

UC Riverside

UC Riverside Previously Published Works

Title

Reducing Prejudice Across Cultures via Social Tuning

Permalink

<https://escholarship.org/uc/item/6z73d1s0>

Journal

Social Psychological and Personality Science, 6(4)

ISSN

1948-5506

Authors

Skorinko, Jeanine LM

Lun, Janetta

Sinclair, Stacey

et al.

Publication Date

2015-05-01

DOI

10.1177/1948550614561125

Peer reviewed

Reducing Prejudice Across Cultures via Social Tuning

Jeanine L. M. Skorinko¹, Janetta Lun², Stacey Sinclair³,
Satia A. Marotta⁴, Jimmy Calanchini⁵, and Melissa H. Paris⁶

Social Psychological and
Personality Science
2015, Vol. 6(4) 363-372
© The Author(s) 2014
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1948550614561125
spps.sagepub.com



Abstract

This research examines whether culture influences the extent to which people's attitudes tune toward others' egalitarian beliefs. Hong Kong Chinese, but not American, participants were less prejudiced, explicitly and implicitly, toward homosexuals when they interacted with a person who appeared to hold egalitarian views as opposed to neutral views (Experiment 1). In Experiments 2 and 3, cultural concepts were manipulated. Americans and Hong Kong Chinese who were primed with a collectivist mind-set showed less explicit and implicit prejudice when the experimenter was thought to endorse egalitarian views than when no views were conveyed. Such differences were not found when both cultural groups were primed with an individualist mind-set. These findings suggest that cultural value orientations can help mitigate prejudice.

Keywords

culture, social tuning, prejudice reduction, attitude transmission, implicit attitudes

Researchers are increasingly exploring cultural variation in the expression of intergroup bias (Ditlmann, Purdie-Vaughns, & Eibach, 2011; Durante et al., 2013; Fiske & Cuddy, 2006; Glick et al., 2000, 2004; Guimond et al., 2013; Neuberg et al., 2014; Pratto et al., 2012; Span & Vidal, 2003; Van de Vliert, 2011). Although this work illuminates similarities and differences in the nature of stereotyping and prejudice across national groups, it is limited in informing how culture shapes the expression of prejudice in everyday social interaction and whether cultural value orientations could be a means to mitigate prejudice. Research on affiliative social tuning (Huntsinger & Sinclair, 2014; Lun, Sinclair, Whitchurch, & Glenn, 2007; Sinclair, Huntsinger, Skorinko, & Hardin, 2005a; Sinclair, Lowery, Hardin, & Coangelo, 2005b) shows that spontaneously adopting others' egalitarian beliefs in social interaction (i.e., social tuning) can be an effective means to reduce prejudice. This research examines whether social tuning is influenced by cultural variation in individualism versus collectivism (e.g., Markus & Kitayama, 1991; Triandis & Gelfand, 2012). Specifically, we test the hypothesis that collectivism, as compared to individualism, facilitates the adoption of egalitarian views of those with whom individuals interact. This work represents the first effort, to our knowledge, to examine the intersection between cultural variation in psychological propensities and the mitigation of prejudice.

The current understanding of how individualism and collectivism affect the degree and nature of intergroup prejudice rests on how intergroup identities are conceptualized differently

along this cultural dimension. For example, it has been theorized that collectivists differentiate between in-groups and out-groups more readily than individualists and, therefore, should show stronger in-group favoring tendencies (Erez & Earley, 1993; Triandis, 1995; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). However, this point is debatable (Brewer & Chen, 2007). An alternate perspective suggests that intergroup prejudice may vary by culture because in collectivist cultures an in-group constitutes direct interpersonal assemblages such as friends or family, whereas in individualist cultures, an in-group constitutes social categories such as ethnicity or gender (Brewer & Chen, 2007; Brewer & Yuki, 2007). Although these viewpoints suggest cultural differences in the level of prejudice across individualist and collectivist cultures, they say little about how culture may also play a role in the interpersonal dynamics of changing prejudicial attitudes.

¹ Department of Social Science and Policy Studies, Worcester Polytechnic Institute, Worcester, MA, USA

² Department of Psychology, University of Maryland, College Park, MA, USA

³ Department of Psychology, Princeton University, Princeton, NJ, USA

⁴ Department of Psychology, Tufts University, Medford, MA, USA

⁵ Department of Psychology, University of California Davis, Davis, CA, USA

⁶ City University London, London, United Kingdom

Corresponding Author:

Jeanine L. M. Skorinko, Department of Social Science and Policy Studies, Worcester Polytechnic Institute, 100 Institute Rd, Worcester, MA 01609, USA.

Email: skorinko@wpi.edu

Thus, this research charts new territory by considering the role of affiliative social tuning as a cultural variation that may mitigate intergroup prejudice (Sinclair et al., 2005a, 2005b). Affiliative social tuning is the alignment of one's attitudes with the attitudes of an interaction partner in response to affiliative motivation or the desire to get along with the partner. Sinclair and colleagues found that indirectly communicating egalitarian views in social interactions has powerful effects on intergroup attitudes and self-evaluations (Sinclair et al., 2005a, 2005b). Unlike strategic self-presentation stemming from interpersonal demand (Jones & Pittman, 1982; Schlenker, 2003; Zanna & Pack, 1975), this form of attitude alignment affects both implicit and explicit outcomes and occurs even when fulfilling affiliative goals have negative reputational consequences or financial costs (Sinclair et al., 2005a). Of particular relevance, past research shows that when individuals wish to affiliate with an interaction partner, their implicit prejudice aligns with the apparent views of the partner. When such views are egalitarian, this leads to prejudice reduction (Sinclair et al., 2005a).

The central role of affiliative motivation in social tuning suggests that there may be cultural variation in the extent to which individuals socially tune. In individualist cultures such as the United States, the self is thought to be independent, autonomous, and separate from others. In collectivist cultures such as Hong Kong, the self is thought to be interdependent and coordinated with others (Brewer & Chen, 2007; Markus & Kitayama, 1991; Oyserman, Coon, & Kimmelmeier, 2002). Consistent with this distinction, collectivists are more likely to adjust their beliefs and behaviors to fit with those around them than individualists (Bond & Smith, 1996; Kim & Markus, 1999; Morling & Fiske, 1999; Morling, Kitayama, & Miyamoto, 2002; Oh, 2013; Oishi & Diener, 2001; Savani, Morris, Naidu, Kumar, & Berlia, 2011). For example, Morling (2000) found that collectivists tended to adjust their movements when trying to perform a difficult step in an aerobics class, whereas individualists tended to change the difficult step. Moreover, social adjustment occurs in the service of social connection and bonding (Morling et al., 2002; Savani et al., 2011). If collectivism is associated with adjusting to the apparent needs, beliefs, and behaviors of others in the service of social bonding, it is likely that it also inspires tuning of one's attitudes without specific invocation of affiliative motivation. Thus, in collectivist cultures or when a collectivist orientation is psychologically available, the concomitant desire to connect with others via social adjustment should cause people to "tune" to an egalitarian belief expressed by a social interaction partner, thereby reducing the expression of prejudiced attitudes. However, this should not be the case in individualist cultures or when individualism is made psychologically available due to the emphasis on autonomy and social distance. In fact, individualism may inspire contrasting oneself with an interaction partner (Gardner, Gabriel, & Hochschild, 2002) or "antituning" where individuals contrast themselves from their interaction partner to maintain social distance in the interaction (Sinclair et al., 2005a).

In sum, the current research tests the prediction that collectivists', but not individualists', expression of group-based prejudice will be spontaneously shaped by the ostensible views of an interaction partner. Experiment 1 is a cross-cultural study in which we compare the extent to which implicit and explicit attitudes of collectivists (i.e., Hong Kong Chinese) versus individualists (i.e., American) tune toward the apparent egalitarian beliefs of an interaction partner. We then manipulate cultural mind-sets among Americans (Experiment 2) and Hong Kong Chinese (Experiment 3) to establish the causal effect of cultural mind-set on the propensity to social tune. We examined sexual orientation bias across all three samples because this group-based distinction is salient in both the United States and Hong Kong (Aronowitz, 2009; Mayer, 2011; Span & Vidal, 2003). In Experiment 2, we also looked at racial bias in order to connect this work with previous work on social tuning (Lun et al., 2007; Sinclair et al., 2005a, 2005b) and to assess the generalizability of the effects of cultural differences in social tuning on bias.

Experiment 1

Method

Participants

One hundred twenty-six heterosexual undergraduates at English-speaking universities (94 females and 32 males) participated in this experiment. Eighty-nine lived in the United States and 37 lived in Hong Kong, Special Administrative Region. American participants earned class credit and Hong Kong participants earned Hong Kong dollar (HKD) 50 (approximately US\$6).

Procedure and Materials

The experiment was conducted in English. Participants were greeted by an experimenter who wore a blank T-shirt or a T-shirt that read "People don't discriminate, they learn it," conveying egalitarian beliefs.¹ Participants learned that the experiment investigated cognitive skills and that they would complete several different tasks, including a computer game and some questionnaires. After giving informed consent, participants completed a "vision" test to ostensibly ensure that they could complete the computer tasks. The experimenter feigned that the eye chart was missing and asked, in an impromptu fashion, whether the participants would read either (a) the message on the T-shirt (egalitarian views condition) or (b) a string of random letters written on a piece of paper (neutral views condition). The T-shirt procedure served as our perceived views manipulation. Based on previous experiments (Lun et al., 2007; Sinclair et al., 2005a), participant should be more likely to think of the experimenter in the "people don't discriminate" T-shirt as holding egalitarian beliefs than the experimenter in the blank T-shirt. The eye test helped ensure that participants processed the message on the T-shirt. All participants agreed

to the vision test and read the message or letters successfully, and no one reported being suspicious. After the vision test, participants completed computerized implicit and explicit measures of attitudes toward homosexuals and were reminded that all responses were anonymous. Participants provided demographic information, including gender, birthplace, and sexual orientation (option of “do not wish to disclose” was provided). Participants were debriefed and thanked.

Implicit attitudes measure. Implicit attitudes toward homosexuals were measured using an Implicit Associations Test (IAT; Greenwald, McGhee, & Schwartz, 1998; Greenwald, Nosek, & Banaji, 2003), which assessed how strongly people associated positive and negative concepts with homosexuals and was scored according to the algorithm recommended by Nosek, Greenwald, and Banaji (2005). Higher positive *d* scores indicate stronger negative implicit evaluations of homosexuals relative to heterosexuals. Two participants failed to complete the IAT, so their scores were not included in the analysis.

Explicit attitudes toward homosexuals’ measure. We measured explicit attitudes toward homosexuals using a modified 16-item Attitudes Towards Gays and Lesbians (ATLG) scale (Herek, 1998). We removed four questions that were specific to American culture, law, or institutions (e.g., State laws against private sexual behavior between consenting adult women should be abolished). Two participants from the Hong Kong sample reported purposely skewing their responses on this measure, and their data were removed from the analyses. A principle components factor analysis with varimax rotation was used to verify the factor structure of the ATLG scale in each culture sample. To adjust for systematic response bias across cultures, all items were first standardized within each culture sample before the factor analysis. For both cultures, all ATLG questions loaded into one factor. For the Hong Kong sample, the scree plot revealed one factor that accounted for 45% of the total variance (eigenvalue = 6.78; factor loading range = .29–.85; Cronbach’s $\alpha = .91$). For the American sample, there was one factor that accounted for 59% of the total variance (eigenvalue = 8.85; Cronbach’s $\alpha = .95$; factor loading range = .45–.91). Ratings were averaged and higher numbers indicate more explicit prejudice toward homosexuals.

Results and Discussion

We conducted an analysis of variance (ANOVA) with participant’s cultural background (collectivist or individualist) and the perceived views of the partner (egalitarian or neutral views) as between-participant factors on the implicit and explicit attitudes’ scores.

Implicit Attitudes Toward Homosexuals

There was no main effect for cultural background ($p > .8$) but a main effect of perceived views, $F(1, 120) = 5.76, p = .02$,

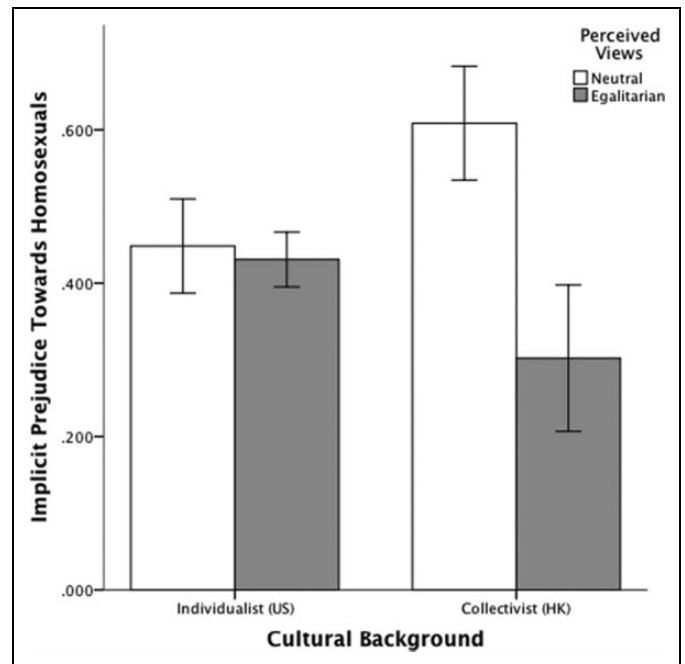


Figure 1. The effects of perceived views and cultural background on implicit attitudes toward homosexuals (Experiment 1).

$\eta_p^2 = .05$. However, this main effect was qualified by a significant interaction between cultural background and perceived views on implicit attitudes, $F(1, 120) = 4.57, p = .03, \eta_p^2 = .04$ (see Figure 1). As predicted, Hong Kong Chinese (i.e., collectivists) in the egalitarian views condition exhibited lower implicit prejudice toward homosexuals ($M = .30, SD = .42$) than collectivists in the neutral views condition ($M = .61, SD = .31, F(1, 120) = 7.25, p = .01, \eta_p^2 = .06$). Also, as predicted, Americans’ (i.e., individualists) implicit attitudes toward homosexuals did not differ significantly as a function of the experimenter’s views, $p > .80$ ($M_{egalitarian} = .43, SD_{egalitarian} = .24; M_{neutral} = .45; SD_{neutral} = .40$).

Explicit Attitudes Toward Homosexuals

Similar to the IAT results, although there was no main effect for cultural background ($p > .9$), there was a main effect of perceived views, $F(1, 120) = 4.33, p = .04, \eta_p^2 = .04$. However, this was qualified by a significant interaction between cultural background and perceived views on explicit attitudes, $F(1, 120) = 4.73, p = .03, \eta_p^2 = .04$ (see Figure 2). As with the implicit prejudice measure, collectivists in the egalitarian views condition ($M = -.38, SD = .88$) exhibited lower explicit prejudice toward homosexuals than those in the neutral views condition ($M = .44, SD = .93, F(1, 120) = 6.37, p = .01, \eta_p^2 = .05$). There was no difference between the perceived view conditions among individualists, $p > .9$ ($M_{egalitarian} = .03, SD_{egalitarian} = 1.01; M_{neutral} = .01, SD_{neutral} = .99$).

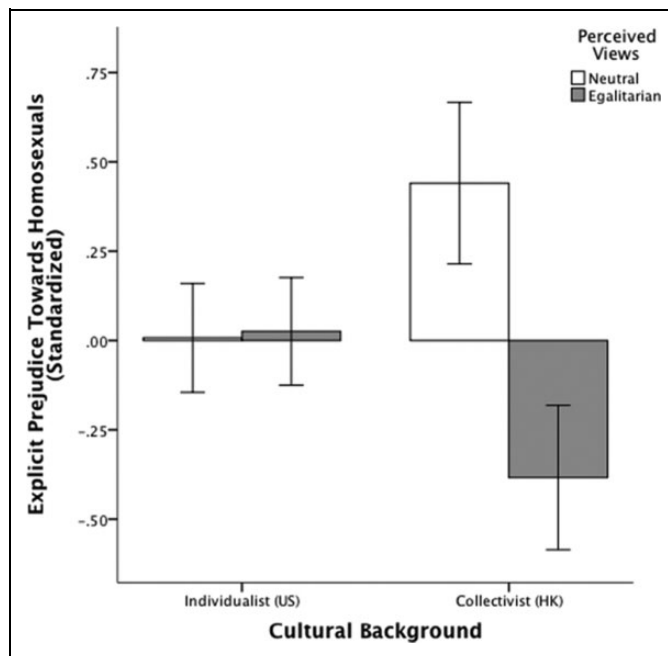


Figure 2. The effects of perceived views and cultural background on explicit attitudes toward homosexuals (Experiment 1).

Conclusion

Results of Experiment 1 provide initial evidence that cultural backgrounds influence the propensity to engage in social tuning. Collectivists' implicit and explicit prejudice was lower when interacting with an apparently egalitarian person, but this was not the case among individualists.

Experiment 2

Research demonstrates that cultural tendencies can be temporarily evoked by making culturally relevant mind-sets cognitively available (Oyserman & Lee, 2008; Trafimow, Triandis, & Goto, 1991). Using this method, Experiment 2 investigates whether priming participants from an individualist background (the United States) with collectivist or individualist values influences the likelihood of engaging in social tuning. Similar to Experiment 1, we assess attitudes toward homosexuals. Additionally, in Experiment 2 we evaluate attitudes toward Blacks, a stigmatized group in the U.S. context that was the focus of previous social tuning research (e.g., Sinclair et al., 2005a, 2005b), to see whether the findings generalize to other stigmatized groups.

Method

Participants

Ninety-five U.S. undergraduates from a Northeastern university participated to fulfill a partial requirement for a psychology class. We excluded data of the following participants from analysis because their cultural or ethnic background might influence the effectiveness of the manipulation or their

responses to the dependent measures: five participants originally from Mainland China, three self-identified homosexuals/bisexuals, and three self-reported Black participants. Thus, the data are based on 84 participants (28 females and 56 males).

Procedure and Material

The procedure is the same as in Experiment 1, with the addition of a cultural concepts priming task after the vision test and the inclusion of anti-Black prejudice-dependent variables. We primed cultural mind-sets by having participants read a story about a warrior who made a self-interested decision (individualist prime) or a family-interested decision (collectivist prime; Oyserman & Lee, 2008; Trafimow et al., 1991). After reading the story, participants completed implicit attitude measures regarding homosexuals and Blacks using separate, counterbalanced IATs. In addition to the ATLG ($\alpha = .96$), we then measured explicit attitudes toward Blacks using the Pro- and Anti-Black Scale (Katz & Hass, 1988; Pro-Black $\alpha = .72$, Anti-Black $\alpha = .85$). We created a difference score to measure explicit attitudes toward Blacks (Anti-Black items–Pro-Black items), with higher positive numbers indicating greater prejudice. The explicit measures were standardized to remain consistent with the analyses reported in Experiment 1 and their order was counterbalanced.

Results and Discussion

We conducted an ANOVA with cultural concept prime (Collectivist or Individualist) and the perceived views of the partner (egalitarian or neutral views) as between-participant factors on our different dependent measures. The order of the implicit and explicit measures did not influence the results.

Attitudes Toward Homosexuals

Implicit attitudes. As seen in Figure 3, there was a significant interaction between prime and perceived views on implicit attitudes toward homosexuals, $F(1, 78) = 5.84, p = .02, \eta_p^2 = .07$, with no main effects, $ps > .4$. American participants primed with a collectivist mind-set exhibited lower implicit prejudice toward homosexuals when in the egalitarian views ($M = .26, SD = .28$) than the neutral views condition ($M = .45, SD = .28$), $F(1, 78) = 5.64, p = .02, \eta_p^2 = .07$. However, the implicit attitudes of those primed with an individualist mind-set did not differ as a function of the experimenter's views ($M_{egalitarian} = .41, SD_{egalitarian} = .19$; $M_{neutral} = .32, SD_{neutral} = .32$), $p > .3$.

Explicit attitudes. There was no main effect for views, $p > .7$, but a significant main effect of prime, $F(1, 78) = 3.96, p = .05, \eta_p^2 = .05$. Importantly, this was qualified by a significant interaction between prime and perceived views, $F(1, 78) = 9.1, p = .01, \eta_p^2 = .11$ (see Figure 4). When primed with a collectivist mind-set, participants had lower explicit prejudice

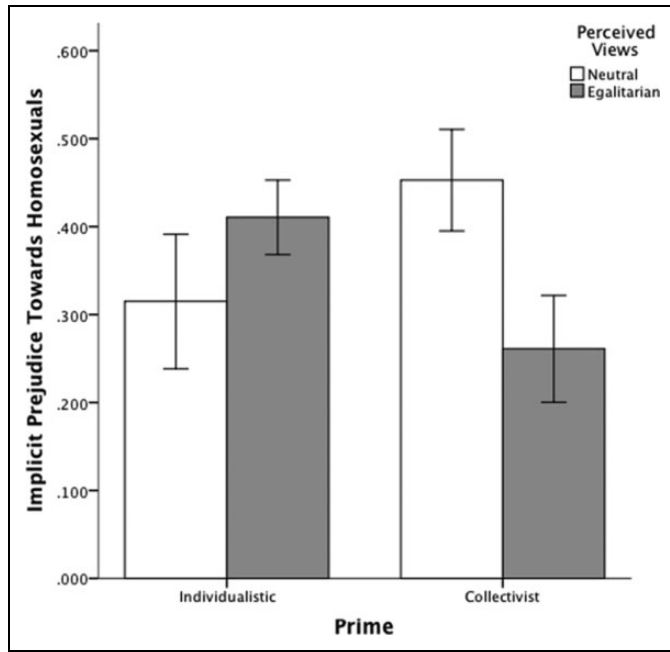


Figure 3. The effects of perceived views and prime on implicit attitudes toward homosexuals (Experiment 2).

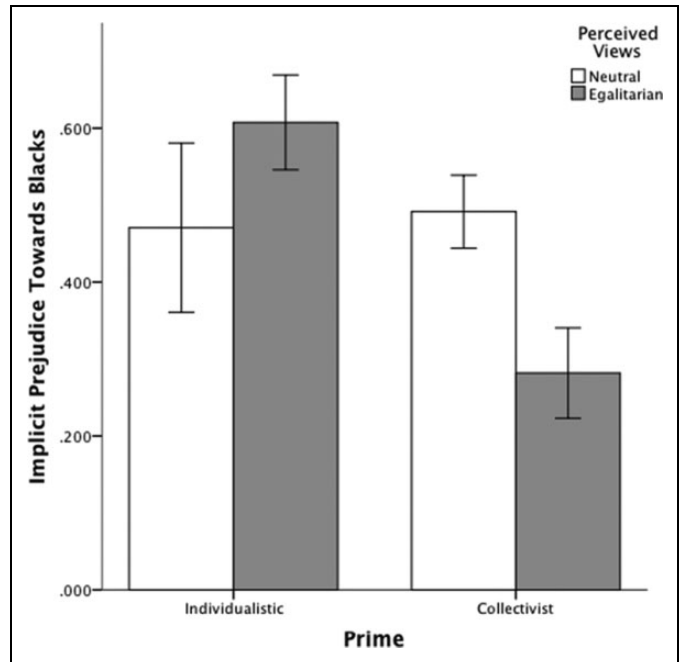


Figure 5. The effects of perceived views and prime on implicit attitudes toward Blacks (Experiment 2).

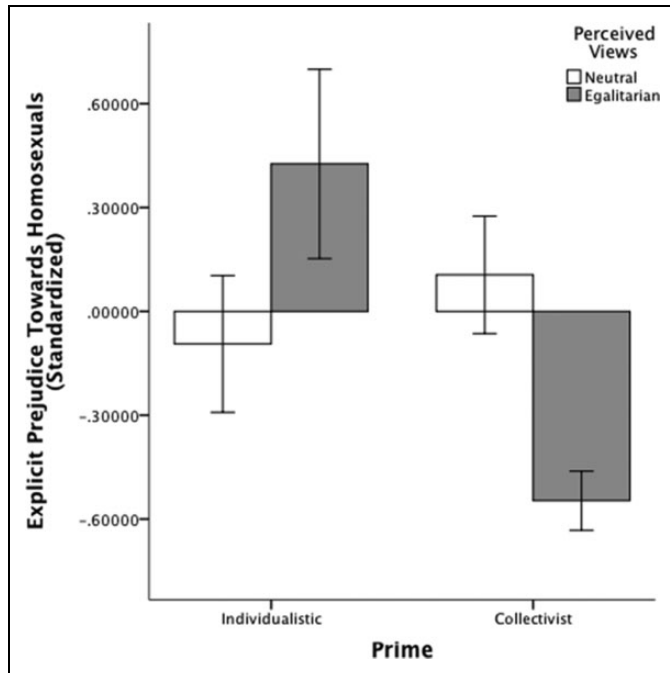


Figure 4. The effects of perceived views and prime on explicit attitudes toward homosexuals (Experiment 2).

toward homosexuals ($M = -.55, SD = .39$) in the egalitarian views than in the neutral views condition ($M = .11, SD = .81$), $F(1, 78) = 6.12, p = .02, \eta_p^2 = .07$. When primed with an individualist mind-set, explicit attitudes did not differ as a function of the experimenter's views ($M_{egalitarian} = .43, SD_{egalitarian} = 1.25$; $M_{neutral} = -.09, SD_{neutral} = .81$), $p > .07$.

Attitudes Toward Blacks

Implicit attitudes. There was no main effect for perceived views ($p > .6$) but a significant main effect for prime, $F(1, 77) = 4.87, p = .03, \eta_p^2 = .06$. However, this was qualified by a significant interaction between prime and perceived views on implicit prejudice, $F(1, 77) = 6.29, p = .01, \eta_p^2 = .08$ (see Figure 5), showing that participants primed with a collectivist mind-set had less implicit prejudice toward Blacks in the egalitarian views ($M_{implicit} = .28, SD_{implicit} = .27$) than in the neutral views condition ($M = .49, SD = .22$), $F(1, 77) = 4.94, p = .03, \eta_p^2 = .06$. There was no difference between perceived views condition when they were primed with an individualist mind-set ($M_{egalitarian} = .61, SD_{egalitarian} = .28$; $M_{neutral} = .47, SD_{neutral} = .45$), $p > .2$.

Explicit attitudes. There were no main effects for prime or perceived views, $ps > .3$, but there was a significant interaction between these variables, $F(1, 77) = 4.15, p = .05, \eta_p^2 = .05$ (see Figure 6). Among participants primed with a collectivist mind-set, those in the egalitarian views condition ($M = -.27, SD = .68$) showed less explicit prejudice toward Blacks than those in the neutral views condition ($M = .31, SD = 1.09$), $F(1, 77) = 4.92, p = .03, \eta_p^2 = .06$. The explicit attitudes of those primed with an individualist mind-set did not change as a function of the experimenter's views ($M_{egalitarian} = .22, SD_{egalitarian} = .56$; $M_{neutral} = .02, SD_{neutral} = 1.00$), $p > .5$.

Conclusion

Experiment 2 conceptually replicated the results in Experiment 1, suggesting that a collectivist mind-set facilitates

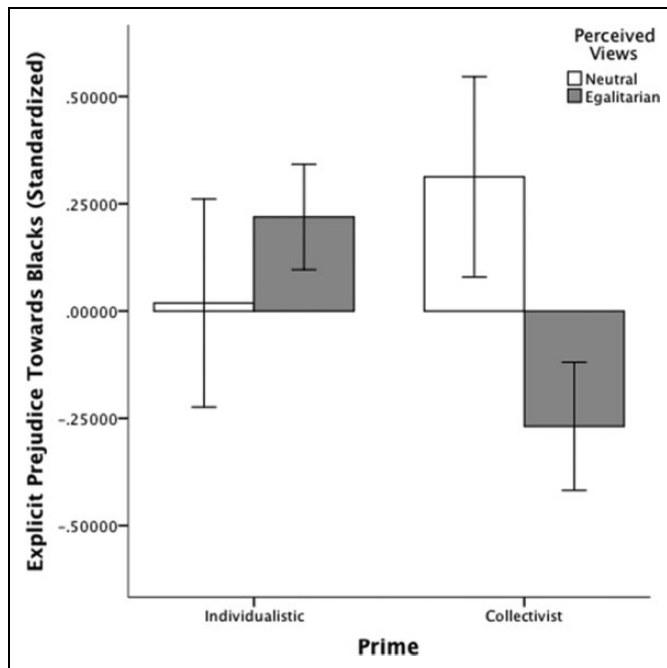


Figure 6. The effects of perceived views and prime on explicit attitudes toward Blacks (Experiment 2).

social tuning of implicit and explicit attitudes—even for those from individualist backgrounds. Experiment 2 also demonstrates that these findings are not limited to attitudes toward homosexuals.

Experiment 3

Experiment 3 is a conceptual replication of Experiment 2 but with a sample of Hong Kong Chinese. Research has shown that because Hong Kong Chinese have been exposed to both Western and Eastern influences, they are capable of switching cultural mind-sets when they are primed with either Eastern or Western cultural symbols (Hong, Morris, Chiu, & Benet-Martínez, 2000; Wong & Hong, 2009). We predict that when the Hong Kong participants are primed with a collectivist mind-set by exposure to Chinese cultural symbols, they will social tune toward the egalitarian views of the experimenter more than when they are primed with an individualist mind-set by exposure to American cultural symbols.

Method

Participants

Eighty-six heterosexual students (54 females and 32 males) from two English-speaking universities in Hong Kong participated and received a compensation of HK\$50 (approximately US\$6). One participant reported purposely manipulating his or her IAT scores and another participant reported purposely changing his or her explicit responses. Both participants' data were removed from the analyses, leaving a total of 84 participants.

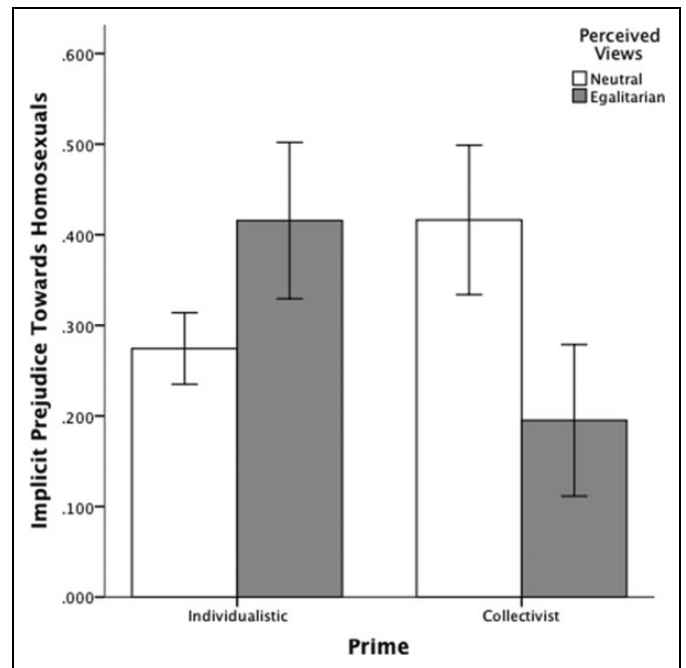


Figure 7. The effects of perceived views and prime on implicit attitudes toward Homosexuals (Experiment 3).

Procedure and Material

We replicated Experiment 2 except for the cultural mind-set manipulation and omission of the anti-Black prejudice-dependent variables² (ATLG, $\alpha = .88$). For the cultural mind-set manipulation, participants were randomly assigned to view either five pictures of Chinese cultural icons (i.e., Confucius, Chinese opera, dragon, Forbidden City, and Great Wall) or five pictures of American cultural icons (i.e., American flag, Bald Eagle, Capitol Hill, Marilyn Monroe, and the Statue of Liberty). Participants identified the pictures and briefly wrote about what each cultural icon represented and what it meant to them (procedure and images adopted from Hong et al., 2000; Wong & Hong, 2009). Most participants wrote their responses in both English and Chinese (regardless of condition), and all participants correctly identified the majority of the Chinese or American cultural icons.

Results and Discussion

Implicit Attitudes Toward Homosexuals

A two-way ANOVA with cultural concept prime and perceived views as between-participant factors showed no main effects, $ps > .6$. However, there was a significant interaction between prime and perceived views on implicit attitudes toward homosexuals, $F(1, 81) = 5.82, p = .02, \eta_p^2 = .07$ (see Figure 7). Hong Kong Chinese participants primed with a collectivist mind-set (i.e., Chinese cultural icons) showed lower implicit prejudice in the egalitarian views ($M = .20, SD = .36$) than the neutral views condition ($M = .42, SD = .36$), $F(1, 81) = 3.9, p = .05, \eta_p^2 = .05$. The implicit attitudes

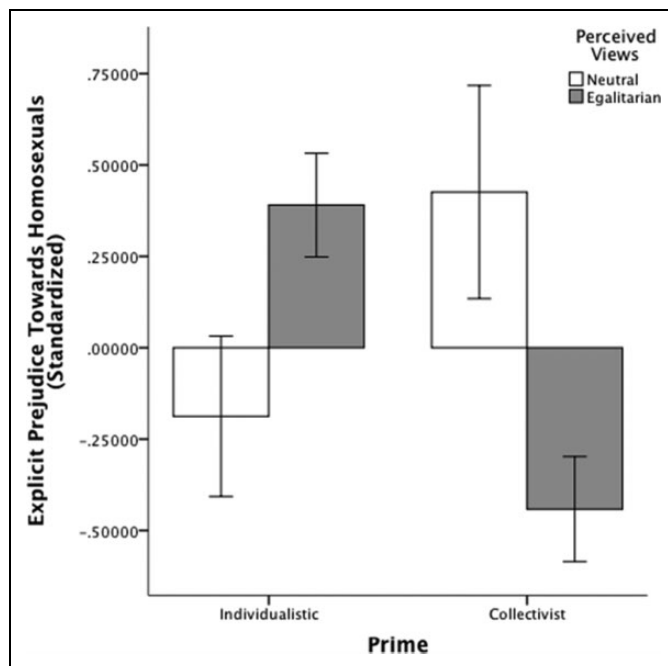


Figure 8. The effects of perceived views and prime on explicit attitudes toward Homosexuals (Experiment 3).

of those primed with an individualist mind-set (i.e., American cultural icons) did not differ as a function of the experimenter's views ($M_{egalitarian} = .42$, $SD_{egalitarian} = .42$; $M_{neutral} = .27$, $SD_{neutral} = .19$), $p > 0.2$.

Explicit Attitudes Toward Homosexuals

A two-way ANOVA showed no main effects for cultural concept prime or perceived views ($ps > .5$). However, there was the expected interaction between prime and perceived views, $F(1, 82) = 12.68$, $p = .01$, $\eta_p^2 = .13$ (see Figure 8). Hong Kong Chinese primed with a collectivist mind-set expressed less explicit prejudice in the egalitarian views ($M = -0.44$, $SD = 0.64$) than in the neutral views condition ($M = 0.42$, $SD = 1.23$), $F(1, 81) = 5.9$, $p = .02$, $\eta_p^2 = .07$. We also found that Hong Kong Chinese primed with an individualist mind-set showed more explicit prejudice when in the egalitarian views ($M = 0.39$, $SD = 0.70$) than the neutral views condition ($M = -0.19$, $SD = 1.07$), $F(1, 81) = 5.6$, $p = .02$, $\eta_p^2 = .07$. This latter finding suggests a contrasting or distancing effect as a result of having an individualist mind-set. Previous research has shown similar contrasting effect when participants were primed with motivation to distance from others (Sinclair et al., 2005a, study 4). The individualist mind-set might have cued a sense of independence consistent with a social distancing motivation in a collectivist environment.

General Discussion

Across three experiments with three instantiations of cultural variation in collectivism and individualism (i.e., nationality

and two primes), two target groups (i.e., gay/straight, White/Black), and two ways of assessing prejudice (i.e., implicit, explicit), we found consistent evidence of cultural variation in the propensity to social tune. Experiment 1 demonstrated that people from a collectivist culture (i.e., Hong Kong) expressed lower implicit and explicit prejudice toward a stigmatized group when interacting with a person believed to hold egalitarian views than people from an individualist culture (i.e., United States). Experiments 2 and 3 illustrated that situationally activated cultural orientations have corresponding effects on social tuning, thus establishing causality. Overall, the results of this research complement and expand past work on social tuning (Lun et al., 2007; Sinclair et al., 2005a, 2005b) by showing that social tuning can also be motivated by cultural context.

The findings of the present research raise new considerations and future research questions regarding the relationship between culture and prejudice. First, although the current research demonstrates that prejudice is mitigated when collectivists interact with a partner who endorses egalitarian beliefs, the pattern of results when participants were not cued regarding their partner's beliefs is consistent with the contention that collectivism generally enhances in-group bias (Triandis, 1995). Although this was not a focus of the present research, we noticed that across experiments collectivists, as compared to individualists, seemed to express more prejudice in the neutral (blank T-shirt) condition and confirmed the presence of this pattern with an exploratory meta-analysis.³ This finding is consistent with the theoretical perspectives contending that collectivists more readily differentiate between in-groups and out-groups and therefore tend to express more prejudice under neutral conditions (Erez & Earley, 1993; Triandis et al., 1988). Although our findings show that collectivists tend to express more prejudice in neutral situations, the current work extends this research by demonstrating that collectivists do not always express more prejudice. Rather, we found that when egalitarian views are expressed in an interaction, collectivists more readily adopted and expressed nonprejudicial attitudes. Thus, the current work makes an important and novel contribution to the literature by showing that the past findings are more nuanced than previously thought.

Second, we also noticed across experiments that individualists, at times, expressed views that contrasted from their interaction partner. An exploratory meta-analysis found a contrasting effect for individualists on explicit measures but not for implicit measures.⁴ This pattern of findings is in line, to some extent, with previous research on social tuning that has found antituning effects on explicit and implicit measures when no affiliative motivation is present (Sinclair et al., 2005a). This finding is also in line with research showing that independent self-construal can lead to greater social comparison than interdependent self-construal (Gardner et al., 2002). However, given the inconsistent effects for implicit measures, future research should examine the extent that the differences in prejudice reduction across individualism and collectivism are also attributed to the antituning tendency in individualists.

The findings of this research also highlight the importance of asking whether it is possible that social tuning could lead to increased prejudiced attitudes—if an interaction partner endorses these types of beliefs. Previous research demonstrated that social tuning can support the views of an ostensibly prejudiced interaction partner among those in individualist cultures when affiliative goals are active (Sinclair et al., 2005a). Future research should investigate the degree to which the valence of the endorsed attitude moderates tuning among collectivists to better understand when social tuning might mitigate or increase prejudice.

Future research should also examine the mechanisms by which cultural differences in social tuning occur. Recent debate regarding the nature of social coordination in collectivist cultures distinguishes between harmony-seeking and rejection avoidance accounts. According to the former, social coordination in collectivist cultures is the product of voluntarily and genuinely accommodating to the needs and wishes of others to find harmonious synchrony within the interpersonal context (Markus & Kitayama, 1991). According to the latter, collectivists accommodate because they feel like they must do so to avoid accrual of a negative reputation and interpersonal rejection (e.g., Yamagishi, Cook, & Watabe, 1998; Yamagishi & Suzuki, 2009). It would be interesting to explore which of these accounts best characterize cultural social tuning and whether they differentially implicate moderation of implicit attitudes via cognitive control or fluctuations in underlying associations (Calanchini & Sherman, 2013). In addition, there may be other processes underlying cultural variance in social tuning such as epistemic goals (Lun et al., 2007) and other cultural values and beliefs such as uncertainty avoidance (Hofstede, 2001). Future research on these questions will help us better understand why and how people adopt egalitarian attitudes in different cultural contexts.

Finally, by pioneering in combining the theoretical perspectives of culture and social tuning, the current research opens up new avenues of research with implications beyond prejudice reduction. For instance, future research may examine whether cultural differences in social tuning also apply to other domains such as mood (e.g., Huntsinger, Lun, Sinclair, & Clore, 2009), self-concepts (Sinclair et al., 2005a), and the psychological experience of shared reality (Shteynberg, 2010).

In sum, this research illustrates the importance of integrating research on culture and intergroup relations to increase our understanding of prejudice across cultures and to develop culturally relevant interventions that limit the effects of prejudice across the globe. It also highlights numerous ways in which research on culture can be fruitfully combined with that on social cognition to explain the promulgation and mitigation of a variety of important attitudes and experiences.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Pretesting in both the United States and Hong Kong showed that people interpreted the shirt as expressing egalitarian views. The shirt was obtained from Hong Kong Unison a nongovernmental organization that promotes equality.
2. We attempted to measure attitudes toward Arabs. Unfortunately, participants expressed confusion regarding the Arabic names in the Arabic/Chinese Implicit Associations Test, thereby invalidating the task. These results are omitted from the article but are available from the first author.
3. Meta-analysis of findings from the neutral conditions of Studies 1–3: $F_{implicit}(1, 287) = 4.2$, $p_{implicit} = .04$, $\eta_p^2_{implicit} = .01$ and $F_{explicit}(1, 288) = 5.4$, $p_{explicit} = .02$, $\eta_p^2_{explicit} = .02$.
4. Meta-analysis of findings from the individualistic conditions of Studies 1–3: $F_{implicit}(1, 287) = .99$, $p_{implicit} = .32$, $\eta_p^2_{implicit} = .003$ and $F_{explicit}(1, 288) = 4.04$, $p_{explicit} = .05$, $\eta_p^2_{explicit} = .01$.

References

- Aronowitz, A. A. (2009). *Human trafficking, human misery: The global trade in human beings*. Westport, CT: Praeger.
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin*, *119*, 111–137.
- Brewer, M. B., & Chen, Y.-R. (2007). Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological Review*, *114*, 133–151.
- Brewer, M. B., & Yuki, M. (2007). Culture and social identity. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 307–322). New York, NY: Guilford.
- Calanchini, J., & Sherman, J. W. (2013). Implicit attitudes reflect associative, non-associative, and non-attitudinal processes. *Social and Personality Psychology Compass*, *7*, 654–667.
- Ditlmann, R., Purdie-Vaughns, V., & Eibach, R. (2011). Heritage and ideology-based national identities and their implications for immigrant citizen relations in the United States and in Germany. *International Journal of Intercultural Relations*, *35*, 395–405.
- Durante, F., Fiske, S. T., Kervyn, N., Cuddy, A. J. C., Akande, A. D., Adetoun, B., . . . Storari, C. C. (2013). Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap. *British Journal of Social Psychology*, *52*, 726–746.
- Erez, M., & Earley, P. C. (1993). *Culture, self-identity, and work*. New York, NY: Oxford University Press.
- Fiske, S. T., & Cuddy, A. J. C. (2006). Stereotype content across cultures as a function of group status. In S. Guimond (Ed.), *Social comparison and social psychology: Understanding cognition, intergroup relations and culture* (pp. 249–263). Cambridge, England: Cambridge University Press.
- Gardner, W. L., Gabriel, S., & Hochschild, L. (2002). When you and I are “we”, you are not threatening: The role of self-expansion in social comparison. *Journal of Personality and Social Psychology*, *82*, 239–251.

- Glick, P., Fiske, S. T., Masser, B., Manganelli, A. M., Huang, L.-L., Castro, Y. R., . . . Wells, R. (2004). Bad but bold: Ambivalent attitudes towards men predict gender inequality in 16 nations. *Journal of Personality and Social Psychology, 86*, 713–728.
- Glick, P., Fiske, S., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., . . . Lopez, W. L. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. *Journal of Personality and Social Psychology, 79*, 763–775.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*, 1464–1480.
- 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.
- Guimond, S., De Oliveira, P., Kteily, N., Lalonde, R., Pratto, F., Sidanius, J., . . . Zick, A. (2013). Diversity policy, social dominance, and intergroup relations: Predicting prejudice in changing social and political contexts. *Journal of Personality and Social Psychology, 104*, 941–958.
- Herek, G. M. (1998). *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals*. Thousand Oaks, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences* (2nd ed.). Thousand Oaks, CA: Sage.
- Hong, Y., Morris, M. W., Chiu, C., & Benet-Martínez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709–720.
- Huntsinger, J., Lun, J., Sinclair, S., & Clore, G. (2009). Contagion without contact: Anticipatory mood matching in response to affiliative motivation. *Personality and Social Psychology Bulletin, 35*, 909–922.
- Huntsinger, J. R., & Sinclair, S. (2014). Affiliative social tuning reduces the activation of prejudice. Manuscript submitted for publication.
- Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 231–262). Hillsdale, NJ: Lawrence Erlbaum.
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology, 55*, 893–905.
- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology, 77*, 785–800.
- Lun, J., Sinclair, S., Whitchurch, E. R., & Glenn, C. (2007). (Why) do I think what you think? Epistemic social tuning and implicit prejudice. *Journal of Personality and Social Psychology, 93*, 957–972.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.
- Mayer, J. (2011, February 14). Gay rights in Costa Rica: Pura vida? *The Costa Rica News*. Retrieved: <http://thecostaricanews.com/gay-rights-in-costa-rica/5650>
- Morling, B. (2000). “Taking” an aerobics class in the U.S. versus “entering” an aerobics class in Japan: Primary and secondary control in a fitness context. *Asian Journal of Social Psychology, 3*, 73–85.
- Morling, B., & Fiske, S. T. (1999). Defining and measuring harmony control. *Journal of Research in Personality, 33*, 379–414.
- Morling, B., Kitayama, S., & Miyamoto, Y. (2002). Cultural practices emphasize influence in the United States and adjustment in Japan. *Personality and Social Psychology Bulletin, 28*, 311–323.
- Neuberg, S. L., Warner, C. M., Mistler, S. A., Berlin, A., Hill, E. D., Johnson, J. D., . . . Schober, J. (2014). Religion and intergroup conflict: Findings from the global group relations project. *Psychological Science, 25*, 198–206.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the Implicit Association Test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin, 31*, 166–180.
- Oh, S. H. (2013). Do collectivists conform more than individualists? Cross-cultural differences in compliance and internalization. *Social Behavior and Personality, 41*, 981–994.
- Oishi, S., & Diener, E. (2001). Goals, culture, and subjective well-being. *Personality and Social Psychology Bulletin, 27*, 1674–1682.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3–72.
- Oyserman, D., & Lee, S. W. S. (2008). Does culture influence what and how we think? Effects of priming individualism and collectivism. *Psychological Bulletin, 134*, 311–342.
- Pratto, F., Cidam, A., Stewart, A. L., Zeineddine, F. B., Aranda, M., Aiello, A., . . . Henkel, K. E. (2012). Social dominance in context and in individuals: Contextual moderation of robust effects of social dominance orientation in 15 languages and 20 countries. *Social Psychological and Personality Science, 4*, 587–599.
- Savani, K., Morris, M. W., Naidu, N. V. R., Kumar, S., & Berlia, N. V. (2011). Cultural conditioning: understanding interpersonal accommodation in India and the United States in terms of the modal characteristics of interpersonal influence situations. *Journal of Personality and Social Psychology, 100*, 84.
- Schlenker, B. R. (2003). Self-presentation. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 492–518). New York, NY: Guilford Press.
- Shteynberg, G. (2010). A silent emergence of culture: The social tuning effect. *Journal of Personality and Social Psychology, 99*, 683–689.
- Sinclair, S., Huntsinger, J., Skorinko, J., & Hardin, C. D. (2005a). Social tuning of the self: Consequences for the self-evaluations of stereotype targets. *Journal of Personality and Social Psychology, 89*, 160–175.
- Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005b). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology, 89*, 583–592.
- Span, S. A., & Vidal, L. A. (2003). Cross-cultural differences in female university students' attitudes toward homosexuals: A preliminary study. *Psychological Reports, 92*, 565–572.

- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology, 60*, 649–655.
- Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Luca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationship. *Journal of Personality and Social Psychology, 54*, 323–338.
- Triandis, H. C., & Gelfand, M. J. (2012). A theory of individualism and collectivism. In V. Van Lange, A. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories in social psychology*. New York, NY: Sage.
- Van de Vliert, E. (2011). Climato-economic origins of variation in ingroup favoritism. *Journal of Cross-Cultural Psychology, 42*, 494–515.
- Wong, R. Y., & Hong, Y. (2005). Dynamic influences of culture on cooperation in the prisoner's dilemma. *Psychological Science, 16*, 429–434.
- Yamagishi, T., Cook, K. S., & Watabe, M. (1998). Uncertainty, trust and commitment formation in the United States and Japan. *American Journal of Sociology, 104*, 165–194.
- Yamagishi, T., & Suzuki, N. (2009). An institutional approach to culture. In M. Schaller, A. Norenzayan, S. Heine, T. Yamagishi, & T. Kameda (Eds.), *Evolution, culture, and the human mind* (pp. 185–203). New York, NY: Psychology Press.
- Zanna, M. P., & Pack, S. J. (1975). On the self-fulfilling nature of apparent sex differences in behavior. *Journal of Experimental Social Psychology, 11*, 583–591.

Author Biographies

Jeanine L. M. Skorinko is an associate professor of psychology at Worcester Polytechnic Institute, Worcester, MA, USA.

Janetta Lun recently completed a postdoctoral fellowship at the University of Maryland.

Stacey Sinclair is an associate professor of psychology and African American studies at Princeton University.

Satia A. Marotta completed her BS at Worcester Polytechnic Institute and is now a social psychology PhD candidate at Tufts University.

Jimmy Calanchini is a social psychology PhD candidate at the University of California Davis.

Melissa H. Paris completed her BS at Worcester Polytechnic Institute and is currently an organizational psychology MSc candidate at the City University London.