success in following these instructions could increase the bonus they earned, I utilized the single-item evaluating how likeable their partner was—rather than the full four-item scale used in Studies 1 and 2 that included questions assessing the desire to get along and have a smooth interaction—as an indicator of affiliative motivation. Thus, I conducted an ANCOVA inputting motivation condition (Affiliative/Self-Presentation), partner's perceived views ("Eracism"/Republican), and their interaction as predictors of liking for one's chat partner. There was no effect of partner's perceived views ($p=.15$). Confirming the manipulation, I found a marginally significant effect of motivation condition ($F(1, 275)=3.56, p=.060$, partial $\eta^2=.013$), such that participants in the affiliative motivation condition reported more liking of their partner ($M=5.7, SD=1.2$) than did participants in the self-presentation condition ($M=5.4, SD=1.2$). There was no significant interaction predicting liking ($p=.30$).

Main Analyses

Implicit Prejudice. I first set out to examine the hypothesis that participants' implicit prejudice would tune to the apparent views of their partner when they were affiliatively motivated toward their partner and this person was perceived to have egalitarian attitudes. To test the hypothesis that participants motivated to genuinely affiliate with a clearly egalitarian interaction partner would express less implicit prejudice than participants motivated to strategically self-present, I conducted a 2 (Motivation:

Self-Presentation/Affiliative) $\times$ 2 (Partner's perceived views: "Eracism"/ Republican) ANCOVA with implicit prejudice during the first session of the study as the dependent variable. There was no main effect of motivation ($p=.89$), and only a marginally significant effect of partner ideology ($F(1, 275) = 3.14, p=.08$, partial $\eta^2=.013$), such that participants who chatted with an ostensible partner wearing the "Eracism" logo expressed less implicit prejudice (D-score $M=.35, SD=.31$) than did individuals who had engaged in a chat with a Republican partner (D-score $M=.43, SD=.40$). There was no significant interaction ($p=.65$).

Next, as in Studies 1 and 2, I conducted a more targeted test of my hypothesis. To do so, I computed a weighted contrast where participants who were induced to genuinely affiliate with an egalitarian partner (weight=3) were compared to participants in all other conditions (weight=-1). This contrast was not significant, $p= .22$. I also tested each simple contrast, comparing participants who were affiliatively motivated with a clearly egalitarian chat partner to participants in each of the other conditions, but no simple contrasts were significant ($ps \geq .13$). Thus, the ANVOCA results provide evidence that participants expressed less implicit anti-Black prejudice when their chat partner was ostensibly egalitarian, relative to when their chat partner's perceived views were Republican. However, these implicit attitudes did not depend on motivation condition. Results from the contrasts further suggest that these effects did not depend on motivation condition.

Shared Worldview. I next tested the prediction that participants who showed evidence of social tuning (i.e., those in the affiliative motivation/egalitarian views condition) would report perceiving greater shared worldviews with their partner than

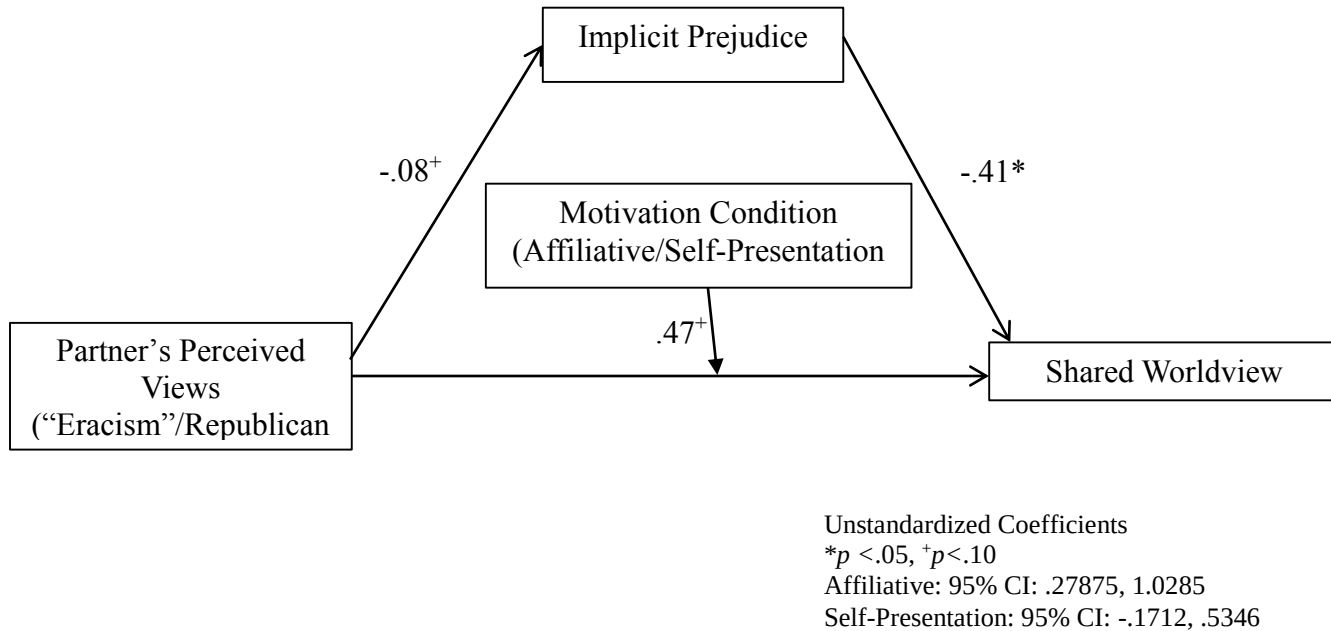
participants in the other conditions. To test this hypothesis, I conducted a 2 (Motivation: Affiliative/Self-Presentation) $\times$ 2 (Partner's perceived views: "Eracism"/ Republican) ANCOVA with shared worldview as the dependent variable. There was no main effect of motivation condition ($p=.34$), but there was a main effect of partner ideology, $F(1, 273)=11.3$, $p=.001$, partial $\eta^2=.041$, qualified by a marginally significant interaction, $F(1, 273)=3.63$, $p=.06$, partial $\eta^2=.012$. Regardless of their ostensible partner's attitudes, participants in the self-presentation conditions reported just as much shared worldview with their partner ($M_{Eracism}=4.3$, $SD=1.1$; $M_{Republican}=4.2$, $SD=1.1$). In contrast, participants in the affiliative motivation conditions reported more shared worldview with their partner when s/he wore an "Eracism" logo ($M=4.5$, $SD=1.2$) than when s/he wore a Republican logo ($M=3.8$, $SD=1.1$).

I next conducted a more targeted test of this hypothesis using the same contrast comparing participants in the affiliative motivation/egalitarian partner condition with all other conditions to predict perceptions of shared reality, as in previous analyses. I found a significant effect, such that people who were in the affiliative motivation condition with an egalitarian chat partner reported greater shared worldview ($M=4.5$, $SD=.91$) with that partner than did participants in all other conditions ($M_{AffilRepublican}=3.9$, $SD=1.2$; $M_{SelfPresent"Eracism"}=4.4$, $SD=1.1$; $M_{SelfPresentRepublican}=4.2$, $SD=1.1$; $F(1, 276) = 6.06$, $p=.01$, partial $\eta^2=.05$). I also tested each simple contrast, comparing participants who were affiliatively motivated with a clearly egalitarian chat partner to participants in each of the other conditions. The simple contrast between the two affiliative motivation conditions was significant ($p<.001$), and the simple contrast with the self-presentation/Republican was marginally significant ($p=.06$). However, the simple comparison with the self-

presentation/“Eracism” condition was not significant ($p=.44$). Thus, the ANCOVA and targeted contrast analyses provide evidence that participants affiliatively motivated to get along with a clearly egalitarian partner reported more shared worldview with that partner, although the results of the simple contrasts were somewhat mixed.

Implicit Attitudes and Shared Worldview. I next sought to examine whether social tuning of implicit prejudice mediated perceptions of shared worldview. I expected that only when genuinely affiliatively motivated would people’s implicit attitudes account for their perceptions of shared worldview. To test this hypothesis, similar to Studies 1 and 2, I employed bootstrapping techniques to test for moderated mediation. Because I found evidence of a significant interaction of motivation condition $\times$ partner’s views to predict shared worldview, I employed the standard Model 5 of the SPSS PROCESS Macro (Hayes, 2013), inputting: (1) Partner’s perceived views as the independent variable; (2) implicit prejudice as the mediator; (3) shared worldview as the outcome; (4) and motivation condition (Affiliative/Self-Presentation) as a moderator at path c . I found a significant moderated mediation effect, such that, to the extent that participants expressed less implicit prejudice when interacting with an ostensibly egalitarian chat partner, they reported more shared worldview (95% CI: .0015, .0966), and the conditional direct effect was only significant when participants were genuinely affiliatively motivated (95% CI: .2783, 1.0278), not when they were motivated to self-present (95% CI includes zero: -.1750, .5311). See Figure 5.

Figure 5. Moderated Mediation: Partner’s perceived views predict shared worldview for participants when affiliatively motivated, accounted for, in part, by implicit anti-Black attitudes.



Explicit Attitudes. After examining participants’ implicit attitudes, I next investigated whether participants tuned their explicit intergroup attitudes and, if so, whether these explicit attitudes related to perceptions of shared worldview. First, to test the hypothesis that participants high in affiliative motivation interacting with an ostensibly egalitarian chat partner would express less explicit, anti-Black prejudice, I conducted a 2 (Motivation: Affiliative/Self-Presentation) $\times$ 2 (Partner’s perceived views: “Eracism”/Republican) ANCOVA indicating explicit anti-Black prejudice as the dependent variable. There was no main effect of motivation condition ($p=.91$) but there was a trend of partner’s views ($F(1, 274) = 2.54$, $p=.11$, partial $\eta^2=.009$). Participants

who chatted with a partner wearing the “Eracism” logo tended to endorse less explicit prejudice ($M=2.7$, $SD=1.0$) than did individuals who had engaged in a chat with a Republican partner ($M=3.0$, $SD=1.0$). There was no significant interaction ($p=.92$).

To conduct a more targeted test of this hypothesis, I again utilized the same weighted contrast to predict explicit prejudice as I had to examine implicit prejudice and shared worldview, above. I compared the affiliative motivation/egalitarian partner condition (weight=3) with all the others (weights=-1) to predict explicit anti-Black attitudes. There was no significant effect ($p=.61$). I also tested each simple contrast, comparing participants who were affiliatively motivated with a clearly egalitarian chat partner to participants in each of the other conditions. No simple contrasts were significant ($ps \geq .30$). In sum, the ANCOVA provides some evidence that participants expressed less explicit anti-Black prejudice when their chat partner was ostensibly egalitarian, relative to when their chat partner’s perceived views were Republican, and these explicit attitudes did not depend on motivation condition. Results of the contrasts further suggest that these effects were weak and did not depend on the motivation condition.

Explicit Attitudes and Shared Worldview. Although there was no strong evidence of tuning of explicit attitudes, I conducted the same test of mediation as I had for implicit anti-Black attitudes. I sought to examine whether social tuning of one’s explicit attitudes mediated perceptions of shared worldview only when participants were affiliatively motivated. Thus, I employed bootstrapping techniques to test for moderated mediation. Because I found evidence of a significant interaction of motivation condition $\times$ partner’s views to predict shared worldview, I again employed the standard Model 5 of the SPSS

PROCESS Macro (Hayes, 2013), inputting: (1) Partner's perceived views as the independent variable; (2) explicit prejudice as the mediator; (3) shared worldview as the outcome; (4) and motivation condition (Affiliative/Self-Presentation) as a moderator at path *c*. I found no evidence of moderated mediation to suggest that explicit attitudes predicted more shared worldview dependent on affiliative motivation condition (95% CI includes zero: -.0140, .0729).

Discussion. Overall, Study 3 provides initial support for the hypothesis that people need to be appropriately motivated to share reality (Echterhoff et al., 2009) and that strategic self-presentation is not an appropriate motivation. Participants reported greater subjective shared reality to the extent that they aligned their implicit attitudes with their partners' but only when they were genuinely affiliatively motivated. There was no such relation between implicit attitudes and perceptions of shared reality when participants were motivated to strategically self-present. However, due to high attrition rates, I could not fully test the hypothesis that social motivation goals will yield unique attitudinal effects over time. Specifically, I could not test that social tuning when genuinely affiliatively motivated would produce strong attitudes that would persist over a weeklong delay, relative to when motivated to strategically self-present. Consistent with Studies 1 and 2, explicit prejudice effects were weaker and these explicit, intergroup attitudes did not account for perceptions of shared worldview.

Studies 4 and 5: Perceiving attitude similarity to share reality

Studies 1, 2, and 3 established that social tuning yields shared reality, such that unconsciously aligning one's implicit attitudes with a partner's perceived attitudes

predicted the extent to which individuals endorsed shared worldview with that partner. Studies 4 and 5 aim to extend these findings by directly manipulating perceptions of shared reality and investigating its effects. More specifically, the purpose of these experiments is to examine the downstream consequences of social tuning by manipulating perceptions of attitude similarity—a theoretically necessary component to achieve shared reality (Echterhoff, et al., 2009). In Studies 4 and 5, I manipulate the role of explicitly perceiving oneself to share race-relevant attitudes with another person for the establishment of shared reality. I will measure these effects on intergroup attitudes and interactions (Studies 4 and 5) as well as on the durability of implicit prejudice reduction over a weeklong delay (Study 5).

Study 4

Method.

Participants. Fifty-two White undergraduates (57% female; $M_{\text{age}} = 18.7$) participated in return for course credit. Participants who did not accurately identify the Eracism logo on their experimenter's t-shirt were dropped from analyses ($n=6$), leaving 48 participants.

Materials and Procedure. One of four White, female experimenters greeted participants. Experimenters were always wearing a t-shirt with the egalitarian message “Eracism” on it. They told all participants that the study was exploring college students’ attitudes and opinions on a variety of topics as well as how college students get to know each other upon first meeting. Thus, participants were led to believe that they would be interacting with another student who was participating in the study at the same time. Prior

to interacting, participants were told that they would be completing a variety of attitude measures in different formats.

After being oriented to the study, all participants experienced an affiliative motivation induction; as in previous research on social tuning (e.g., Sinclair et al., 2005). Experimenters asked participants if they would like any candy and declared, “I really appreciate your participation.” Then, to ensure that all participants were aware of the experimenter’s ostensible race-related attitudes and read her “Eracism” t-shirt, participants were told that they needed to complete an eye exam before beginning a series of computerized measures. Experimenters feigned that they had left their eye-chart in another room and concluded that the participant could just read their t-shirt. Participants were asked to read the word on the experimenter’s shirt from three different distances. After the fake eye-exam, participants first completed a subliminal implicit prejudice measure, assessing implicit anti-Black/pro-White attitudes (Dovidio, Kawakami, & Gaertner, 2002). This particular subliminal measure of implicit intergroup bias was chosen for three reasons: (1) It is a subliminal priming measure, which are generally better predictors of intergroup behavior than other implicit measures (for a review, see Fazio & Olson, 2003); (2) It specifically has been predictive of intergroup behaviors in previous research (Dovidio, Kawakami, & Gaertner, 2002; 2007); (3) Participants would be completing the measure twice in one session, so a subliminal measure was imperative for ensuring that participants not know what the measure was assessing or that they were taking it multiple times.

To manipulate shared race-related attitudes with the experimenter, participants then received false feedback after their first implicit prejudice measure. Upon completing

this subliminal, implicit prejudice measure, a fake, ambiguous score sheet was generated. While writing down these fake scores, experimenters commented on them to convey the attitude similarity manipulation. Experimenters either stated that the participant's attitudes were similar or dissimilar to their own. In an off-hand way, experimenters either said, "These attitude measures are pretty cool. Some people score really differently from each other, but it looks like your attitudes are really similar to mine" (attitude similarity condition); or experimenters said, "These attitude measures are pretty cool. Some people score really differently from each other, and it looks like your attitudes are really different from mine" (attitude dissimilarity condition).

Participants then completed a series of filler items, including personality measures and questions about their opinions of college student life on campus. Participants then completed the same subliminal implicit prejudice measure (Dovidio, Kawakami, & Gaertner, 2002) a second time. After these measures, participants were told that they would then be meeting the other student participating in the study. In actuality, their interaction partner was always one of three Black, female confederate. Confederates were trained to engage in the same way with all participants: All presented themselves as sophomores with an undeclared major, born and raised in a small Midwestern town, and involved in several neutral off-campus activities and jobs. Confederates behaved consistently positively with all participants and were blind to condition and the hypotheses of the study.

Prior to their interactions, participants were reminded that the researchers were interested in "how college students get to know each other," and left alone to talk to each other about whatever they wanted for 7 minutes. These interactions were videotaped.

After this interaction, both the participant and the confederate evaluated the quality of the interaction and reported how much they liked their partner. Participants also completed a final set of measures including manipulation checks and evaluations of their experimenter. Experimenters debriefed their participants, and the study was finished.

Coders and Ratings. To examine the quality of interactions with Black confederates, raters coded both verbal and non-verbal behaviors individually, following thin-slicing procedures (Ambady & Rosenthal, 1992). Specifically, I sampled 30-second clips from the beginning, middle, and end of the 7-minute interaction and coded both participants' and confederates' verbal and non-verbal behaviors. All individual codes were both positively- and negatively-valenced, including qualities like how warm, pleasant, expressive, engaged, cold, and cruel targets seemed. From these individual codes, I created composites for positive nonverbal behaviors for each timepoint (beginning, middle, and end) from the 7-minute interaction: pleasant, expressive, engaged, approachable, and warm ($\alpha \geq .81$); and composites of the negative nonverbal behaviors: cold, cruel, unfriendly, and unlikeable ($\alpha \geq .94$). Three female coders (2 Asian; 1 White) completed nonverbal coding, ensuring double-coding of all clips (all interrater correlations $\geq .70$).

Two different, white female coders completed all verbal coding of the same qualities used in non-verbal coding (all interrater correlations $\geq .70$). They coded the audio without any visual information. I created the similar composites of positive verbal behaviors for each timepoint (beginning, middle, and end) from the 7-minute interaction: pleasant, expressive, engaged, approachable, and warm ($\alpha = .92$); and composites of the

negative verbal behaviors: cold, cruel, negative, generally offensive ($\alpha = .87$), as were computed for nonverbal behaviors.

Results.

Manipulation Checks. I wanted to ensure that all participants explicitly report high affiliative motivation, regardless of the attitude dis/similarity feedback they received. As intended, participants in both conditions reported equal liking ($M_{\text{Similar}}=6.1$, $SD=.92$; $M_{\text{Dissimilar}}=6.4$, $SD=.67$; $p=.31$) and affiliative motivation for their experimenter ($M_{\text{Similar}}=5.6$, $SD=1.1$; $M_{\text{Dissimilar}}=5.8$, $SD=1.1$; $p=.55$).

Implicit Prejudice. I predicted that participants who believed that their attitudes were dissimilar from their experimenters would have their experience of shared reality disrupted. As such, their attitudes would no longer align with their egalitarian experimenter's after receiving this attitude dissimilarity feedback. In contrast, participants who had their attitude similarity explicitly affirmed would continue to show evidence of social tuning; their implicit prejudice ought to stay as low as it was prior to the manipulation. To investigate this hypothesis, I first conducted a 2 (Implicit Prejudice: Time 1/Time 2) $\times$ 2 (Condition: Similar/Dissimilar) mixed-model ANOVA, indicating implicit prejudice as a within-subjects, repeated measure and condition as the between-subjects, independent variable. There was no main effect of implicit prejudice ($p=.42$), a trend of condition ($F(1, 48) = 2.60$, $p=.11$, partial $\eta^2=.051$), and a pattern of an interaction ($F(1, 48) = 1.83$, $p=.18$, partial $\eta^2=.037$). Participants who had been told their attitudes were dissimilar from their experimenter's expressed greater implicit anti-Black prejudice after receiving this feedback, $F(1, 48) = 5.71$, $p = .021$, partial $\eta^2 = .11$ ($M_{T1} = 50.04$, $SD=192.97$; $M_{T2} = 42.11$, $SD=226.25$). As predicted, there was no difference in

implicit prejudice over time for participants who had received similarity feedback ($p=.70$; $M_{T1} = -83.24$, $SD=276.77$; $M_{T2} = -85.05$, $SD=176.35$).

Next, to make a more targeted test of my hypothesis, I conducted a contrast comparing the Time 2 implicit prejudice score of participants in the dissimilar condition with both their Time 1 implicit prejudice scores *and* the Time 1 and Time 2 implicit prejudice scores of participants in the similar condition. To do so, first, I computed linear trend contrasts for the implicit prejudice scores (Weights: -1 for Time 1 similar, -1 for Time 1 dissimilar, -1 for Time 2 similar, and +3 for Time 2 dissimilar). I then submitted these contrast values to a 2 (Condition: Similar, Dissimilar) $\times$ 2 (Implicit Prejudice: Time 1, Time 2) ANOVA with implicit prejudice as a repeated measure. As predicted, I found a significant contrast ($F(1, 48) = 5.98$, $p = .018$, partial $\eta^2 = .11$), such that after participants were told that their attitudes were dissimilar from the experimenter's, their implicit prejudice was greater ($M_{T2} = 42.11$, $SD=226.25$) than those participants who perceived themselves to share attitudes with their experimenter and all participants prior to the manipulation ($M_{T2\text{Similar}} = -85.05$, $SD=176.35$; $M_{T1\text{Dissimilar}} = -50.04$, $SD=192.97$; $M_{T1\text{Similar}} = -83.24$, $SD=276.77$; See Figure 6). In sum, the repeated measures contrast provides evidence that participants who had their perceptions of shared reality maintained also maintained reduced implicit anti-Black prejudice over a short time.

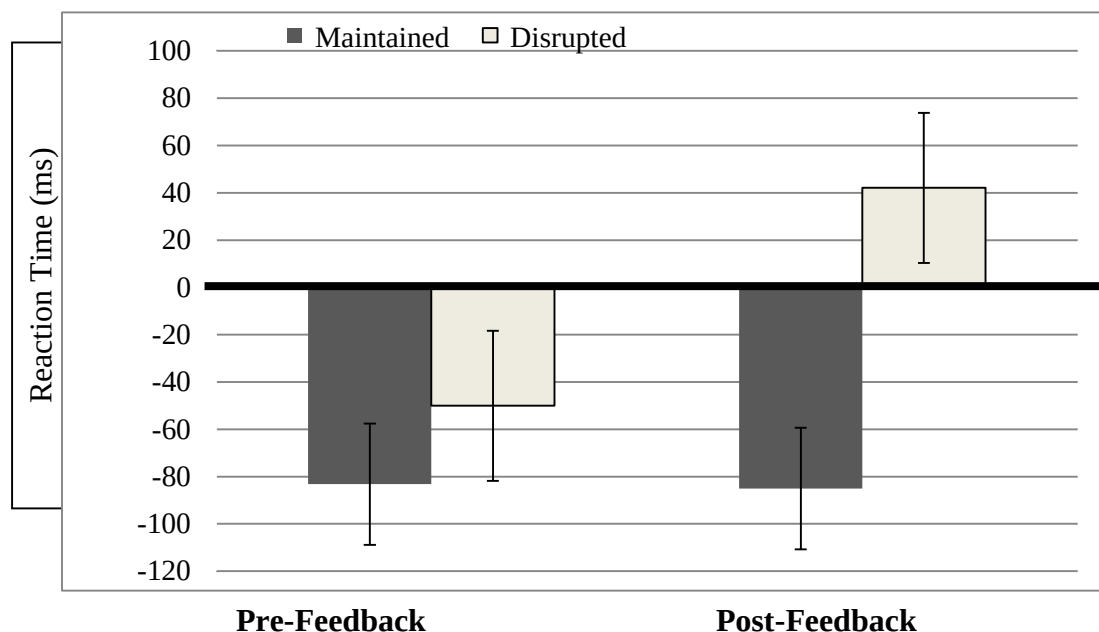


Figure 6. Implicit prejudice increased after perceptions of shared reality were disrupted via attitude dissimilarity feedback, but reductions in implicit prejudice are maintained after attitude similarity is affirmed to maintain shared reality.

Interracial Interactions. To examine how social tuning influences downstream behavioral consequences, I compared confederates' evaluations of participants who had had their perceptions of attitude similarity affirmed with those who had had their perceptions of attitude similarity disrupted. To do so, I conducted an ANCOVA comparing confederates' liking of their partners by condition. Because both confederates were female but participants were male and female, I ran these analyses controlling for participant sex. I found a significant effect, $F(1, 48) = 5.51, p = .02$, such that confederates liked those participants who had had their attitude similarity affirmed after social tuning ($M = 5.3, SD = .96$) more than they liked those participants who had been told their attitudes were dissimilar from the experimenter's ($M = 4.7, SD = 1.0$; See Figure 7).

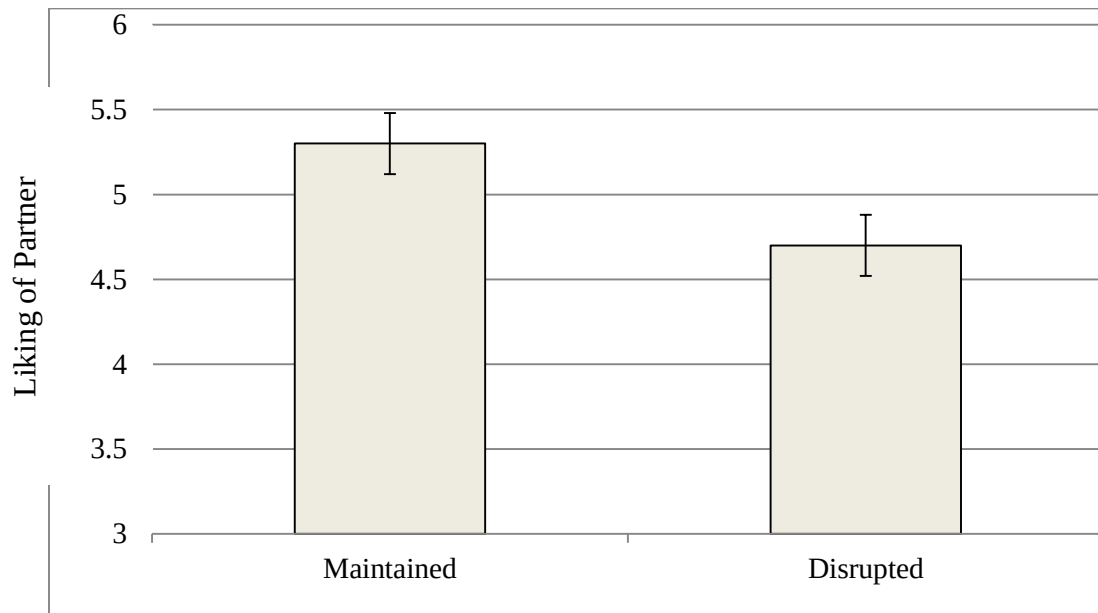


Figure 7. Black confederates report liking their interaction partners better when those interaction partners have had their perception of shared reality maintained compared to those who have been told their attitudes are dissimilar from their egalitarian experimenter's.

Nonverbal Behaviors. To examine whether participants' nonverbal behaviors during the interracial interaction were different depending on whether shared reality had been maintained or disrupted, I considered the codes of nonverbal behaviors. Analyses including either composites of positive behaviors or negative behaviors produced no significant results ($p \geq .31$), nor were any analyses significant when considering individual nonverbal behaviors ($p \geq .22$). Thus, nonverbal coding results will not be discussed.

Verbal Behaviors. Next, I considered participants' verbal behaviors by utilizing the positive and negative composite codes from verbal coding only. First, I conducted a mixed-model ANCOVA, inputting the positive composite codes from each clip

(beginning, middle, and end) as the repeated measure and condition (maintained vs. disrupted) as the between-subjects predictor. As before, I treated participant gender as a covariate since both male and female participants always interacted with a female confederate. I also controlled for the confederate's verbal positivity to take into account the dyadic nature of the interaction. Whether or not ratings of confederate's verbal pleasantness are included, the pattern of results presented below remains the same, and significant results remain significant.

Based on previous research demonstrating that the beginning of novel, interracial interactions can be marked by the most discomfort and negative nonverbal behaviors and related to implicit intergroup bias (i.e., within the first 3 minutes, Dovidio, Kawakami, & Gaertner, 2002; within the first 20 seconds, Richeson & Shelton, 2005), I conducted an ANCOVA with condition (Similar/Dissimilar) as a predictor of participants' verbal positivity at the beginning of the clip *only*. I found a significant effect during the first 30 seconds of the interaction, $F(1, 45) = 5.01, p < .05$, such that participants who had had their attitude similarity affirmed after social tuning were more verbally pleasant ($M = 4.3, SD = 1.1$) than those participants who had been told their attitudes were dissimilar from the experimenter's ($M = 3.3, SD = 1.1$; See Figure 8). Moreover, these codes of verbal pleasantness during the first 30-second clip were significantly correlated with confederates' ratings of liking of the participant, $r = .41, p < .005$). This pattern of results persisted through the middle and final 30-seconds of the interaction, but analyses inputting these epochs as the dependent measure were non-significant ($ps \geq .17$). Conducting the same mixed-model ANCOVA with the composite of negative verbal behaviors indicated as a dependent measure yielded the inverse, but non-significant,

pattern of results across all coded timepoints ($ps > .27$).

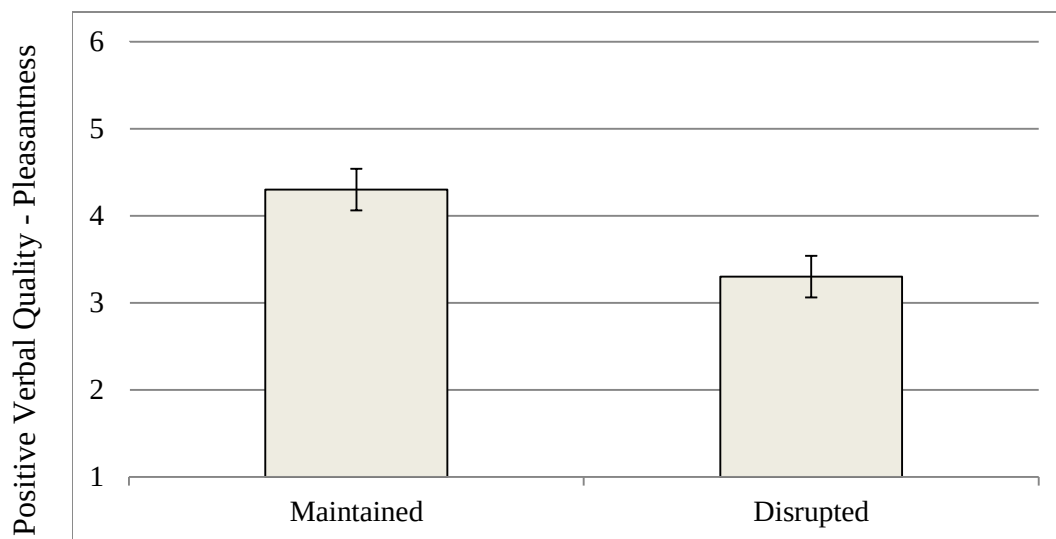


Figure 8. White participants were rated as more verbally pleasant during the first 30 seconds of their interaction with a Black confederate after having their perception of shared reality maintained compared to those who had been told their attitudes were dissimilar from their ostensibly egalitarian experimenter's.

Discussion. Overall, Study 4 provides support for the hypothesis that perceptions of shared reality require the maintenance of perceived attitude similarity with a partner, as theorized by Echterhoff and colleagues (2009); when this perception was disrupted by feedback that participants did not share attitudes with their egalitarian experimenter, participants' implicit prejudice increased. In contrast, when shared reality was maintained via feedback about attitude similarity, then social tuning's effects on implicit intergroup attitudes persisted from pre-test to post-test. Furthermore, maintaining shared reality yields meaningful downstream consequences in the context of a subsequent interracial interaction. Participants who had their perception of shared reality maintained after social

tuning to an egalitarian experimenter were better liked by Black confederates and more verbally interpersonally pleasant with that Black confederate.

Study 5: Perceiving target-specific attitude similarity and sharing reality over time

Study 5 sought to replicate the findings from Study 4 and to test the hypothesis that perceiving oneself to share reality with another will yield strong attitudes that persist over time. Because Study 3 had an extremely high attrition rate from Time 1 to Time 2, I could not satisfactorily test the persistence of attitude change over time with that online sample. To that end, Study 5 includes a weeklong delay between initially sharing reality with an egalitarian experimenter and measures implicit and explicit intergroup prejudice. It also tests how successfully tuning and sharing reality with an egalitarian partner influences interracial interactions during this weeklong delay.

Method.

Participants. Ninety-nine White undergraduate students (63% female) participated in this study in return for course credit. Five participants did not return to complete their time 2 session (5% attrition).

Study Overview. This study employed a very similar design to Study 4, with some key changes to the paradigm. Most notably, the study took place over two sessions, separated by 5-7 days. During the first session, participants experienced the exact same attitude similarity manipulation as in Study 4. During the second session, participants returned to complete the same attitude measures as they had during session 1 in order to assess the durability of attitude change over time.

Materials and Procedure. This study had three conditions. Across all conditions, all participants again received an affiliative motivation induction. In this study, participants completed a sentence scramble to induce affiliative motivation (See Appendix F), used successfully in previous research to induce social tuning (e.g., Huntsinger, et al., 2009). All participants also completed the same subliminal, Black-White implicit prejudice measure (Dovidio, Kawakami, & Gaertner, 2002) a first time after the affiliative induction and then received feedback about their ambiguous attitude scores (identical to Study 3). The key difference was that some participants did not know their experimenter's attitudes. Namely, two-thirds of the participants interacted with an experimenter wearing a t-shirt with an egalitarian logo ("Eracism"). Of these participants, half received feedback that their attitudes were similar to the experimenter's after completing the subliminal implicit prejudice measure at Time 1, while half received feedback that their attitudes were dissimilar after completing the subliminal implicit prejudice measure. Another one-third of participants interacted with an experimenter whose attitudes were unknown (blank t-shirt) and told that their attitudes were similar to the experimenter's. Thus, these three conditions involved participants receiving (1) similarity feedback from an experimenter wearing an "Eracism" logo (henceforth, the "similarity feedback" condition), (2) dissimilarity feedback from an experimenter wearing an "Eracism" logo (henceforth, the "dissimilarity feedback" condition), or (3) similarity feedback from an experimenter wearing a blank t-shirt (henceforth, the "control condition").

After receiving the similarity/dissimilarity feedback, all participants again completed a series of filler measures and took the same subliminal implicit prejudice

measure a second time. Then, rather than interacting with a Black confederate as in Study 3, participants were told that they would be exchanging videos with an interaction partner from another university. At this first session, participants recorded their videos for their partners, and they were led to believe that they would view video responses from their partners at the second session. Participants were randomly assigned to a gender-matched, ostensible interaction partner who was either Black or White. After receiving this partner assignment with a picture of their partner, participants had the opportunity to rank order questions they would like to answer for the videotaped exchange. These questions are taken from the fast-friends paradigm (Aron et al., 1997), and they were chosen to vary in the degree of self-disclosure required to answer them. Some questions are more superficial, while others are more personal (see Appendix G). All participants then responded to two questions on video: an ostensible “warm-up” question and their own top-ranked question. The “warm-up” question was always, “Is there something you’ve dreamed of doing for a long time? Why haven’t you done it?” After this video-taped portion of the study, participants completed a final set of measures assessing how much they perceive themselves to share reality with their experimenter by reporting on their worldview similarity (Turban & Jones, 1988; as in the Studies 1, 2, and 3). Embedded within this final set of measures, participants also indicated how egalitarian they perceived their experimenter to be via the single item, “How much does your experimenter value treating all ethnic groups equally?” on a 7-point Likert-type scale. Additionally embedded in these measures, participants answered two manipulation check questions that had not been in Study 4. These aimed to assess that participants were attending accurately to the attitude dis/similarity feedback and included, “How much

does your experimenter think that you share similar attitudes?” and “How much does your experimenter think that you have different attitudes? (R)” ($r=.22$, $p=.03$). After this final set of measures, the Time 1 session was complete.

Five to seven days later, participants returned to the lab and were always greeted by a different experimenter than from their Time 1 session. The Time 2 experimenter always wore a blank t-shirt so that her attitudes were also unknown. To test the durability of any implicit prejudice reduction gained through social tuning, all participants completed the same implicit and explicit intergroup attitude measures that they completed at Time 1. Additionally, all participants completed questions asking about the quantity and quality of their social interactions during the previous week. Embedded among fillers asking about their encounters with different peers, critical items assessed the quantity and quality of their interim interracial interactions (See Appendix H for sample items). Participants then evaluated their current experimenter and reported on whether they perceived themselves to share attitudes and worldviews with this new experimenter, just as they had evaluated their Time 1 experimenter the week before. Finally, participants were debriefed and told that there was no actual interaction partner or videotaped exchange.

Coders and Ratings. I examined the quality of the videotaped answers participants believed themselves to be exchanging. Coding of these videotaped interactions employed a global coding scheme adapted from—but not identical to—the codes used in the thin slicing procedures from Study 4 (Ambady & Rosenthal, 1992). Rather than watching 30-second clips of either verbal or nonverbal content only, trained raters evaluated the full response to each question that participants had answered for their ostensible exchange

partner. Two Asian, female raters watched each response independently, with sound on, to rate how much participants exhibited qualities such as warmth, coldness, genuineness, disclosure, pleasantness, and cruelty (interrater agreement: all $r_s \geq .70$). Composites of positive qualities (genuine, interested, warm, comfortable, disclosing, trustworthy; $\alpha_s \geq .76$) and negative qualities (cold, generally offensive, flippant; $\alpha_s \geq .63$) were computed for each answer. Answers to each question ranged in length from 10 to 141 seconds long.

Results.

Manipulation Checks: First, I confirmed that across all three conditions, participants reported the same affiliative motivation since all experienced the high affiliative motivation induction. As expected, I found no difference in affiliative motivation across the three groups ($M_{\text{similar}} = 5.6$, $SD = .79$; $M_{\text{dissimilar}} = 5.6$, $SD = 1.1$; $M_{\text{control}} = 5.4$, $SD = .98$; $p = .50$).

I confirmed that when participants received attitude similarity feedback (in either the “Eracism” t-shirt or the control conditions), participants believed that their experimenter thought they shared attitudes with them more than when participants received attitude dissimilarity feedback by conducting an ANOVA, inputting the 3-level condition variable as a predictor and examining the simple effects, $F(1, 93) = 7.91$, $p = .001$. As intended, participants in the dissimilar condition reported that their experimenter believed herself to share attitudes with them significantly less ($M = 3.3$, $SD = 1.4$) than in either the similarity feedback condition ($M = 4.5$, $SD = 1.3$; $p = .001$) or the control condition ($M = 4.5$, $SD = 1.3$; $p = .001$). Neither similarity feedback condition differed from each other ($p = .95$).

Finally, I tested whether participants perceived their experimenter to be more egalitarian in the conditions in which she wore an “Eracism” t-shirt relative to the control condition. I had intended the control condition as a comparison group to show that those participants who do not know the experimenter’s attitudes should not be able to tune to them, thus allowing them to serve as a comparison group that I did not have in Study 4. However, what I found was that, across all three conditions, experimenters were rated as equally egalitarian ($M_{\text{similar}} = 6.3$, $SD = 1.3$; $M_{\text{dissimilar}} = 6.4$, $SD = 1.0$; $M_{\text{control}} = 6.5$, $SD = .81$; $p = .78$). Because participants in the intended control condition did not pass this perceived egalitarianism manipulation check, I exclude them from the main analyses presented below. Exploratory analyses that use the control condition are presented at the end of Study 5’s Results section.

Time 1 Results.

Time 1 Implicit Prejudice. Looking to replicate findings from Study 4, I predicted that participants who believed that their attitudes were dissimilar from their experimenters would have their experience of shared reality disrupted. As such, their attitudes would no longer align with their egalitarian experimenter’s after receiving this attitude dissimilarity feedback. In contrast, participants who had their attitude similarity explicitly affirmed would continue to show evidence of social tuning; their implicit prejudice ought to stay as low as it was prior to the manipulation. To investigate this hypothesis, I first conducted a 2 (Implicit Prejudice: Pre-feedback/Post-feedback) $\times$ 2 (Condition: Similar/Dissimilar) mixed-model ANOVA, indicating implicit prejudice as a within-subjects, repeated measure and condition as the between-subjects, independent variable. There were no significant effects ($ps \geq .45$).

As in Study 4, I again tested the weighted contrast comparing pre-feedback implicit prejudice scores to post-feedback prejudice scores during the Time 1 Session. To do so, first, I computed the linear trend contrasts for the implicit prejudice scores in our egalitarian experimenter conditions (Weights: -1 for Pre-feedback similar, -1 for Pre-feedback dissimilar, -1 for Post-feedback similar, and +3 for Post-feedback dissimilar) for the Eracism t-shirt conditions only. I then submitted these contrast values to a 2 (Condition: Similar, Dissimilar) $\times$ 2 (Implicit Prejudice: Pre-feedback, Post-feedback) ANOVA with implicit prejudice as a repeated measure. There was no evidence of any replication; this contrast was non-significant ($F < 1$, $p = .89$) during the Time 1 session.

Time 1 Explicit Prejudice. To examine if participants had tuned their explicit attitudes during the Time 1 session, I conducted an ANOVA comparing participants in the similarity condition with participants in the dissimilarity feedback condition. I found a marginally significant effect, $F(1, 64) = 3.47$, $p = .07$, partial $\eta^2 = .05$, such that participants who had their perceptions of shared reality maintained endorsed less anti-black prejudice ($M = 2.1$, $SD = .85$) than did participants who had their perceptions of shared reality disrupted ($M = 2.6$, $SD = 1.3$).

Time 1 Intergroup Interactions: Videotaped Exchange. Participants were randomly assigned to exchange videos with either a Black or White gender-matched partner. I examined whether participants in the similar and dissimilar conditions chose questions that required different levels of disclosure by conducting an ANOVA and found no main effects ($ps \geq .29$), qualified by a trending interaction ($F(1, 55) = 2.32$, $p = .13$, partial $\eta^2 = .024$). Participants who had their perception of shared reality maintained chose questions that were equally disclosing, regardless of partner race ($M_{\text{Black}} = 4.2$,

$SD=.71$; $M_{\text{White}}=4.0$, $SD=.89$; $F < 1$, $p=.45$). In contrast, participants who had their perceptions of shared reality disrupted tended to choose questions that were less disclosing when their partners were Black ($M=3.9$, $SD=1.1$) relative to when their video exchange partners were White ($M=4.4$, $SD=.85$), $F(1, 55) = 2.20$, $p=.15$.

Time 1 Video Exchange Coding. After finding evidence that participants in the dissimilarity feedback condition were willing to disclose less to Black, relative to White video exchange partners based on their ranking of questions they wanted to answer, I examined if there were differences in the quality of participants' videotaped answers. I found no such differences in behavioral responses dependent on condition and ostensible video exchange partner's race. There was no difference in ratings of positive or negative qualities in responses to either of the two questions, regardless of whether I examined the positive and negative composites or the individual codes (all $ps \geq .30$).

Time 2 Results

At Time 2, participants interacted with a different experimenter than during their Time 1 session. All analyses reported below control for participants' perceptions of their Time 2 experimenters' egalitarianism ($M_{\text{Similar}}=6.0$, $SD=1.1$; $M_{\text{Dissimilar}}=5.9$, $SD=1.1$; $M_{\text{Control}}=6.1$, $SD=1.2$; $F < 1$, $p=.72$) to ensure that any spontaneous social tuning to this new experimenter could not account for our Time 2 effects.

Time 2 Implicit Prejudice. I predicted that participants who believed that their attitudes were dissimilar from their experimenters would have their experience of shared reality disrupted. As such, their attitudes would no longer align with their egalitarian experimenter's after receiving this attitude dissimilarity feedback. In contrast, participants who had their attitude similarity explicitly affirmed would continue to show

evidence of social tuning; their implicit prejudice ought to stay as low as it was prior to the manipulation a week later. To investigate this hypothesis, I first conducted a 2 (Implicit Prejudice: Pre-feedback/Time 2) $\times$ 2 (Condition: Similar/Dissimilar) mixed-model ANCOVA, indicating implicit prejudice as a within-subjects, repeated measure and condition as the between-subjects, independent variable. There were no significant effects ($F_s < 1$, $p_s \geq .32$).

Next, to conduct a more targeted test of whether participants who had had their shared reality reified during the Time 1 session by receiving similarity feedback maintained the same, lower implicit prejudice scores one week later—relative to participants who received dissimilarity feedback—I again examined the implicit attitudes of participants in the similarity and dissimilarity feedback conditions by testing the weighted contrast comparing pre-feedback implicit prejudice scores to Time 2 prejudice. To do so, I computed the linear trend contrasts for the implicit prejudice scores (Weights: -1 for Pre-feedback similarity, -1 for Pre-feedback dissimilarity, -1 for Time 2 similarity, and +3 for Time 2 dissimilarity). I then submitted these contrast values to a 2 (Condition: similarity feedback, dissimilarity feedback) $\times$ 2 (Implicit Prejudice: Time 1, Time 2) ANCOVA with implicit prejudice as a repeated measure. I found a significant contrast ($F(1, 58) = 4.88$, $p < .05$, partial $\eta^2 = .078$), such that after participants were told that their attitudes were dissimilar from the experimenter's, their implicit prejudice was greater one week later ($M_{T2} = 37.06$, $SD = 184.67$) than those participants who perceived themselves to share attitudes with their experimenter and all participants prior to the manipulation ($M_{T2\text{Similar}} = -10.26$, $SD = 141.35$; $M_{\text{PreSimilar}} = -32.98$, $SD = 104.65$; $M_{\text{PreDissimilar}} = -56.53$, $SD = 171.47$; See Figure 9).

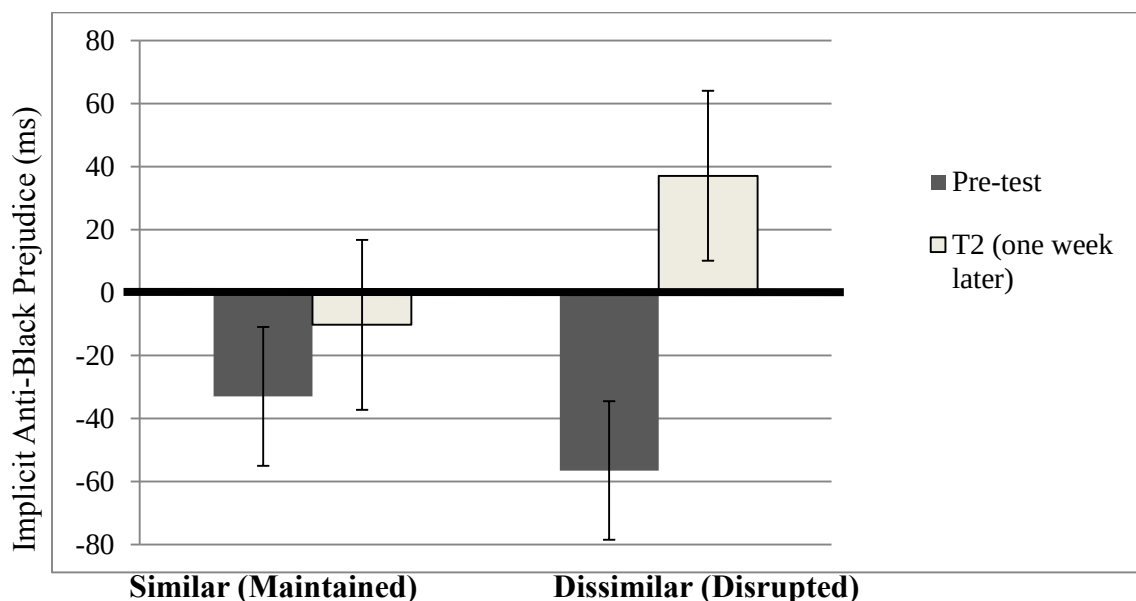


Figure 9. Implicit anti-Black attitudes over time (from Time 1 to Time 2, one week later).

Time 2 Explicit Prejudice. I conducted a repeated measures ANCOVA, inputting explicit prejudice as a within-subject measure (Time 1 and Time 2) and condition as the between subject measure. I found no significant within-subjects effects ($ps \geq .46$), but there was a pattern that participants who had had their perceptions of shared reality maintained reported less anti-Black prejudice overall ($M=2.2$, $SD=1.3$) than did participants in the dissimilarity feedback condition ($M=2.5$, $SD=1.0$), $F(1, 57)=1.30$, $p=.26$.

Time 2 Interracial Interactions: Interim Quality and Quantity. At Time 2, participants recalled the number and quality of interracial interactions they had had with acquaintances (specifically asking about people whom they did not already consider to be their friends) since their Time 1 session. Although there were no significant differences in quantity of interracial interactions with interracial acquaintances between the similarity and dissimilarity feedback groups who had known their experimenter's attitudes ($p =$

.80), participants who had had their experience of shared reality maintained by receiving similarity feedback reported that they had had more positive interracial interactions during the week ($M_{\text{similar}} = 5.8, SD = .92$; $M_{\text{dissimilar}} = 5.4, SD = .95$; $F(1, 67) = 1.37, p = .07$, partial $\eta^2 = .05$).

Perceiving Shared Attitudes predicts Interracial Interaction Quality. Next, I examined whether—as predicted—perceiving oneself to have shared attitudes with one’s experimenter during the Time 1 session accounted for the difference in reported positivity of interracial interactions by condition. To do so, I utilized the composite of the two manipulation check items assessing perceptions of shared attitudes from Time 1 (e.g., “How much does your experimenter think that you share similar attitudes?” and “How much does your experimenter think that you have different attitudes? (R)”). I employed bootstrapping to conduct mediation analyses in which the dummy coded condition (1=Similarity Feedback; 0=Dissimilarity Feedback) predicted how positive interracial interactions during the weeklong interim were reported to be at Time 2, inputting perceptions of shared attitudes with one’s Time 1 experimenter as the mediator. I found (1) A trend of condition predicting interracial interaction quality at Time 2 ($B = .16, p = .10$); (2) Condition predicted how much participants thought they shared attitudes with their experimenter at Time 1 ($B = 1.03, p < .05$); (3) Perceiving oneself to have mutually shared attitudes with the experimenter at Time 1 predicted positivity of interracial interactions reported at Time 2 ($B = .24, p < .05$); and (4) Reporting shared attitudes with the experimenter mediated the relation between condition and Time 2 reports of positivity of interracial interactions during the weeklong interim (95% CI: .0094, .8141). See Figure 10.

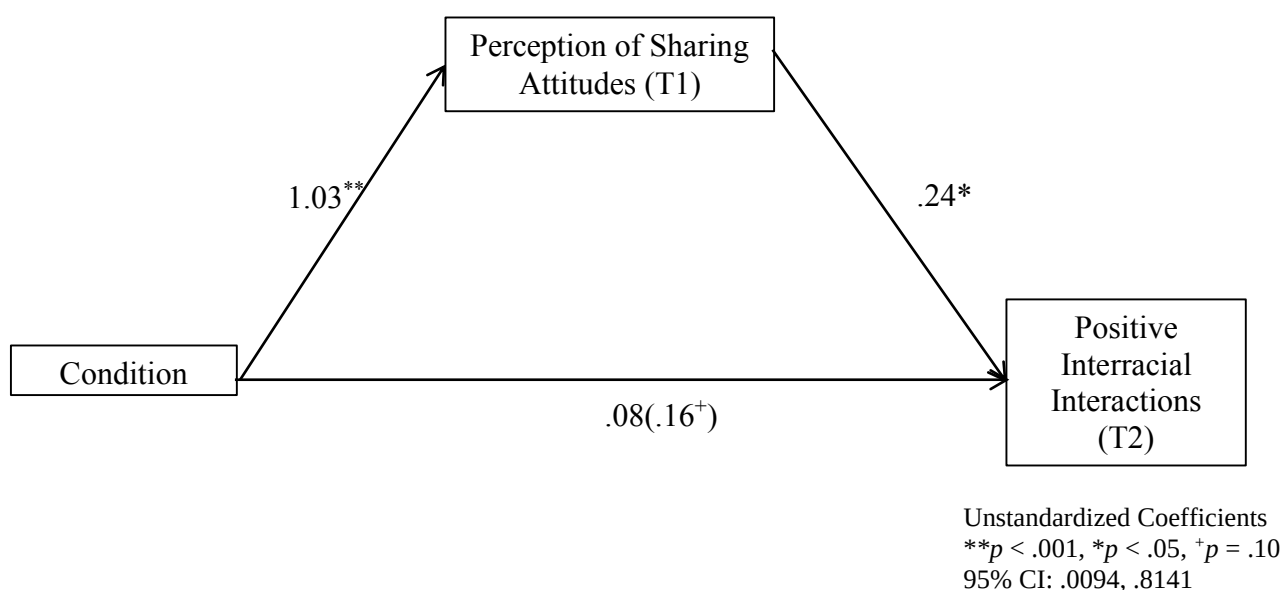


Figure 10. Mediation: Maintenance or disruption of shared reality predicts positivity of interracial interactions during a weeklong interim, due—at least in part—to perceptions of shared attitudes with one’s egalitarian experimenter.

Exploratory Analyses

All exploratory analyses below consider the control group, which was excluded in previous analyses since participants’ self-reported perceptions of their experimenter’s egalitarianism had been equally high whether participants had interacted with an experimenter wearing the “Eracism” logo or a blank t-shirt (reported in the ‘Manipulation Check’ section above).

Time 1 Implicit Prejudice. First, I explored whether participants in the control group had significantly different implicit attitudes than either group of participants who had interacted with an experimenter who was wearing an “Eracism” t-shirt. To do so, I conducted a repeated-measures ANCOVA, inputting implicit prejudice as a within-subjects factor (2 levels: Pre-feedback and Post-feedback) and condition as the between-

subjects factor (3 levels: Similar, Dissimilar, Control). I predicted that at the pre-test of implicit prejudice, participants in the blank t-shirt, control condition would have higher implicit prejudice scores than participants in either of the experimental conditions because these participants should not have known to which attitudes to tune. Moreover, after receiving the similarity feedback, these implicit attitudes should remain unchanged from pre-feedback to post-feedback in the control condition. I found no main effects or significant interaction ($ps \geq .23$). In fact, participants in the control condition expressed equally low implicit prejudice scores at the first measure of implicit prejudice ($M = -46.70$, $SD=283.77$) as participants in the “Eracism” t-shirt conditions did ($M=-58.49$, $SD=185.65$). Because the intended control participants did not evidence any implicit prejudice differences at pre-feedback from either of the conditions in which experimenter attitudes were overt, I did not test for any repeated measure contrast effect from pre- to post-similarity/dissimilarity feedback with either of the experimental conditions.

Time 1 Explicit Prejudice. To examine if participants had tuned their explicit attitudes during the Time 1 session, I conducted an ANOVA comparing participants in the similarity condition with participants in the dissimilarity feedback condition and the control condition. I made this comparison since explicit prejudice was only measured after receiving explicit feedback, so participants in the dissimilarity condition should have had their perception of shared reality disrupted at that point, while participants in the control condition should not have known what attitudes to tune to, or for which they might be perceiving themselves to share reality. To test this comparison, I created a dummy code (1=similarity; 0= dissimilarity and control) and input the dummy code as a predictor of participants’ endorsement of anti-Black prejudice. There was a significant

effect, $F(1, 97) = 3.95, p = .05$, such that participants who had received attitude similarity feedback from a clearly egalitarian experimenter endorsed less anti-black prejudice ($M = 2.1, SD = .85$) than did participants in the dissimilarity and control conditions ($M = 2.5, SD = 1.1$).

Time 1 Intergroup Interactions: Videotaped Exchange. I examined whether participants in the control condition chose questions that required different levels of disclosure relative to the similar or dissimilar conditions by conducting a 3 (condition: Similar/Dissimilar/Control) $\times$ 2 (Race of Partner: Black/White) ANOVA and found no significant effects ($ps \geq .35$). Next, I conducted a targeted ANOVA using the same dummy code as above, comparing participants in the similarity condition with participants in the dissimilarity feedback condition *and* the control condition. I made this comparison since the videotaped exchange occurred after receiving explicit feedback, so participants in the dissimilarity condition should have had their perception of shared reality disrupted at that point, while participants in the control condition should not have known what attitudes to tune to, or for which they might be perceiving themselves to share reality. To test this comparison, I conducted a 2 (Dummy coded condition) $\times$ 2 (Partner race: White/Black) ANOVA with level of the disclosure of the top-ranked question as the dependent measure. There were no main effects ($ps \geq .62$), but a trend of an interaction, $F(1, 94) = 2.24, p = .13$. Participants who had their perception of shared reality maintained chose questions that were equally disclosing, regardless of partner race ($M_{\text{Black}} = 4.2, SD = .71$; $M_{\text{White}} = 4.1, SD = .89$). In contrast, participants in the dissimilar and control conditions chose questions that were less disclosing when their partners were Black ($M = 3.8, SD = .94$) relative to when their video exchange partners were White

($M=4.4$, $SD=.85$). Moreover, when comparing just the control and dissimilar conditions, participants did not differ in their levels of disclosure to White ($M_{\text{Control}} = 4.4$, $SD=.78$; $M_{\text{Dissimilar}} = 4.4$, $SD=.98$) relative to Black ($M_{\text{Control}} = 3.9$, $SD=1.2$; $M_{\text{Dissimilar}} = 4.0$, $SD=.93$) video exchange partners ($p = .99$).

Time 1 Behavioral Coding. As with the two “Eracism” logo conditions, I found no significant differences in any qualities coded for when comparing either to the control condition, depending on partner race (all $ps \geq .29$).

Time 2 Implicit Prejudice. At Time 2, participants in the control condition reported equally low implicit prejudice ($M=-30.06$, $SD=144.08$; $p=.78$) as they had at pre-test at Time 1, when their implicit prejudice scores had been just as low as both “Eracism” conditions. As such, no contrasts were tested to compare the control condition with either of the two “Eracism” conditions at Time 2. See Figure 11.

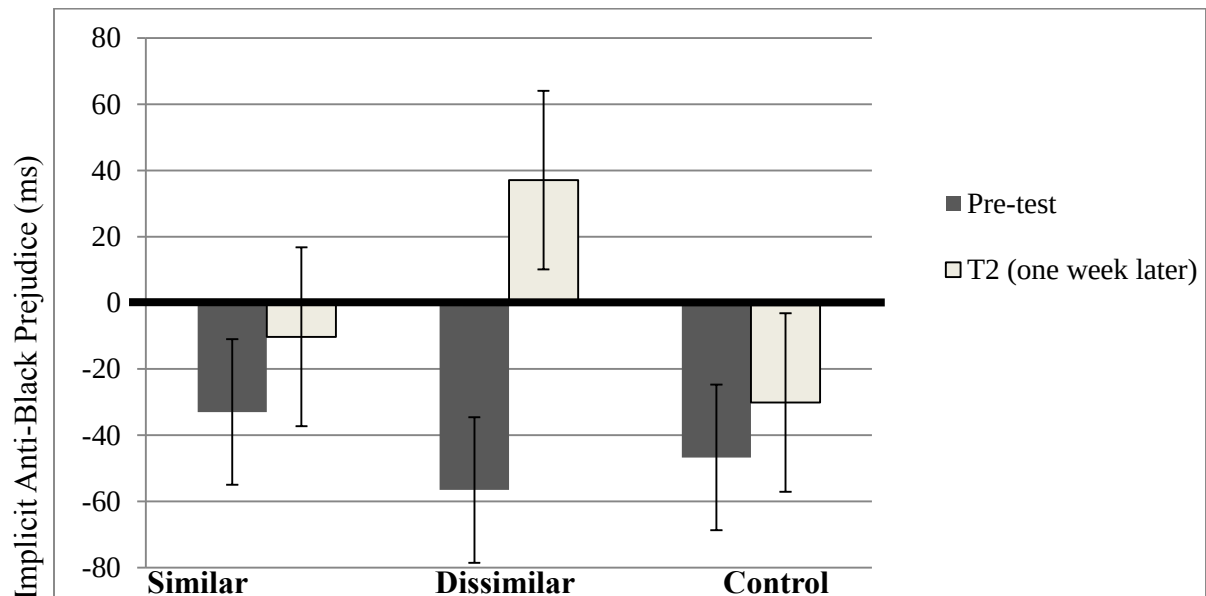


Figure 11. Implicit anti-Black attitudes over time (from Time 1 to Time 2, one week later).

Time 2 Explicit Prejudice. I conducted the same contrast that I ran to evaluate Time 1 explicit prejudice, comparing participants in the similar feedback condition with participants in the other two conditions (1=similar; 0=dissimilar and control). I found no significant effect, but there was a pattern, such that participants who had had their perceptions of shared reality maintained reported less anti-Black prejudice ($M=2.2$, $SD=1.3$) than did participants in the other two conditions ($M=2.5$, $SD=1.0$), $F(1, 87)=1.52$, $p=.22$, at Time 2.

Time 2 Interracial Interactions. At Time 2, I investigated whether participants in the control condition reported differences in the frequency or quality of interracial interactions during the weeklong interim. Participants in the control condition reported significantly fewer interracial interactions than did participants who also received similarity feedback but from a clearly egalitarian experimenter ($F(1, 61) = 4.71$, $p<.05$). When they did have interracial interactions, control participants also rated them to be marginally significantly less positive ($M=5.3$, $SD=1.1$) than did the similarity-feedback treatment participants, $F(1, 52) = 2.90$, $p=.095$. This pattern held, but non-significantly, when controlling for frequency of interracial interactions, $F(1, 51)=1.72$, $p=.19$. There were no differences between the control group and dissimilarity feedback group in evaluations of positivity of interracial interactions ($p=.53$), but participants in the dissimilar condition did report a greater frequency ($M=4.0$, $SD=2.8$) of interracial interactions than did those in the control condition ($M=2.6$, $SD=1.7$; $F(1, 55)=5.5$, $p=.02$).

Perceiving Shared Attitudes predicts Interracial Interaction Quality. Next, I tested to see whether perceiving oneself to have shared attitudes with one's experimenter

during the Time 1 session accounted for the difference in reported positivity of interracial interactions by condition. To do so, I again utilized the two manipulation check items from Time 1 (“How much does your experimenter think that you share similar attitudes?” and “How much does your experimenter think that you have different attitudes? (R)”). I conducted mediation analyses in which I dummy coded condition (1=Similarity feedback/”Eracism” logo; 0=All other conditions) to predict perceptions of shared attitudes with one’s Time 1 experimenter, to predict how positive interracial interactions during the weeklong interim were reported to be at Time 2. I found (1) A pattern of condition predicting interracial interaction quality at Time 2 ($B=.15, p=.10$); (2) Condition predicted how much participants thought they shared attitudes with their experimenter at Time 1 ($B=.72, p<.05$); (3) Perceiving oneself to have shared attitudes with the experimenter at Time 1 predicted positivity of interracial interactions reported at Time 2 ($B=.15, p<.01$); and (4) Reporting shared attitudes with the experimenter mediated the relation between condition and Time 2 reports of positivity of interracial interactions during the weeklong interim (95% CI: .0031, .4535).

Discussion. Again, I found evidence that maintaining or disrupting perceptions of shared reality by manipulating perceptions of shared attitudes with one’s experimenter had downstream consequences for implicit attitudes and interracial interactions. Although there was no direct replication of Study 4 at the initial session, after a weeklong delay, participants who had had their experience of shared reality maintained by receiving similarity feedback from an egalitarian experimenter maintained lower implicit prejudice. In contrast, participants who had had their experience of shared reality disrupted by receiving dissimilarity feedback at Time 1 expressed greater anti-Black implicit prejudice

one week later. This provides support for the hypothesis that social tuning to share reality does indeed produce strong attitudes that are durable over a weeklong delay. Although one might argue that returning to the same room at Time 2 might have influenced implicit prejudice expression at that time (i.e., by causing participants to actually tune again because of the context rather than reflecting a stable change in implicit attitudes that persisted over a weeklong delay), this alternative explanation seems unlikely. Previous research on social tuning suggests that merely being exposed to information in one's environment does not yield tuning of implicit intergroup attitudes (e.g., Sinclair et al., 2005; Lun et al., 2007). This suggests that unless an ostensible attitude is specifically tied to an interpersonal target, socially motivated individuals will not tune to that attitude. In the same way, unless the experimental room was somehow linked to the original, Time 1 experimenter *only* and elicited the same goal to affiliate and re-tune one's attitudes at Time 2, I would not expect the context to serve as a means of tuning. Considering the manipulation checks at Time 2 and how few people even recalled any details of their Time 1 session, it is unlikely that this occurred. However, to fully rule out any unconscious, context-dependent cues that might have elicited the Time 2 outcomes, future research would need to ensure evaluations after a time delay occurred in a different location than where the treatment was delivered.

Study 5 provides more evidence that social tuning to an apparently egalitarian ingroup member improves subsequent intergroup interactions. First, in line with this hypothesis, participants who tuned to an experimenter wearing the "Eracism" logo and then had their perceptions of shared reality maintained were willing to disclose equally to Black or White interaction partners. In contrast, when participants had their experience of

shared reality disrupted by attitude dissimilarity feedback, they were willing to disclose less to Black interaction partners than they were to disclose to White partners. Finally, participants who successfully socially tuned to their egalitarian experimenter also reported that the quality of their interracial interactions that had occurred during the weeklong delay between Time 1 and Time 2 sessions were more positive, despite reporting the same frequency of interracial interactions as participants in the dissimilarity feedback condition. Importantly, this difference in expressed positivity of interracial encounters reported at Time 2 was accounted for, in part, by Time 1 perceptions of attitude similarity with participants' egalitarian experimenter. These effects provide further statistical evidence in support of the tenet of shared reality theory that achieving shared reality requires the perception of sharing attitudes with another person (Echterhoff et al., 2009).

General Discussion

Across five studies, the current research tested whether social tuning achieves shared reality and how the perception of shared reality relates to downstream interracial attitudes and behaviors. Overall, these experiments provide a set of important theoretical and practical tests of social tuning and shared reality theory. Studies 1, 2, and 3 demonstrate the previously untested assumption that social tuning achieves a sense of shared reality with a social interaction partner. In Study 3, I provide some evidence that social tuning of implicit attitudes yields the subjective sense of shared reality when one is affiliatively motivated—not motivated to self-present—supporting theoretical assertions about the necessity of experiencing an appropriate motivation to share reality (Echterhoff et al., 2009). In Studies 4 and 5, by directly manipulating perceptions of attitude

similarity, I tested and provided evidence of another tenet of shared reality theory: Namely, the tenet that achieving shared reality requires perceiving oneself to have common attitudes, beliefs, or emotions about a target with a social interaction partner (Echterhoff et al., 2009). Across all five studies, effects with explicit attitudes were weaker than those with implicit attitudes. Social tuning improved implicit attitudes more than explicit attitudes, and implicit intergroup attitudes—but not explicit ones—accounted for perceptions of shared reality.

This research also provides a test of the durability of social tuning's effects over time and across different social contexts. Although the high attrition rate in Study 3 precluded adequate testing of how sharing reality affected implicit attitudes over time, Studies 4 and 5 directly manipulated perceptions of shared reality to shed further light on its importance for the durability of implicit attitudes and its effect on behaviors. In Study 4, disrupting perceptions of shared reality via attitude dissimilarity feedback disrupted social tuning's effects; only when participants had their perception of shared reality maintained did they maintain lower implicit, anti-Black prejudice. Moreover, participants who perceived themselves to have shared reality with their egalitarian experimenter were more verbally pleasant in an interracial interaction and more well-liked by a Black confederate, relative to those participants whose shared reality was disrupted. In Study 5, I replicated this implicit attitude effect over a weeklong delay. Again, successfully socially tuning to an egalitarian experimenter and having shared reality maintained with attitude similarity feedback related to intergroup interactions. These participants reported having had more positive interracial interactions during a weeklong delay between the treatment session and their second session in the study, even when controlling for the

number of interracial interactions that had occurred. Although the intended control condition in Study 5 did not provide an adequate comparison group to demonstrate baseline social tuning in the experimental conditions, previous research on social tuning with various comparison groups (e.g., poster conditions; blank t-shirt conditions; Lun et al., 2007; Sinclair et al., 2005) suggests that our results at baseline do reflect social tuning effects. However, that is one critical limitation of the current studies that needs to be addressed in a direct test in future research.

These studies provide evidence that social tuning and perceptions of shared reality might shape attitudes and behaviors via related but distinct processes. Although it was possible that either a person's newly-aligned implicit attitudes would be predictive of their subsequent interracial behaviors (because these attitudes ought to be strong ones; e.g., Echterhoff et al., 2009; Lun et al., 2007) or that the experience of sharing reality itself would predict subsequent behaviors, I found some evidence that improved interracial behaviors fell out of perceptions of shared reality—not one's implicit attitudes. Overall, although implicit anti-Black attitudes related to subsequent interracial behaviors in the predicted direction across all our studies, these relationships were not significant. Instead, in Study 5, perceiving oneself to have similar attitudes with one's experimenter accounted for participants reports of positive interracial interactions. Recent work by Brannon and Walton (2013) also has shown a similar pattern of results. After administering a socially-situated intervention that directly manipulated perceptions of similarity with an outgroup member, participants expressed immediate improvements in intergroup, implicit attitudes. However, although these improved implicit attitudes moderately persisted over a 6-month delay, participants' implicit attitudes were *not*

significantly predictive of subsequent positive interracial behaviors, either in the immediate context or after this delay. Thus, it is possible that social tuning and shared reality yield improvements in intergroup attitudes and behaviors via two related, yet distinct, psychological processes, but the current work does not make a direct test of this claim.

Limitations and Future Directions

Future research should clarify and examine more fully several important findings from these studies. First, Study 3 presents the first theoretical test of a central tenant of shared reality theory: That appropriate motivation is required to yield social tuning and that self-presentation is not an appropriate social motivation to induce a sense of shared reality (Echterhoff et al., 2009; Sinclair et al., 2005). This experiment provided some evidence that social tuning—but not self-presentation—yields the subjective sense of shared reality, in spite of finding no differences in affiliative motivation versus strategic, self-presentation in predicting initial implicit attitudes. Instead, I only found an effect of partner ideologies, such that participants who chatted with a partner wearing the “Eracism” logo had lower implicit anti-Black bias than did participants who chatted with a Republican partner—regardless of motivation. One possible reason for this effect is that self-presentation strategies do influence implicit attitudes in the immediate social context, but that—because self-presentation does not yield shared reality—these attitudes should not persist over time or relate to any behaviors outside of the self-presentation context. Thus, this finding would be in line with theorizing and research suggesting that self-presentation can impact attitudes and beliefs in a given social context (e.g., Baumeister, 1982). Unfortunately, there were no subsequent, behavioral dependent measures in this

study to be able to test the hypothesis that either motivational state would yield differences in subsequent interracial interactions. Moreover, the attrition rate from Time 1 to Time 2 (one week later) precluded adequately testing the hypothesis that either motivational state would yield differences in the durability of any intergroup attitude change over this delay. Promisingly, Study 5 provided evidence that social tuning does yield implicit attitude change that lasts over a weeklong delay, but a direct test of motivational state is necessary to test its effect on attitude change over time.

Another limitation of this research involves its inability to directly answer an unasked but tacit research question raised by these five studies: How far do the effects of social tuning via isolated interpersonal interactions extend if broader social norms are incongruent with the attitudes communicated in an interpersonal exchange? The current research involves tuning only to socially sanctioned intergroup attitudes; it is politically correct and socially prescribed to be tolerant of racial outgroups (e.g., Crandall, Eshleman, & O'Brien, 2002), and perceiving this type of social norm at one's college might be an especially strong determinant of a person's intergroup attitudes and behaviors (see, Pike & Kuh, 2006). As such, the current studies do not provide evidence that tuning's effects on intergroup behaviors and implicit attitudes over time might override any *existing* perceived norms for the broader social group. Promisingly, though, Studies 1-3 provided evidence of tuning of implicit intergroup attitudes outside of a liberal college environment, suggesting that tuning can occur outside of the university setting.

Future research should directly examine whether and under what conditions tuning to counter-normative attitudes occurs and how long its effects persist. An

abundance of research demonstrates that knowledge of descriptive and prescriptive norms shapes behaviors (Goldstein, Cialdini, & Griskevicius, 2008; Schultz, 1999; for a review, Schultz, Nolan, Goldstein, Cialdini, & Griskevicius, 2007), so an exciting future direction should directly examine when interpersonal social tuning can change perceptions about one's social connections and the normative behaviors within one's social group. To put this more concretely, consider an example about attitudes toward a group for which perceived norms sanction stigmatization: Obese people (e.g., Crandall, Eshleman, & O'Brien, 2002; Puhl & Heuer, 2009). Although it is normative to stereotype and stigmatize obese individuals, research on social tuning suggests that when relationally motivated, people would still tune their attitudes with someone who holds ostensibly positive attitudes toward obese people, via an isolated interpersonal exchange with that person. However, whether these improved attitudes are maintained over time or impact subsequent interactions with obese individuals remains unclear. I hypothesize that the durability of tuning's effects ought to depend on the experience of shared reality with the initial interaction partner. If the strength of the social connection achieved via sharing reality fulfills a person's need to belong and/or need to understand the social world, this interpersonal process might actually shape and inform his or her perceptions of group norms. That is, one might acknowledge that some groups of people express anti-fat attitudes, but—because of the strength of the social connection s/he experiences with a more egalitarian interaction partner—that person will now perceive his or her own social group as *also* endorsing more positive attitudes toward obese people. However, if an isolated social interaction does not yield a strong social connection to shape one's beliefs

about his or her group's norms, then tuning should not occur and—even if it does—any evidence of tuning should not persist over time or in any subsequent interactions.

Results from a different lab-based study excluded from the current write-up suggest indication in support of this hypothesis about the possible conflicts and/or complements between interpersonal social tuning and perceived group norms in shaping attitudes and behaviors. In the excluded study, university participants were induced to tune to an apparently Republican experimenter with an affiliative motivation induction. The study aimed to induce tuning to perceived views that were less egalitarian than those conveyed by an “Eracism” logo—a counternormative ideology. Participants were unlikely to tune to this Republican experimenter when they did perceive her views to be less egalitarian, suggesting it is difficult to induce affiliative motivation and yield tuning to a counternormative ideology. However, I did not directly measure any perceptions of group norms to fully assess this question. Critically, though, the small subset of participants who both perceived their Republican experimenter to be less egalitarian than one wearing an “Eracism” logo and expressed affiliative desire for her, expressed *greater* implicit anti-Black prejudice, suggesting that tuning to counternormative attitudes is possible. Nonetheless, a more direct test either measuring and/or pitting normative information against the attitudes to which one is induced to tune should be conducted to better understand the relationship between interpersonal tuning and group-based normative influence. Based on the abundance of research suggesting that intergroup prejudice is socialized by parents, peers, and the media (Clark & Kashima, 2007; Crandall, Eshelman, & O'Brien, 2002; Crandall & Stangor, 2005; Schaller & Conway, 1999), future research could profitably investigate when and why people do tune to share

reality about a prescriptively undesired ideology, such as racism. Understanding how and when these social processes can produce and strengthen intergroup conflict would clarify strategies for reducing intergroup prejudice.

The current work suggests that a social tuning intervention can impact other social encounters outside of the intervention context, and future research should examine how these effects continue to propagate through, and to shape, broader social networks. In Study 5, I showed that participants who had their perceptions of shared reality with an egalitarian experimenter maintained also reported more positive interracial interactions during a week after experiencing the intervention. However, I did not assess whether these self-reports were accurate; I collected no information from any individuals with whom our participants were interacting. By also assessing how minority group members experience interactions with recipients of a tuning intervention, research could more fully examine the downstream consequences and impact this strategy has.

Similarly, future research should investigate how achieving shared reality develops in newly forming, naturalistic groups to clarify whether and under what conditions social tuning effects propagate through and shape these groups. This type of research would also provide the opportunity to examine social tuning effects over a longer time course than our weeklong delay. In a changing social environment, attitudes should at first be unstable and disparate, but they will stabilize as groups and relationships stabilize (Levine, Higgins, & Choi, 2000; Shoda, LeeTeirnen, & Mischel, 2002). Thus, an ideal group to examine these processes with are incoming college freshmen who live in residential colleges. College students are an easily accessed sample, but more importantly, they provide the unique opportunity to study newly forming groups

and compare their social dynamics with those of existing groups, all within a relatively isolated and similar context. This type of naturalistic research could also serve to identify several unanswered but important questions about social tuning and shared reality. First, one important question is raised: With whom do attitudes align and stabilize over time in naturally occurring social interactions? While it is clear that people social tune in the laboratory, it is less clear to whom people tune in unrestrained, naturalistic contexts. Sheer popularity may not influence group attitudes as much as the nature of the relationships people hold, though; for example, people with whom others are interdependent have stronger impacts on explicit attitudes than do individuals with whom no such relationship exists (Sechrist & Milford-Szafran, 2011). Ostensibly, interdependence ought to elicit the same influence on implicit attitudes as well. Another characteristic might be a group member's prototypicality, with research suggesting that more peripheral group members are more likely to follow the behaviors of prototypical group leaders (e.g., Van Knippenberg & Hogg, 2003). Whatever the important personality variables are, identifying when and to whom group members tune their attitudes will inform efforts to improve intergroup interactions in naturally-occurring groups.

Finally, as was discussed above, although I found little evidence that implicit attitudes directly predicted behavioral outcomes in my studies, future research should more systematically examine how and when implicit attitudes that align in the service of shared reality will relate to subsequent behaviors in different intergroup interactions and relationships. While some researchers argue that implicit attitudes and automatic associations cannot be easily changed (Bargh, 1999) and recent research on the

developmental trajectory of implicit intergroup attitudes suggest that they are relatively stable over one's development (Yarrow, Baron, & Banaji, 2008), still other researchers continue to try to improve implicit attitudes with the aim of improving intergroup relations. Although there is some evidence of the malleability of automatic intergroup attitudes via simple processes (e.g., Dasgupta & Greenwald, 2001), far less research has investigated how durable any changes in automatic attitudes over time delays longer than a day (but see Devine et al., 2012) or whether changing the strength of one's automatic associations for different outgroups actually relates to improved intergroup behaviors. In contrast, the current research suggests that social tuning can conjointly benefit implicit intergroup attitudes for at least a week and improve immediate intergroup interactions, but future work needs to clarify the link between these two processes.

Conclusion

Overall, across five experiments, I investigated the hypothesis that social tuning yields shared reality and tested whether and how social tuning affects attitudes over time and subsequent intergroup interactions. Theoretically, this work provides evidence in support of several key tenets of shared reality theory: Namely, the necessity of perceiving similarity of attitudes with someone about a target and the necessity of appropriate motivation to share reality. Moreover, these studies provide the first test of the assumption that social tuning occurs in the service of shared reality. Practically, the results highlight how promising this minimally effortful intervention strategy is for improving not only intergroup attitudes but intergroup behaviors.

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Appendix A: Online Chat Content

High Affiliative Motivation

Introduction: Hi! My name is Michelle/Michael. I like reading and writing and I work at a local business. Umm...i'm not sure what we're supposed to say exactly to introduce ourselves. But I think this study could be interesting--It should be fun to talk with you!

Question 1: Nice to "meet" you! :) Hmm..okay. I wonder if you're really chatting with me...Are you? Tell me something that might be unique...like, do you have any hobbies or things you like to do for fun?

Question 2: Cool! Okay hm, question two. I think i'm going to try to see a movie this week--there are a lot out right now. It would be great to hear your recommendations! Have you seen anything good lately?

Low Affiliative Motivation

Introduction: I'm Michelle/Michael. I like reading and writing and I work at a local business. Umm...i'm not sure what we're supposed to say exactly to introduce ourselves. i just want to finish this HIT. I think it's dumb we have to talk to each other.

Question 1: Uhh..okay. I wonder if you're really chatting with me...Are you? Tell me something that might be unique...like, do you have any hobbies or things you like to do for fun?

Question 2: Another question? I don't know...I don't really care. I think i'm going to try to see a movie this week--there are a lot out right now. I doubt it, but do you have any good movie recommendations? Have you seen anything good lately?

Appendix B

Eracism Avatar:



Neutral Avatar:



Republican Avatar:



Appendix C

Modern Racism Scale (McConahay, 1986):

1. Over the past few years, Blacks have gotten more economically than they deserve.
2. Over the past few years, the government and news media have shown more respect for Blacks than they deserve.
3. It is easy to understand the anger of Black people in America.
4. Discrimination against Blacks is no longer a problem in the United States.
5. Blacks are getting too demanding in their push for equal rights.
6. Blacks should not push themselves where they are not wanted.

Abbreviated Fraboni Ageism Scale (taken from Fraboni, Saltstone, & Hewstone, 1990):

1. Complex and interesting conversation cannot be expected from most old people.
2. Most old people would be considered to have poor personal hygiene.
3. Most old people can be irritating because they tell the same stories over and over again.
4. Most old people should not be trusted to take care of infants.
5. The company of most old people is quite enjoyable.
6. It is sad to hear about the plight of the old in our society these days.

Neutral Attitude Items (from Lun et al., 2007):

1. The color red represents power.

2. Yellow is an uplifting color.
3. Blue is the most soothing color.
4. I prefer the color green to the color orange.
5. Purple is an underappreciated color.
6. Dogs make better pets than cats.

Affiliative Desire (Adapted from Sinclair et al., 2005):

1. How much do you want to get along with [partner]/your experimenter?
2. How likeable is [partner]/your experimenter?
3. How smooth is your interaction with [partner]/your experimenter so far?
4. How much would do you want to be friends with [partner]/your experimenter?

Worldview Similarity Scale (Adapted from Turban & Jones, 1988):

1. [Partner] and I see things in much the same way.
2. [Partner] is similar to me in terms of outlook, perspectives, and values.
3. [Partner] and I are alike in a number of ways.
4. [Partner] and I think alike.
5. [Partner] thinks that I see things in much the same way as s/he does.
6. [Partner] thinks that we are similar in terms of outlook, perspectives, and values.
7. [Partner] thinks that s/he and I are alike in a number of ways.
8. [Partner] thinks that s/he and I think alike.

Appendix D

Self-Presentation Instructions:

We are interested in different aspects of communication, memory, and impressions.

Sometimes, people have to **act strategically to make a positive impression**, even if they don't genuinely get along. For instance, during job interviews, applicants often present themselves as positively as possible to get hired--even if they don't like the person interviewing them or agree with what that person says or thinks.

We are interested in understanding the different types of pressures social interactions can present, so during this study, **you will be assigned a specific social task**. Please advance the page to receive your assignment.

Note: Part of your bonus will be determined by how well you remember the assignment(s) and follow it during the chat.

*During the chat interaction portion of this study, **you** are assigned:*

-	<u>No role</u> : Don't change your normal interaction style with your partner
☒	<u>Role</u>: Act in such a way to get your chat partner to <u>like you</u>
-	<u>Role</u> : Act in such a way to get your partner to <u>dislike you</u>
-	<u>Role</u> : Act in such a way to get your partner to think you are very <u>book-smart</u>
-	<u>Role</u> : Act in such a way to get your partner to think you are very <u>creative</u>

*Your **partner** will:*

☒	<u>NOT be assigned a role</u>
-	Be assigned a role <u>you'll have to guess</u>

Self-Presentation Neutral Chat

Introduction: Hi my name is Michelle/Michael. I like reading and writing and I work at a local business. Umm...i'm not sure what we're supposed to say exactly to introduce ourselves.

Question 1: Hmm..okay. I wonder if you're really chatting with me...Are you? Tell me something that might be unique...like, do you have any hobbies or things you like to do for fun?

Question 2: Ok question two. I think i'm going to try to see a movie this week--there are a lot out right now. Do you have any recomendations?

Appendix E

Study 3: Time 2 Results

Implicit Prejudice – Time 2. I conducted a repeated-measures ANCOVA to test whether participants implicit prejudice scores (within-subjects: T1 and T2 scores) were dependent on (between-subjects) motivation condition, partner ideology, or their interaction. I found no evidence of any main effects or interactions ($ps \geq .43$). I could not test for any mediation or moderated mediation since there were no significant differences between groups.

Explicit Prejudice – Time 2. I conducted a repeated-measures ANCOVA to test whether participants explicit prejudice scores (within-subjects: T1 and T2 scores) were dependent on (between-subjects) motivation condition, partner ideology, or their interaction. I found no evidence of any main effects or interactions ($ps \geq .24$). I could not test for any mediation or moderated mediation since there were no significant differences between groups.

Shared Worldview – Time 2. I conducted a repeated-measures ANCOVA to test whether participants perceptions of shared reality (within-subjects: T1 and T2) were dependent on (between-subjects) motivation condition, partner ideology, or their interaction. I found no evidence of any main effects or interactions ($ps \geq .15$).

Appendix F

Instructions: For each set of words below, make a grammatical sentence and type it in the space provided. For each set of words, there is ONE word that is not needed in the sentence.

For example: flew eagle the plane around

The eagle flew around.

High affiliationLow affiliation

- | | |
|---|---|
| 1. close can to Jane Adam feels | 1. distant can from Jane Adam feels |
| 2. I to her get along considered wanted with | 2. I to her get away considered wanted from |
| 3. like I life outlook Rachel's | 3. dislike I her him |
| 4. Peter observes occasionally television watches | 4. Peter observes occasionally television watches |
| 5. I feel Joey comfortable guess with | 5. Christine Joey disagrees guess with |
| 6. sent I email it over letter | 6. sent I email it over letter |
| 7. maintain others I get along to with want | 7. Jane dislikes distance him |
| 8. Lisa friend Mary's wants story to be | 8. I friend her want don't to be train |
| 9. sky Lauren is friend good a | 9. sky I to relate cannot him a |
| 10. eating like together I with friends | 10. Mary disagreed style John with |
| 11. likes Joe really going jam | 11. likes Joe really going jam |

- | | |
|---|--|
| 12. birds she with me cooperates | 12. style we of me difference have a |
| 13. Christine feels Joey close guess to | 13. Christine dinner dislikes Thanksgiving |
| 14. I smooth blimp interaction with want | children |
| to have him | 14. I through with her bickered |
| 15. know she travel wanted him with | 15. bump she I and heads wakes |
| 16. Jane friend Sarah's wants story to be | 16. I train the dinner took |
| 17. a Lauren is style cook bad | 17. a Lauren is style cook bad |
| 18. to Sally is Harry similar style | 18. him I had a between with fight |
| 19. I relate that can to today | 19. I be alone that want to today |
| 20. bond I with him picture want to | 20. train I dislike Jeremy's his |

Appendix G

Video Chat Questions (from Aron et al., 1997)

1. For what in your life do you feel most grateful?
2. What is your favorite memory?
3. If you knew that in one year you would die suddenly, would you change anything about how you live?
4. What do you value most in a friendship?
5. What would constitute a “perfect” day for you?
6. If a crystal ball could tell you the truth about yourself, your life, the future, or anything else, what would you want to know?
7. When was the last time you walked for more than an hour? Where did you go and why?
8. What has been your favorite college class so far? Why?
9. Do you read newspapers or magazines often? If so, which ones?
10. What did you do last summer?
11. Do you prefer digital watches and clocks or the analog kind (with hands)? Why?
12. What foreign country would you most like to visit? What attracts you to this place?

Appendix H

Instructions and Sample Items from Social Interactions Questionnaire:

Instructions: Think about the social encounters and interactions you have had over the past week. Focusing only on those interactions that included **some conversation and lasted at least 5 minutes**, please answer the following questions about your interactions with acquaintances. **Acquaintances** can be thought of as people whom you know but with whom you do not regularly socialize.

1. About how many interactions did you have with acquaintances, or people whom you know but with whom you do not regularly socialize?
2. How many of these interactions with acquaintances were with people in your classes?
3. How many of these interactions with acquaintances were with people in a different class year than you?
4. How many of these interactions with acquaintances were with people of a different gender?
5. How many of these interactions with acquaintances were with people of a different sexual orientation?
6. How many of these interactions with acquaintances were with people of a different race or ethnicity?
7. On average, how positive anxious did you feel during these interactions?

Appendix I

Table 1. Table of critical analyses and significance values of results across all studies.

		Study 1	Study 2	Study 3	Study 4	Study 5
Implicit anti-Black Prejudice	2 × 2 ANCOVA (interaction p-values)	<i>ns</i>	<i>p</i> =.08	<i>ns</i>	-	-
	Contrast (Weights: +3, -1, -1, -1)	<i>p</i> <.05	<i>p</i> <.05	<i>p</i> =.22	-	-
	Moderated Mediation: Significance of Indirect Effect Predicting Shared Worldview	90% CI	95% CI	95% CI	-	-
	Repeated Measures Linear Trend Contrast (Weights: +3, -1, -1, -1)	-	-	-	<i>p</i> <.05	Time 1: <i>ns</i> Time 2: <i>p</i> <.05
Explicit anti-Black Prejudice	2 × 2 ANCOVA (interaction p-values)	<i>ns</i>	<i>ns</i>	<i>ns</i>	-	-
	Contrast (Weights: +3, -1, -1, -1)	<i>p</i> =.11	<i>p</i> =.13	<i>ns</i>	-	-
	Moderated Mediation: Significance of Indirect Effect Predicting Shared Worldview	<i>ns</i>	<i>ns</i>	<i>ns</i>	-	-
	2 × 2 Mixed-Model ANOVA	-	-	-	-	<i>ns</i>
Shared Worldview	2 × 2 ANCOVA (interaction p-values)	<i>ns</i>	<i>ns</i>	<i>p</i> =.06	-	-
	Contrast (Weights: +3, -1, -1, -1)	<i>p</i> =.01	<i>p</i> <.001	<i>p</i> <.01	-	-