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Abstract

In the present research, we examined the hypothesis that cues of social connectedness to a member of another social group can spark interest in the group's culture, and that such interest, when freely enacted, contributes to reductions in intergroup prejudice. In two pilot studies and Experiment 1, we found that extant and desired cross-group friendships and cues of social connectedness to an out-group member predicted increased interest in the target group's culture. In Experiments 2 and 3, we manipulated cues of social connectedness between non–Latino American participants and a Latino American (i.e., Mexican American) peer and whether participants freely worked with this peer on a Mexican cultural task. This experience reduced the participants' implicit bias against Latinos, an effect that was mediated by increased cultural engagement, and, 6 months later in an unrelated context, improved intergroup outcomes (e.g., interest in interacting with Mexican Americans; Experiment 4). The Discussion section addresses the inter- and intragroup benefits of policies that encourage people to express and share diverse cultural interests in mainstream settings.

Keywords

interpersonal interaction, attitudes, intergroup dynamics, prejudice, sociocultural factors

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Intergroup contact can improve intergroup attitudes (Allport, 1954; Dovidio, Gaertner, & Kawakami, 2003; Pettigrew & Tropp, 2006). For instance, having a Black American roommate can reduce automatic racial prejudice among White American college students (Shook & Fazio, 2008). But how does contact improve intergroup attitudes? In the present research, we examined one potential process. We hypothesized that feelings of social connectedness to a member of an out-group can spark interest in that group's culture. In turn, actively taking part in that group's culture—freely enacting cultural interests—may reduce prejudice.

This hypothesis integrates research on the social bases of the self and on consistency theories. Much research has shown that people acquire aspects of self, including interests, from others, especially others to whom they feel socially connected. Even small cues of social connectedness, such as a shared birthday, can cause people to internalize the goals and motivations of others (Walton, Cohen,

Cwir, & Spencer, 2012; see also Cwir, Carr, Walton, & Spencer, 2011). In the context of intergroup interactions, cues of social connectedness may lead people to acquire the interests of out-group members, including interests associated with an out-group's culture. Drawing on psychology's consistency theories (e.g., theories of cognitive dissonance, Festinger, 1957; self-perception, Bem, 1972; and balance, Greenwald et al., 2002; Heider, 1958), we hypothesized that actively taking part in relevant cultural activities—expressing this interest behaviorally—may contribute to reductions in intergroup prejudice. Because cultural activities often function as a source of pride, shared meaning, and collective identity for groups (Adams & Markus, 2004; Bruner, 1996; Kroeber & Kluckhohn, 1952),

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freely enacting cultural interests associated with an outgroup may seem inconsistent with holding prejudicial attitudes. This inconsistency may lead people to adopt more positive intergroup attitudes (cf. Rokeach, 1971).

To illustrate, suppose a shared interest in mystery novels facilitates a social connection between Karen, a White American, and Liliana, a Mexican American. As the two become friends, Karen may learn about Liliana's personal interests, including those related to her Mexican heritage, and come to share these interests herself. If Karen has the opportunity to participate in relevant cultural activities, such as watching a Mexican telenovela or making the Mexican dish sopa seca with Liliana, this openness to Mexican culture may lead Karen to participate fully and enthusiastically. Doing so may seem to Karen to reflect and express her interest in Mexican culture and feel inconsistent with holding negative attitudes toward Latinos. But if Karen does not feel socially connected to Liliana, the same behaviors may not be executed with the same enthusiasm or carry the same psychological meaning—they may not seem to reflect an authentic personal interest—and, thus, may not cause attitude change.

Central to the hypothesized process is the behavioral enactment of cultural interests. Even if Karen and Liliana are friendly, if Karen does not freely take part in a Mexican cultural activity, she may not show reductions in anti-Latino prejudice. Classic consistency theories emphasize the importance of freely chosen behaviors, which can seem to reflect a commitment of the self to which people feel accountable and which can drive attitude change (Kiesler & Sakumura, 1966). Thus, behaviorally enacting an interest in Mexican culture may reduce prejudice, whereas a mere social connection to a Mexican American or an idle interest in Mexican culture may not.

In examining the effects of social connections and consistency processes on intergroup outcomes, we have extended past work that used experimental procedures to foster intergroup friendships (e.g., Page-Gould, Mendoza-Denton, & Tropp, 2008). In a departure from this work, we investigated the effects of small cues of social connectedness between cross-group members, not extensive friendship-building exercises or extended interpersonal contact, and their contribution to consistency processes, not alternative processes (e.g., the reduction of intergroup anxiety; see also Shook & Fazio, 2008; Wright, Aron, & Tropp, 2002). In addition, to identify more precisely the type of intergroup contact that improves intergroup outcomes, we held constant (a) intergroup interaction, rather than comparing inter- and intragroup interaction, and (b) the activity participants engaged in, varying only its representation.

Overview

We tested the hypotheses that cues of social connectedness to an out-group member can lead people to develop

an interest in that group's culture (Hypothesis 1) and that freely enacting these cultural interests can improve intergroup attitudes (Hypothesis 2). Hypothesis 1 was tested in the two pilot studies and Experiment 1. The pilot studies showed that White Americans who had more Latino friends and White Canadians who desired a friendship with a Chinese Canadian interaction partner expressed greater interest in those groups' cultures (see Pilot Studies in the Supplemental Material available online). In Experiment 1, we manipulated cues of social connectedness between non-Latino American participants and a Chinese Canadian peer and assessed participants' interest in Chinese culture. In Experiments 2 and 3, we tested Hypothesis 2 by manipulating cues of social connectedness between non-Latino American participants and a Mexican American peer and participants' freely chosen opportunity to work with this peer on a Mexican cultural activity; the primary outcome measure was non-Latino Americans' implicit bias against Latinos. In Experiment 4, we examined whether this experience caused enduring effects on intergroup outcomes.

Experiment 1

We manipulated White Canadians' sense of social connectedness to a Chinese Canadian confederate using nonverbal mimicry, an established manipulation of social connectedness (Chartrand & Bargh, 1999). We tested whether the nonverbal mimicry would increase participants' interest in Chinese culture.

Method

Participants. Fifty-one (28 female, 23 male) White Canadian undergraduates participated for course credit or Can\$10. An additional 7 participants (5 from the mimicry condition, 2 from the no-mimicry condition; see the Procedure section for descriptions of conditions) who expressed suspicion about the confederate or about his or her nonverbal behavior were excluded.

Prestudy survey. Several weeks prior to the experiment, in an ostensibly unrelated survey, participants indicated how positively or negatively they viewed people from China, Australia, and Britain; responses were made using feeling thermometers from 0 to 100. To index preference for people of Chinese descent versus people of European descent, we subtracted scores for views of Australian and British people (r=.71, p<.001) from the score for views of Chinese people to create a difference score. Participants also reported how interested they were in Chinese culture and in the two Western (Australian and British) cultures, using scales from 1 (not at all) to 7 (very; r=.57, p<.001).

Procedure. Participants took part individually in a study that was ostensibly on interactions and worldviews; each

participant was paired with one of two extensively trained Chinese Canadian confederates posing as another participant. The experimenter gave the dyad a series of questions to ask each other and then left the room. The questions and the confederate's responses were scripted so that the confederate described both mainstream experiences (e.g., academic interests) and his or her Chinese cultural background (e.g., favorite Chinese foods). On average, the conversation lasted 20 min 40 s, with no difference by condition, t < 1.40, p > .17.

The confederate either mimicked the participant's body posture, leg position, and arm position following a lag of several seconds (mimicry condition) or held a neutral position (no-mimicry condition; Chartrand & Bargh, 1999). Confederates were unaware of the hypothesis and purpose of the manipulation. No analysis was moderated by confederate.

Dependent measures. After the conversation, the experimenter separated the dyad and gave the participant a questionnaire. First, as a manipulation check, we assessed perceived similarity, a key basis of interpersonal liking (Byrne, 1997). Participants reported how much they had in common with the confederate, using a scale from 1 (*nothing*) to 7 (*very much*), and the degree to which they were similar to the confederate, using a scale from 1 (*not at all*) to 7 (*very;* r = .74, p < .001; see Manipulation Check in the section on Experiment 1 in the Supplemental Material).

Next, participants reported how interested they were in Australian culture, British culture, and Chinese culture, using scales from 1 (*not at all*) to 7 (*very*), and how much they liked Chinese art and Chinese movies, using a scale from 1 (*not at all*) to 7 (*very much*). The two items measuring interest in Western culture were correlated (r = .70, p < .001), and the three items measuring interest in Chinese culture formed a reliable scale ($\alpha = .78$).

Finally, participants were invited to complete lottery tickets to win Chinese cultural products (e.g., Chinese films) ostensibly left over from a prior study. Each ticket required extensive contact information (full name, address, etc.). Participants could complete as many tickets as they liked. The number of tickets completed served as a behavioral measure of interest in Chinese culture.²

Results and discussion

The prestudy feeling-thermometer difference score proved a significant covariate on the measure of perceived similarity, F(1, 48) = 10.21, p = .002, so we included it as a covariate. To retain the same analytic approach for all outcomes, we included this measure in all other analyses; this procedure did not change any of the results.

Perceived similarity. An analysis of covariance (ANCOVA) showed that the degree to which participants saw themselves and the confederate as similar was greater in the mimicry condition (M = 4.56) than in the no-mimicry condition (M = 3.97), F(1, 48) = 4.15, p = .047.

Cultural interest. Interest in Western cultures and in Chinese culture was examined using a mixed-model ANCOVA that included the outcomes (within-subjects) and condition (between-subjects). To control for baseline differences, we first regressed each outcome on the corresponding prestudy measure. We saved the unstandardized residuals, added the grand mean from the outcome to preserve the original metric, and used these scores in our analysis.

The interaction was significant, F(1, 48) = 4.60, p = .024 (see Fig. 1a). Participants reported greater interest in Chinese culture in the mimicry condition than in the nomimicry condition, t(48) = 2.38, p = .021, d = 0.67, with no difference for interest in Western cultures, t < 1. In addition, participants reported greater interest in Western cultures than Chinese culture in the no-mimicry condition, t(48) = 3.08, p = .003, d = 0.86, but not in the mimicry condition, t < 1.

Finally, an ANCOVA showed that participants completed more lottery tickets to win Chinese cultural products in the mimicry condition than in the no-mimicry condition, F(1, 48) = 4.87, p = .032, d = 0.62 (see Fig. 1b and Number of Ballots Completed to Win Chinese Cultural Products in the section on Experiment 1 in the Supplemental Material).

Experiment 2

The results of Experiment 1 showed that a small cue of social connectedness with a member of an out-group caused people to express greater interest in that group's culture. Does enacting such cultural interests reduce prejudice?

We tested this question in Experiment 2, in which non–Latino American participants freely took part in a cooperative cultural activity with a Latino American (Mexican American) peer. In developing the procedure, we drew on classic cognitive-dissonance studies on counterattitudinal behaviors and attitude change (Brock & Blackwood, 1962). There were two manipulations. First, we manipulated participants' sense of social connectedness to their interaction partner with an idiosyncratic-similarities manipulation (Cwir et al., 2011). Although not the focus of the study, results from Experiment 1 had suggested that such cues of social connectedness should spark interest in Latino culture. Second, we manipulated whether the cultural activity

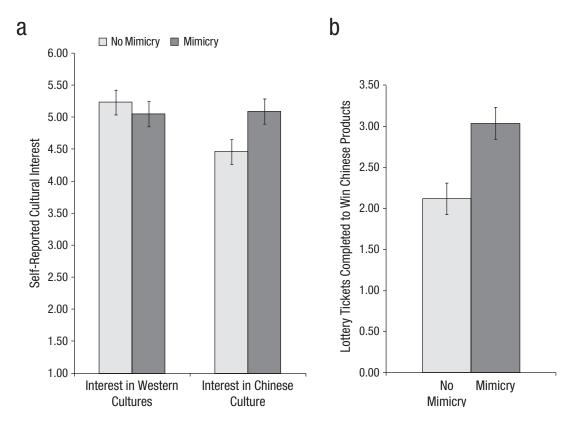


Fig. 1. Results from Experiment 1: (a) self-reported interest in Chinese and Western cultures and (b) number of lottery tickets completed to win Chinese products as a function of condition. Error bars represent ±1 *SE*.

participants engaged in was said to involve Mexican culture or another culture (Portuguese). Implicit anti-Latino prejudice was predicted to drop only when participants were led to feel socially connected to their partner and to think that the activity they took part in involved Mexican culture.

Method

Participants. Fifty-eight non–Latino American female undergraduates (31 White American, 23 Asian American, 4 other race or ethnicity) participated for course credit or US\$10. We recruited only women to create same-sex pairs with female confederates (see Participant Gender in the section on Experiments 2 and 3 in the Supplemental Material). Four additional participants (evenly distributed across conditions) who expressed suspicion of the confederate or of the cultural activity were excluded.

Prestudy survey. Several weeks before the experiment, participants reported five idiosyncratic interests (e.g., their favorite book) in an ostensibly unrelated mass survey.

Procedure. Participants took part individually in a study that was ostensibly on music and media. Each participant

was paired with one of two extensively trained Latina American confederates posing as another participant. First, the experimenter orchestrated a brief getting-toknow-you conversation by alternately asking each member of the pair questions. In all conditions, the confederate revealed that she was Mexican American. Then, following a personalized script for each participant, the confederate was queried about three idiosyncratic interests (e.g., favorite book). In the social-connection condition, the confederate described having one interest that the participant had reported in the prestudy survey (see Manipulation of Social Connectedness in the section on Experiments 2 and 3 in the Supplemental Material). In the no-social-connection condition, each participant was yoked to a social-connection-condition participant, and the confederate described having an interest reported by this participant. Thus, across conditions, the confederates expressed the same types of interests; what was manipulated was whether one interest did or did not match one of the participant's interests. This procedure reliably fosters a sense of social connectedness between new interaction partners (Cwir et al., 2011).

Next, the experimenter told the dyad that they would design a music video for a new pop song and that they could choose what band to use music from. To reinforce the sense of free choice (see Brehm, 1956), we presented

the pair with a fictitious Canadian band, which the confederate and all participants rejected. The experimenter then read the name of a second band, Camila, an actual Mexican band, and was interrupted by the confederate, who excitedly said that she liked Camila and that Camila was popular in either Mexico (Mexican condition) or Portugal (Portuguese condition). The experimenter confirmed the group's origin and asked the confederate and participant if they wanted to use Camila. All participants agreed to do so.

The dyad then read about Camila's current (fictitious) tour in either Latin America or Europe, viewed a Camila music video, listened to a new Camila song, and read a synopsis of the song's theme. They were then given a worksheet to design a music video for the new song (see Fig. S1 in the Supplemental Material). To constrain this interaction, we had the experimenter ask each person to take the lead in answering specific questions. The confederate's contributions were semiscripted so that in all conditions, she provided relevant cultural information for instance, suggesting that the video include a traditional Mexican or Portuguese (depending on condition) dance (see Confederate's Contribution to the Music-Video Design in the section on Experiments 2 and 3 in the Supplemental Material). On average, this interaction took approximately 15 min.

Dependent measures. After the dyad had completed the music task, the experimenter separated the dyad and asked the participant to complete "poststudy" measures. The first measure was a White-Latino lexical Implicit Association Test (IAT; Page-Gould et al., 2008). Participants sorted words into four categories (bad, good, White surnames, and Latino surnames) by pressing one of two keys. We calculated the IAT *D* score (Greenwald, Nosek, & Banaji, 2003). Positive scores indicated a bias in favor of Whites. Data from 3 participants were lost as a result of a software-saving error; in addition, data from 2 participants with high error rates (> 18%; more than 2 *SD*s above the mean) were excluded.

Finally, as a manipulation check, we had participants report how much they had in common with their interaction partner and how similar they were to their interaction partner, using 7-point scales (r = .74, p < .001).

Results and discussion

Manipulation check. Analysis yielded the predicted main effect of social connection (social-connection condition: M = 4.54; no-social-connection condition: M = 3.97), F(1, 56) = 4.15, p = .046, with no main or interactive effect of the cultural-framing manipulation, Fs < 1.

Implicit prejudice. The predicted two-way interaction was significant, F(1, 51) = 4.78, p = .033 (see Fig. 2a).

Participants displayed less anti-Latino prejudice in the social-connection/Mexican condition than in the social-connection/Portuguese condition, t(51) = 2.04, p = .047, d = 0.56, or in the no-social-connection/Mexican condition, t(51) = -2.71, p = .009, d = 0.75. No pairwise comparisons among the social-connection/Portuguese, no-social-connection/Mexican, and no-social-connection/Portuguese groups were significant, t = 1.3

Experiment 3

To further explore the role of consistency processes in prejudice reduction, we manipulated whether the choice to design a music video for a Mexican band was represented as free or required. Consistency theories predict that only behaviors that seem freely chosen should create the feeling of behavioral-attitudinal inconsistency that causes attitude change (Cooper & Croyle, 1984). If a feeling of inconsistency between free participation in a cultural activity and negative intergroup attitudes drives attitude change, participants should show reduced prejudice only in the social-connection/free-choice condition. In addition, to examine the underlying psychological process, we assessed participants' level of engagement with the cultural task through confederate and coder reports. We anticipated that participants would engage more with the task in both the social-connection condition (which would extend findings from Experiment 1) and the free-choice condition (which would replicate research on autonomy; Ryan & Deci, 2000). However, we predicted that increased engagement would contribute to reductions in prejudice only when this behavior seemed freely chosen and, thus, potentially relevant to the self.

Method

Participants. Fifty-eight non–Latino American female undergraduates (26 White American, 25 Asian American, 7 other race or ethnicity) participated for course credit or US\$10. Two additional participants who expressed suspicion of the confederate or of the music task were excluded.

Procedure. In the free-choice condition, the procedure, including the social-connection manipulation, was identical to that in the Mexican condition in Experiment 2. The procedure was the same in the no-free-choice condition except that after the confederate expressed enthusiasm for Camila, the experimenter paused and, instead of asking the dyad if they would like to use Camila, said that the study protocol required them to do so. The music task and dependent measures were identical to those in Experiment 2 except for the inclusion of measures assessing participants' cultural-task engagement.

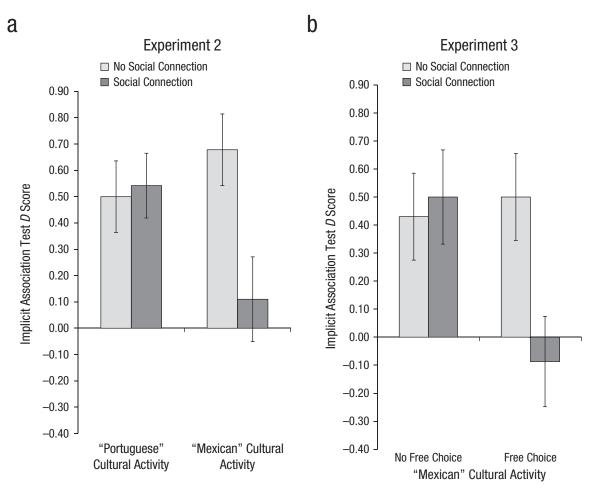


Fig. 2. Implicit Association Test D scores in (a) Experiment 2 and (b) Experiment 3. Higher values indicate greater implicit prejudice against Latinos. Error bars represent ± 1 SE.

After each session, the confederate rated how enthusiastic and interactive the participant had been during the music task, using scales from 1 (not at all) to 7 (very), r = .84, p < .001. In addition, two coders, who were unaware of the conditions and hypotheses, rated participants' contributions to the music-task worksheet (median intraclass correlation = .75) on six measures (e.g., "detailed/vivid," "enthusiastic"), using scales from 1 (not at all) to 5 (very much; $\alpha = .92$). The confederate and coder ratings were standardized and averaged to form a composite measure of cultural engagement. IAT data from 5 participants were lost as a result of a software-saving error (see the section on Experiment 3 in the Supplemental Material).

Results and discussion

Manipulation check. As predicted, there was a main effect of social-connection condition on perceived similarity to the confederate (social-connection condition: M = 4.72; no-social-connection condition: M = 3.80), F(1, 54) = 9.40, p = .003, with no main or interactive effect of the free-choice manipulation, Fs < 1.20.

Implicit prejudice. The predicted interaction was significant, F(1, 49) = 4.18, p = .046 (see Fig. 2b). Participants exhibited less anti-Latino prejudice in the social-connection/free-choice condition than in any of the other conditions, ts > 2.30, $ps \le .025$, $ds \ge 0.65$. No pairwise comparison among the three other conditions was significant, ts < 1.

Cultural engagement. There were two main effects. Participants were more engaged with the cultural task in the social-connection condition (M = .24) relative to the no-social-connection condition (M = -.19), F(1, 54) = 4.51, p = .038, and in the free-choice condition (M = .22) relative to the no-free-choice condition (M = -.22), F(1, 54) = 4.43, p = .040, with no interaction, F < 1.

Mediation. As hypothesized, greater engagement with the cultural task predicted lower levels of anti-Latino prejudice in the free-choice condition, r = -.61, p = .001, but not in the no-free-choice condition, r = -.09, p = .66. To ascertain whether increased engagement in the social-connection condition, together with the predictiveness of

this engagement for prejudice reduction in the freechoice condition, mediated the interaction on implicit prejudice, we tested for mediated moderation (Muller, Judd, & Yzerbyt, 2005). We regressed contrast-coded social-connection condition, contrast-coded free-choice condition, the two-way interaction, engagement, and the engagement-by-free-choice interaction on implicit prejudice. In this analysis, the social-connection-by-free-choice interaction was no longer significant, $\beta = -0.19$, t(47) =-1.43, p = .16, but the engagement-by-free-choice interaction was marginally significant, $\beta = -0.26$, t(47) = -1.79, p = .079 (see Table S1 in the Supplemental Material). Also consistent with the proposed meditational relationship, results showed that within the free-choice condition, the effect of social-connection condition on implicit prejudice was fully mediated by cultural engagement (see Fig. S2 in the Supplemental Material).

Experiment 4: Long-Term Follow-Up

Does the experience created in Experiments 2 and 3 improve intergroup outcomes along broader measures and in the future? Although the effect could dissipate rapidly, brief dissonance-based interventions can have effects that last months and years (Axsom & Cooper, 1985), including effects on intergroup attitudes (Rokeach, 1971; see also Debriefing of Participants in Experiments 2 and 3 in the section on Experiment 4 in the Supplemental Material). We explored this question in Experiment 4 by having a new experimenter survey participants from Experiments 2 and 3 approximately 6.5 months later (mean delay = 200.35 days, SD = 163.86). No connection was made to participants' prior laboratory experience. Embedded in the survey were measures assessing two critical intergroup outcomes: interest in interacting with Mexican Americans and attitudes toward undocumented Mexican immigrants.

Method

Participants. Because some participants from Experiments 2 and 3 had graduated, we estimated that we had valid contact information for 91 remaining participants. Of these, 60.44% (n=55) responded to our communications and completed an online survey in exchange for US\$10. The remaining participants did not respond (none explicitly declined participation). Participants were equally likely to have taken part in Experiments 2 and 3 and were evenly distributed across conditions from both studies, χ^2 s < 1. There was no difference by retention status in implicit prejudice, t < 1.

Dependent measures. Embedded among various ostensibly unrelated surveys were items assessing how much

participants would "enjoy," "feel enthusiastic about," "want to learn from," and "try to avoid" (reverse-coded) talking with a Mexican American student about (a) Mexican cultural traditions and practices (α = .84) and (b) U.S. immigration policy and undocumented Mexican migrants (α = .84). Participants responded to all items using scales from 1 (*not at all*) to 7 (*very much*). The two subscales correlated, r = .41, p = .002, and yielded the same interaction, Fs > 4.15, ps < .05, so they were combined. An ostensibly unrelated section of the survey contained nine items assessing attitudes toward undocumented Mexican immigrants (see Attitudes Toward Undocumented Mexican Immigrants in the section on Experiment 4 in the Supplemental Material).

Results and discussion

To test the effects of the social-connection manipulation and of whether participants freely engaged in a Mexican cultural task, we combined the Portuguese condition of Experiment 2 with the no-free-choice condition of Experiment 3 in our analyses. The combined groups did not differ on any outcome. The time lag between participants' laboratory experience and completion of the follow-up assessment did not moderate any of the results.

For interest in interacting with a Mexican American peer, there was a significant interaction, F(1, 51) = 6.28, p = .015 (see Figs. 3a and 3b). Participants expressed greater interest in talking with a Mexican American peer in the social-connection/Mexican-free-choice condition than in either the social-connection/Mexican-no-free-choice condition, t(51) = 2.61, p = .012, d = 0.72, or the no-social-connection/Mexican-free-choice condition, t(51) = 2.03, p = .048, d = 0.56. The a priori predicted contrast between the first condition and the three other conditions was significant, t(51) = 2.68, p = .010, d = 0.74.

For attitudes toward undocumented Mexican immigrants, the results were in the same direction and marginally significant (see Fig. 3c and Attitudes Toward Undocumented Immigrants in the section on Experiment 4 in the Supplemental Material).

General Discussion

How does intergroup contact improve intergroup attitudes? The present studies highlight the role of cultural activities. We hypothesized that cues of social connectedness to a member of an out-group can spark interest in that group's culture that, when freely enacted, can contribute to reductions in intergroup prejudice. Pilot studies and Experiment 1 demonstrated that cues of social connectedness to ethnic-minority peers predicted increased interest in the respective group's culture. Experiments 2 and 3 showed that cues of social connectedness to a

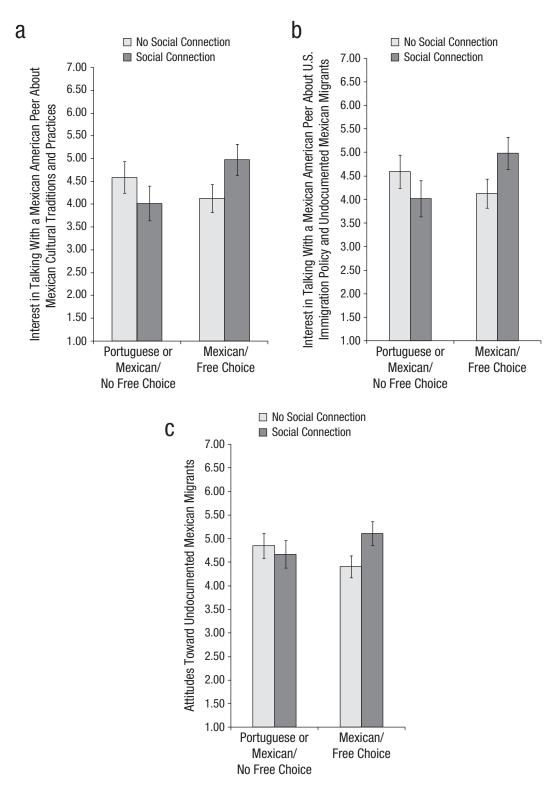


Fig. 3. Results from Experiment 4: non–Latino American participants' interest in talking with a Mexican American peer about (a) Mexican cultural traditions and practices and (b) U.S. immigration policy and undocumented Mexican migrants, and (c) attitudes toward undocumented Mexican migrants, as a function of prior-study condition. Intergroup attitudes were assessed approximately 6.5 months after participation in either Experiment 2 or Experiment 3. Error bars represent ± 1 SE.

Mexican American peer and freely working with this person on a Mexican cultural task reduced implicit anti-Latino prejudice. Consistent with the hypothesized psychological process, results from Experiment 3 showed that increased cultural engagement—behaviorally expressing cultural interest—mediated this reduction in implicit prejudice. Moreover, Experiment 4 demonstrated that the experience of being connected to a Mexican American and freely working on a Mexican cultural task led to more positive intergroup attitudes half a year later.

By examining social connections, cultural behaviors, and consistency processes, we have extended past work examining the impact of other mechanisms on the reduction of implicit bias (e.g., perspective taking, Todd, Bodenhausen, Richeson, & Galinsky, 2011; and counterstereotypical exemplars, Blair, 2002; Dasgupta & Greenwald, 2001; see also Gawronski & Strack, 2004; Page-Gould et al., 2008; Shook & Fazio, 2008). The present studies thus inform policies that aim to use multicultural experiences to improve intergroup outcomes (see Holloway, Waldrip, & Ickes, 2009; Smith, 1943; Wright & Tropp, 2005). The present research suggests the potential effectiveness of this approach and highlights an important boundary condition: Participation in minority-group cultural activities should feel freely chosen, not forced or obligated, to generate positive intergroup outcomes.

The present studies also raise important questions for future research. For instance, how did the laboratory experience in Experiments 2 and 3 improve intergroup attitudes 6 months later? It does not appear that longterm change was mediated by more positive implicit attitudes in the short term. Correlations between implicit prejudice and distal intergroup attitudes were weak, rs < [.24], n.s. Instead, following research on social-psychological interventions, we suspect that more positive intergroup attitudes engendered in the laboratory endured through interactions with the social context (cf. Rokeach, 1971; Yeager & Walton, 2011). For example, if the laboratory experience caused participants to have better interactions with Latinos (Greenwald, Poehlman, Uhlmann, & Banaji, 2009), this could propagate the effect into the future even without participants' awareness of the original precipitating cause (cf. Walton & Cohen, 2011).

Often, the expression of distinctive cultural interests by minority-group members is seen as risky—an invitation to be perceived through the lens of a stereotype (Pronin, Steele, & Ross, 2004; Steele & Aronson, 1995). An important implication of the present research is that it highlights the benefits that can arise when minority-group members express and share positive aspects of their culture in mainstream settings. In addition to improved intergroup outcomes, this expression can facilitate creativity and cognitive functioning among ethnic minorities (Brannon, Markus, & Jones-Taylor, 2013; see

also Cheng, Sanchez-Burks, & Lee, 2008). These benefits suggest the value of multicultural policies that encourage people to express and share their cultures.

Author Contributions

Both authors actively participated in conceptualizing the theory and studies, running the studies, analyzing the data, and writing the manuscript.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

Additional supporting information may be found at http://pss.sagepub.com/content/by/supplemental-data

Notes

- 1. Notably, mere intergroup friendships may not have this general meaning, in part because people can readily subtype crossgroup friends, viewing them as exceptional rather than typical (Brown, Vivian, & Hewstone, 1999).
- 2. We also assessed self-reported mood to determine whether positive mood could have contributed to the results. There was no effect of mimicry on mood, F < 2.50, p > .10 (see Mood in the section on Experiment 1 in the Supplemental Material).
- 3. A potential alternative explanation involves the confederate's perceived ethnic identification. Additional analyses suggested that this did not drive the results (see Experiment 2: Perceived Ethnic Identification of the Confederate in the Supplemental Material).

References

- Adams, G., & Markus, H. R. (2004). Toward a conception of culture suitable for a social psychology of culture. In M. Schaller & C. S. Crandall (Eds.), *The psychological foundations of culture* (pp. 335–360). Mahwah, NJ: Erlbaum.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Axsom, D., & Cooper, J. (1985). Cognitive dissonance and psychotherapy: The role of effort justification in inducing weight loss. *Journal of Experimental Social Psychology*, *21*, 149–160.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York, NY: Academic Press.

Blair, I. V. (2002). The malleability of automatic stereotypes and prejudice. *Personality and Social Psychology Review*, 6, 242–261.

- Brannon, T. N., Markus, H. R., & Jones-Taylor, V. (2013). Two souls, two thoughts, two self-schemas: Positive consequences of double consciousness in African-Americans for self, behavior, and academic performance. Manuscript submitted for publication.
- Brehm, J. W. (1956). Postdecision changes in the desirability of alternatives. *Journal of Abnormal and Social Psychology*, 52, 384–389.
- Brock, T. C., & Blackwood, J. E. (1962). Dissonance reduction, social comparison, and modification of others' opinions. *Journal of Abnormal and Social Psychology*, 65, 319–324.
- Brown, R. J., Vivian, J., & Hewstone, M. (1999). Changing attitudes through intergroup contact: The effects of group membership salience. *European Journal of Social Psychology*, 29, 741–764.
- Bruner, J. S. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.
- Byrne, D. (1997). An overview (and underview) of research and theory within the attraction paradigm. *Journal of Social and Personal Relationships*, 14, 417–431.
- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76, 893–910.
- Cheng, C., Sanchez-Burks, J., & Lee, F. (2008). Connecting the dots within: Creative performance and identity integration. *Psychological Science*, 19, 1178–1184.
- Cooper, J., & Croyle, R. T. (1984). Attitudes and attitude change. *Annual Review of Psychology*, *35*, 395–426.
- Cwir, D., Carr, P. B., Walton, G. M., & Spencer, S. J. (2011). Your heart makes my heart move: Cues of social connectedness cause shared emotions and physiological states among strangers. *Journal of Experimental Social Psychology*, 47, 661–664.
- Dasgupta, N., & Greenwald, A. G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology*, 81, 800–814.
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, 6, 5–21.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Gawronski, B., & Strack, F. (2004). On the propositional nature of cognitive consistency: Dissonance changes explicit, but not implicit attitudes. *Journal of Experimental Social Psychology*, 40, 535–542.
- Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott, D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and selfconcept. *Psychological Review*, 109, 3–25.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85, 197–216.
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E., & Banaji, M. R. (2009). Understanding and using the Implicit

- Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, 97, 17–41.
- Heider, F. (1958). *The psychology of interpersonal relations*. Hillsdale, NJ: Erlbaum.
- Holloway, R. A., Waldrip, A. M., & Ickes, W. (2009). Evidence that a simpatico self-schema accounts for differences in the self-concepts and social behavior of Latinos versus Whites (and Blacks). *Journal of Personality and Social Psychology*, 96, 1012–1028.
- Kiesler, C. A., & Sakumura, J. (1966). A test of a model of commitment. *Journal of Personality and Social Psychology*, 3, 349–353.
- Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. New York, NY: Random House
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89, 852–863.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology*, 95, 1080–1094.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751–783.
- Pronin, E., Steele, C. M., & Ross, L. (2004). Identity bifurcation in response to stereotype threat: Women and mathematics. *Journal of Experimental Social Psychology*, 40, 152–168.
- Rokeach, M. (1971). Long-range experimental modification of values, attitudes, and behavior. *American Psychologist*, 26, 453–459.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68–78.
- Shook, N. J., & Fazio, R. H. (2008). Interracial roommate relationships: An experimental field test of the contact hypothesis. *Psychological Science*, *19*, 717–723.
- Smith, F. T. (1943). *An experiment in modifying attitudes toward the Negro*. New York, NY: Teachers College, Columbia University.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal* of *Personality and Social Psychology*, 69, 797–811.
- Todd, A. R., Bodenhausen, G. V., Richeson, J. A., & Galinsky, A. D. (2011). Perspective taking combats automatic expressions of racial bias. *Journal of Personality and Social Psychology*, 100, 1027–1042.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, *331*, 1447–1451.
- Walton, G. M., Cohen, G. L., Cwir, D., & Spencer, S. J. (2012). Mere belonging: The power of social connections. *Journal of Personality and Social Psychology*, 102, 513–532.
- Wright, S. C., Aron, A., & Tropp, L. R. (2002). Including others (and groups) in the self: Self-expansion and intergroup relations. In J. P. Forgas & K. D. Williams (Eds.),

- The social self: Cognitive, interpersonal, and intergroup perspectives (pp. 343–363). Philadelphia, PA: Psychology Press.
- Wright, S. C., & Tropp, L. (2005). Language and intergroup contact: Investigating the impact of bilingual instruction
- on children's intergroup attitudes. *Group Processes & Intergroup Relations*, *8*, 309–328.
- Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81, 267–301.