

**When Norms Loom Larger Than the Self: Susceptibility of Preference-Choice  
Consistency to Normative Influence Across Cultures**

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**Citation:**

Savani, K., Wadhwa, M., Uchida, Y., Ding, Y., & Naidu, N. V. R. (2015). When norms loom larger than the self: Susceptibility of preference-choice consistency to normative influence across cultures. *Organizational Behavior and Human Decision Processes*, 129, 70-79.

**Abstract**

The present research investigated a novel account of how normative influence varies across culture—whether there exist cultural differences in the motivation to adhere to social norms even when similar norms are prevalent across cultures. Experiment 1 established that both Americans and Indians perceived that most others would disapprove of individuals who made choices primarily based on their own preferences compared to individuals who also took other factors into consideration. Experiments 2 and 3 found that when either general normative concerns or specific norms were highlighted, Indians' preference-choice consistency shifted whereas Americans' did not. Experiment 4 demonstrated that motivating people to act counter-normatively (rather than normatively) increased Indians' preference-choice consistency but had no influence on Americans'. The findings indicate that even when the norm content does not differ across cultures, people from a more interdependent culture are more susceptible to normative influence than people from a more independent culture.

Keywords: preference; choice; consistency; norms; culture

## **When Norms Loom Larger Than the Self: Susceptibility of Preference-Choice Consistency to Normative Influence Across Cultures**

People make choices on a daily basis. Some choices are trivial, such as choosing a pair of shoes, whereas others could have significant lifelong consequences, such as choosing a career. Not surprisingly, preferences are an important driver of people's choices. Yet often times, people choose options that they do not necessarily prefer the most (Savani, Markus, & Conner, 2008). Why might this be the case? We attempt to address this conundrum in the current research. The key question that we ask is—can socio-cultural concerns, such as social norms, loom larger than one's own preferences, leading people to make choices that are inconsistent with their own preferences? More specifically, we investigate whether differential motivation to adhere to social norms could explain cultural differences in preference-choice inconsistency.

A popular normative account of cultural differences in behavior is that the content of norms differs across cultures—people in different cultures believe that different behaviors are normative—but people from different cultures are similarly motivated to adhere to social norms (Fischer et al., 2009; Shteynberg, Gelfand, & Kim, 2009; Zou et al., 2009). An alternative normative account of cultural differences in behaviors that we propose in this article is that even when the norm content does not differ across cultures, the motivation to adhere to norms does. We test this idea in the context of preference-choice consistency, a case in which normative influences have to be strong enough to overcome people's desire to make choices consistent with their just-stated preferences. The remainder of the paper is organized as follows. We first draw upon past research on culture and social norms to propose our hypotheses. We then present

evidence from four experiments that test the hypotheses.

### **Culture and Social Norms**

A substantial body of research has argued that the content of norms differs across cultures but cultures do not differ in people's motivation to adhere to norms. The *culture as common sense* model, for example, proposes that individuals' actions and cognitions are based on whether they believe that traditional views are culturally consensual (Zou et al., 2009). Providing evidence for this model, Zou et al. (2009, Study 1) show that individuals' likelihood of complying with requests for help is more strongly predicted by their perception of whether most of their peers were collectivistic (the perceived cultural consensus) than by their personal degree of collectivism. Similarly, individuals' judgments of blame following intentional and unintentional acts were more influenced by whether believed that collectivistic behaviors were common in their culture than by whether they personally endorsed collectivistic values (Shteynberg et al., 2009; see Fischer et al., 2009; Heine, Buchtel, & Norenzayan, 2008; Savani, Morris, & Naidu, 2012, for similar findings). This body of research implicitly assumes that while different behaviors are normative in different cultures, people from different cultures are motivated to follow perceived norms to a similar extent. We call this normative explanation for cultural differences the *different norms-same adherence motivation* account.

In contrast, the present research tests a distinct but not a mutually exclusive account, whether there are cultural differences in the extent to which people are motivated to follow salient social norms even when the norm content is similar across cultures. We call this the *same norms-different adherence motivation* account. We now

review past research that provides suggestive evidence for the second part of our account, that cultures do differ in the motivation to follow social norms.

One line of research has demonstrated that people from Asian cultures are more likely to take others' perspectives and others' views into consideration than people from Western cultures (Cohen, Hoshino-Browne, & Leung, 2007). For example, compared to European Americans', Asians' perception of their ability was more influenced by what others thought they scored on a test (Kim, Cohen, & Au, 2010). Similarly, although both Asian and European American students anticipated that their parents' perceptions of them would be less positive than their own self-perceptions, a reminder of parents negatively impacted Asian students' self-perceptions but not European Americans' (Kim, Chiu, Cho, Au, & Kwak, 2014). Therefore, the subjective self-perceptions of people from interdependent cultures are more influenced by others' views when others are salient in mind, suggesting that Asians might also be more motivated to adhere to social norms—how others expect them to act—than Americans.

Research has also found that compared to people whose independent self-concepts are salient, people whose interdependent self-concepts are activated are more likely to vary their subjective perceptions based on normative concerns. For example, when presented with a new drug that was stated to have side-effects that tended to affect people like them, those primed with interdependence viewed the drug as more risky when they thought that they would have to explain their risk judgments to others compared to when they would not have to explain their judgment to others (Torelli, 2006). In contrast, those primed with independence did not vary their risk perceptions based on whether or not they would have to explain their judgments to

others (Torelli, 2006). Therefore, the subjective perceptions of interdependent selves are more influenced by normative concerns than those of independent selves, again suggesting that Asians might also be more motivated to adhere to social norms than Americans.

In sum, past research has found that Asians' subjective perceptions are more influenced by concerns about what others would think of them than those of Americans. However, to provide evidence for the *same norms-different adherence motivation* account, research needs to first establish that there are no cultural differences in the norm content before assessing cultural differences in the motivation to adhere to the same norms. Past research on cultural differences in susceptibility to normative influence did not meet this requirement. Further, past work focused on how normative concerns influence people's subjective perceptions, not their behavior. Thus, the present research is the first to directly test the *same norms-different adherence motivation* account, and does so in the context of a behavioral outcome—preference-choice consistency.

Preference-choice consistency is a decision making phenomenon that challenged the prevailing assumption in economics and behavioral decision making that choices reveal either stable underlying preferences (Von Neumann & Morgenstern, 1944) or preferences constructed in the moment (Payne, Bettman, & Johnson, 1992). Even when preferences<sup>1</sup> and choices were measured independently in close temporal proximity, there was a substantial gap between the two—people *did not* always choose what they liked the most (Savani et al., 2008).

The phenomenon of preference-choice consistency affords a strong test of

normative influence for two reasons. First, there is consistent prior evidence of cultural differences in preference-choice consistency. For example, in one study, whereas 84% of American participants chose to take the pen that they rated as liking the most out of five similar pens, only 62% of Indians did so (Savani et al., 2008, Study 4). Thus, the context of preference-choice consistency allows us to test whether the previously established cultural difference in behavior follows from cultural differences in the motivation to adhere to social norms even in the presence of similar norm content across cultures. Second, in the preference-choice consistency paradigm, people are required to declare their preferences before their motivation to adhere to social norms is manipulated. Thus, the experimentally induced normative influence must be strong enough to overpower people's motivation to choose according to their just-stated preferences.

To test the *same norms-different adherence motivation* account, we first assess whether there exist similar norms about preference-choice consistency in the US and India—that is, whether people from both cultures expect that most others in their society would disapprove of individuals who choose primarily based on their own preferences compared to individuals who also take other factors into account. We then assess cultural differences in the motivation to adhere to these norms by testing whether Indians are more likely than Americans to alter their preference-choice consistency as the decision environment makes normative concerns salient or highlights specific norms.

### **Overview of Experiments**

We present four experiments investigating the aforementioned predictions.

Experiment 1 assessed the perceived injunctive norms about preference-choice consistency in India and the US, that is, the extent to which people believed that most others would disapprove of individuals who made preference-consistent versus preference-inconsistent choices. Experiment 2 subtly activated general normative concerns by exposing people to schematic representations of human eyes. We hypothesized that if Indians' decision making strategies are more susceptible to normative influence than Americans', then the increased salience of normative concerns would lower Indians' but not Americans' preference-choice consistency. Experiment 3 directly manipulated the norm content presented to participants, that is, whether participants were told that most people in their society approved preference-consistent choices or preference-inconsistent choices. We hypothesized that if Indians are more motivated to adhere to social norms than Americans, then Indians' preference-choice consistency would be more likely to shift in line with the stated norms than Americans'. Finally, Experiment 4 manipulated whether participants were motivated to act normatively or counter-normatively with respect to their culture. We hypothesized that if Indians' decision making is more susceptible to normative influence than Americans', then they would exhibit lower preference-choice consistency when motivated to act normatively than when motivated to act counter-normatively. In contrast, if Americans' decision making is not as susceptible to normative influence, they would exhibit similar levels of preference-choice consistency across both conditions.

### **Experiment 1**

Experiment 1 assessed perceived injunctive norms about individuals who choose primarily based on their own preferences compared to those who choose based both on

their own preferences and other factors. We exposed participants to descriptions of a target who tended to make either preference-consistent or preference-inconsistent choices, and measured whether participants perceived that most others in their society would approve or disapprove of the target. We hypothesized that given that people tend to evaluate individuals who make more socially mindful choices more favorably than those who do not (Van Doesum, Van Lange, & Van Lange, 2013), both groups would expect that most others in their culture would disapprove of individuals who choose primarily based on their own preferences compared to individuals who also take other factors into account.

## **Method**

**Participants.** Surveys seeking residents of the US and of India were posted on Amazon Mechanical Turk. Two hundred and one participants were randomly assigned to either the preference-consistent target condition or the preference-inconsistent target condition. Of these, we excluded two participants who did not provide their residency information and ten who were not residents of the targeted country. One participant did not respond to any of the dependent measures and thus got automatically dropped from the analysis. The final sample included 98 Americans (60 women, 38 men; mean age 39.93 years) and 90 Indians (36 women, 54 men; mean age 30.93 years). Given the differences in gender and age between the two samples, we controlled for gender and age in the analyses. One participant did not report her age, so we imputed the mean age in the participant's culture (rounded) to avoid dropping the participant from the analyses. The same procedure was used in subsequent studies when demographics were missing.

**Measures.** Participants were presented with a description of one of the following targets (the labels below were not shown to participants):

**Preference-consistent target:** Imagine Rita, a young professional. When making everyday choices, such as among clothes, shoes, food, music, and so on, Rita chooses things only based on what she personally likes. Whenever she has to make a choice, she thinks about what she likes and makes a decision.

**Preference-inconsistent target:** Imagine Rita, a young professional. When making everyday choices, such as among clothes, shoes, food, music, and so on, Rita chooses things based on what she personally likes as well as based on other factors, such as what is practical, how others would view her choices, etc. Whenever she has to make a choice, she thinks about what she likes but also thinks about other considerations before making a decision.

Given that perceived injunctive norms are about what people think “most others approve or disapprove” (Cialdini, Reno, & Kallgren, 1990, p. 1015), participants were asked, (1) “Would most people in your society view Rita positively or negatively?”; (2) “Would most people in your society approve or disapprove of Rita?”; and (3) “Would most people in your society form a favorable or an unfavorable view of Rita?”

Participants responded on 7-point bipolar scales.

## Results

We averaged participants' responses to the three items measuring whether most others in their society would approve the target ( $\alpha = .89$  for Americans and  $.90$  for Indians). We submitted these ratings to a 2 (Culture) X 2 (Type of target) ANCOVA with gender and age<sup>2</sup> as covariates. We found a main effect for Type of target,  $F(1, 182) = 7.32, p = .008$ , indicating that the preference-consistent target was disapproved more than the preference-inconsistent target,  $M_{\text{Consistent}} = 5.54, SE = .16, M_{\text{Inconsistent}} = 6.00, SE = .14$  (see Figure 1). The Culture X Type of target interaction was not significant,  $F(1, 182) = 0.10, p = .76$ .

<Insert Figure 1>

## **Discussion**

Experiment 1 showed that perceived injunctive norms are relevant to preference-choice consistency across both cultures: Both Indians and Americans perceived that most others in their society would disapprove of someone who chose primarily based on her own preferences more than someone who also took other factors into account. This finding suggests that in both societies, there exists a perceived injunctive norm of not basing choices exclusively on one's own preferences. The question then arises—why is Indians' preference-choice consistency lower than Americans' (Savani et al., 2008)? One solution to this conundrum might be that although similar norms exist in both societies, Indians are more motivated than Americans to adhere to these social norms. We tested this idea in the subsequent experiments.

## **Experiment 2**

While Experiment 1 set the background by elucidating that perceived norms are relevant to preference-choice consistency in the two cultures, Experiment 2 examined the primary hypothesis of the present research—whether Indians' preference-choice consistency is more susceptible to normative influence than Americans'. Specifically, in this experiment, we incidentally exposed some participants to subtle social cues during the choice task that made them feel as if they were being watched by others, thus activating general normative concerns about how others would judge their behavior. We then assessed the impact of this manipulation on Indians' and Americans' preference-choice consistency.

To activate concerns about the social norm without the strong demand effects

accompanying more direct manipulations of normative salience, we used schematic representations of human eyes (Imada & Kitayama, 2010; Kitayama, Snibbe, Markus, & Suzuki, 2004; Na & Kitayama, 2012). As Ishii, Kobayashi, and Kitayama (2010) argued, “mere exposure to faces or face-like stimuli seems sufficient to produce, albeit unconsciously, outside of any conscious recognition, an impression of ‘watching eyes’, thereby making social norms and expectations more salient” (p. 308). Consistent with this argument, previous research has found that exposure to schematic representations of faces highlights how others think of oneself (Kim et al., 2014).

We predicted that Indians’ decision making would be more susceptible to normative influence than Americans’. Given the finding of Experiment 1, which showed that people perceived that most others in their society would approve preference-inconsistent choices more than preference-consistent choices, the specific hypothesis was that exposure to schematic eyes would reduce Indians’ preference-choice consistency. In contrast, we predicted that Americans’ decision making would not be as susceptible to normative influence, and thus the specific hypothesis was that their preference-choice consistency would not be as influenced by the schematic eyes manipulation.

## **Method**

**Participants.** Participants were 53 students at Stanford University, California (29 women, 24 men; mean age 18.98 years), and 59 students at Ramaiah University, Bangalore, India (19 women, 38 men, 2 unreported; mean age 20.88 years). Participants were randomly assigned to either the neutral condition or the social cues condition. Given the differences in gender and age between the two samples, we

controlled for gender and age in the analyses.

**Preference task.** Participants were presented with color images of 64 consumer items, 150 to 240 pixels each in size, in a random order. The stimuli—eight chairs, color patches, cups, tile patterns, plants, shirts, umbrellas, and watches—were adopted from Savani et al. (2008, Study 3). For each item, participants were instructed to “rate the extent to which you like the item” on 5-point scales ranging from *not at all* to *a lot*. Note that there was no manipulation during the preference task.

**Choice task.** The eight items from each category were combined into two relatively homogenous groups of four items each, yielding a total of 16 choice trials, which were pre-decided and thus identical for all participants. These trials were presented in a random order. For each choice set, participants were instructed: “From each group, suppose that you can get one of the four items for yourself. You have to choose one item that you want most for yourself.”

After making each choice, participants were asked to indicate whether the choice they just made was easy or difficult. In the neutral condition, participants were not shown any schematic images with the difficulty question (see top panel of Figure 2), but in the social cues condition, participants were shown a picture of smiling eyes below the word “easy,” and a picture of frowning eyes below the word “difficult” (see bottom panel of Figure 2; see also Ishii et al., 2010, for a similar manipulation). Therefore, participants in the social cues condition were incidentally exposed to “eyes of the other” after every trial of the choice round, whereas those in the control condition were not. In order to manipulate the cue before the first choice trial, we presented the respective image on the instruction screen that explained participants that they would be asked to judge the

difficulty of each choice that they make.

<Insert Figure 2>

## Results

To compute the extent to which participants based their choices on their preferences, for each choice trial, we determined the item or items that the participant rated as liking the most in the preceding preference round. For each choice trial, we created a dummy variable that equaled 1 if participants chose one of their most highly rated items and 0 otherwise. We summed this dummy variable across the 16 choice trials for each participant to yield a measure of preference–choice consistency, which indicated the number of trials on which participants chose their most highly rated item.

Given that the dependent measure was a count variable that can only take positive integer values, we used a Poisson regression with robust standard errors (Cameron & Trivedi, 2009) to analyze the data, which is specifically designed for analyzing count data (Gardner, Mulvey, & Shaw, 1995). Predictor variables were culture (US = 0, India = 1) and condition (Neutral = 0, Social cues = 1), with gender and age as covariates. The Pearson goodness of fit statistic (Coxe, West, & Aiken, 2009) indicated that the model fit the data reasonably well,  $\chi^2 (df = 106) = 34.23, p = 1.00$ .

The only significant effect was a culture X condition interaction,  $B = -.13, SE = .060, z = 2.22, p = .026$ . Tests of the marginal effects found a nonsignificant effect of condition for Americans,  $\chi^2 (df = 1) = 0.94, p = .33, M_{\text{Neutral}} = 13.30 (83\%), SE = .34$  vs.  $M_{\text{SocialCues}} = 13.88 (87\%), SE = .24$ . However, Indian participants demonstrated significantly lower preference-choice consistency in the social cues condition than in the neutral condition,  $\chi^2 (df = 1) = 3.99, p = .046, M_{\text{Neutral}} = 11.93 (75\%), SE = .37$  vs.

$M_{\text{SocialCues}} = 10.83$  (68%),  $SE = .47$  (see Figure 3).

<Insert Figure 3>

Tests of marginal effects of culture within condition found a non-significant effect of culture in the neutral condition,  $\chi^2 (df = 1) = 2.69$ ,  $p = .10$ , but Indians had significantly lower preference-choice consistency than Americans in the social cues condition,  $\chi^2 (df = 1) = 14.33$ ,  $p < .001$ .

Finally, we tested whether participants' choice difficulty ratings varied by culture and condition. We computed the number of trials that each participant found to be difficult and submitted this measure to the same Poisson regression reported above. We did not find significant effects of culture, condition, or their interaction,  $ps > .55$ . Thus, the differential effect of the social cues manipulation by culture cannot be explained by differences in the difficulty of making the choices when normative concerns were highlighted.

## Discussion

Experiment 2 found that when general normative concerns were incidentally highlighted by exposing participants to subtle social cues during the choice task, Indian participants changed their decision making strategies by decreasing the extent to which they based their choices on their preferences. In contrast, Americans' decision making was unaffected by the increased normative salience—their preference-choice consistency was similarly high across the two conditions. Whereas Indians' consistency was significantly lower than Americans' in the social cues condition, Indians did not have significantly lower consistency than Americans in the neutral condition, although the difference was in the expected direction. Experiment 2 corroborates our central

thesis that Indians' decision making is more susceptible to normative influence than Americans'. Stated differently, Indians are more likely than Americans to change their decision making strategies based on the changing normative significance in the environment.

### Experiment 3

Although the findings of Experiment 2 are consistent with our hypothesis, there might be a potential alternative explanation, that the cultural difference observed was not because of differential susceptibility to normative influence but because of the different extent to which the eyes activated normative concerns across the two cultures. Although extensive previous research has found that the effect of the schematic eyes manipulation is of similar magnitude across North American and Asian cultures (Imada & Kitayama, 2010; Ishii et al., 2010; Kitayama et al., 2004; Na & Kitayama, 2012), we attempted to further rule out this account in the current study by using a more direct and explicit manipulation of social norms. Moreover, instead of activating general normative concerns, we made specific norms about preference-choice consistency salient.

In this experiment, we manipulated the norm content presented to participants, that is, whether choosing primarily based on one's preferences is normative in their society versus whether choosing based on one's preferences and other factors is normative. Our hypothesis was that if Indians are more motivated to adhere to social norms than Americans, Indians would exhibit higher preference-choice consistency in the *preference-consistent norm* condition than in the *preference-inconsistent norm* condition. However, we predicted that Americans' preference-choice consistency would be less influenced by this norm manipulation. Given that any effects of experimental

condition on preference-choice consistency could be due to a variety of reasons, we also explicitly asked participants to indicate the extent to which they were focusing on their preferences while making choices.

## **Method**

**Participants.** Surveys seeking US residents and India residents were posted on Amazon Mechanical Turk. Five hundred and fifty-eight participants were randomly assigned to either the consistent norm or the inconsistent norm condition. Of these, we excluded four participants who did not provide their residency information, 15 who were not residents of the targeted country, and 23 who completed the survey from the same IP address. We also excluded ten participants who gave an identical preference rating to all the 40 pairs of shoes, indicating insincere responding (no participant in Experiment 2, which was a lab study, gave an identical rating to all items). The final sample included 234 Americans (126 women, 108 men; mean age 38.76 years) and 272 Indians (99 women, 173 men; mean age 30.10 years). Given the differences in gender and age between the two samples, we controlled for gender and age in the analyses.

**Preference task.** Participants were presented with color images of 40 pairs of shoes, each 225 X 225 pixels in size. Only unisex shoes were included as stimuli to ensure that the stimuli were similarly relevant to both male and female participants. The order of the 40 pairs of shoes was randomized in advance, and the same order was used for all participants. Each image was first presented for three seconds, during which participants could not make a response. Thereafter, participants were asked to report how much they liked the shoes on a 7-point scale ranging from *not at all* to *extremely*.

**Manipulation.** The experimental manipulation was implemented after the

preference task. Under the guise of a “typing ability test,” participants were asked to type out a 100-word paragraph in a box. The paragraphs proclaimed that either a norm of making choices primarily based on one’s preferences or a norm of making choices while taking other factors into consideration was prevalent in the participant’s society (either India or America, matched to participants’ own culture):

**Preference-consistent norm condition:** A core Indian / American norm is to be consistent with one's own thoughts and preferences when making decisions. Indians / Americans approve of people who act consistently with their own views. A person who makes choices and decisions based on his or her own preferences is seen as a good person by others. People who say they like one thing but do another thing are viewed negatively in India / America. Indians / Americans view these people as violating an important Indian/ American ideal, which is to be consistent. Almost everyone in India/ America would say that it’s important to make choices and decisions based on one's own preferences.

**Preference-inconsistent norm condition:** A core Indian/ American norm is to NOT just focus on one's own thoughts and preferences when making decisions. Indians / Americans disapprove of people who act only based on their own views. A person who makes choices only based on their own preferences is seen as a bad person by others. People who say they will only do what they like are viewed negatively in India/ America. Indians / Americans view these people as violating an important Indian / American ideal, which is not to be self-centered. Almost everyone in India / America would say it’s important to make choices based on many factors other than one's own preferences.

**Choice task.** After manipulating the perceived norm, participants completed a choice task. The 40 pairs of shoes presented in the preference task were combined into groups of four, yielding a total of 10 choice trials, which were pre-decided and thus identical for all participants. The items were presented for 3 seconds, after which participants were asked to choose one of the four pairs of shoes for themselves.

**Process measures.** After the choice task, we presented participants with four questions assessing the extent to which they based their choices on their preferences: (1) “While making the choices, to what extent did you focus on what you personally like

and dislike?"; (2) "While making the choices, to what extent did you focus on your own preferences?"; (3) "While making the choices, to what extent did you focus on what shoes would suit you personally?"; and (4) "While making the choices, to what extent did you focus on what shoes would suit your personality?". Participants responded on 7-point scales ranging from *not at all* to *extremely*.

## Results

We used the same procedure as in Experiment 2 to compute participants' preference-choice consistency, that is, the number of trials on which participants chose their most highly rated item. We submitted this measure to a Poisson regression with robust standard errors, with culture (US = 0, India = 1) and condition (Consistent norm = 0, Inconsistent norm = 1) as independent variables and gender and age as covariates. The Pearson goodness of fit statistic indicated that the model fit the data reasonably well,  $\chi^2 (df = 500) = 225.87, p = 1.00$ . The only significant effect was a culture X condition interaction,  $B = -.093, SE = .044, z = 2.11, p = .035$ .

Tests of the marginal effects of condition by culture found a nonsignificant effect of condition for Americans,  $\chi^2 (df = 1) = 0.06, p = .81, M_{\text{Inconsistent}} = 7.51, SE = .15$  vs.  $M_{\text{Consistent}} = 7.47, SE = .16$ . However, Indian participants had significantly lower preference-choice consistency in the preference-inconsistent norm condition than in the preference-consistent norm condition,  $\chi^2 (df = 1) = 6.80, p = .009, M_{\text{Inconsistent}} = 6.47, SE = .16$  vs.  $M_{\text{Consistent}} = 7.07, SE = .16$  (see Figure 4).

Additional tests of the marginal effects of culture by condition found a significant cultural difference in the preference-inconsistent norm condition,  $\chi^2 (df = 1) = 19.12, p < .001$ , indicating that Indians had significantly lower preference-choice consistency than

Americans in this condition. Notably, in the preference-consistent norm condition, the difference between Indians and Americans was no longer significant,  $\chi^2 (df = 1) = 2.27$ ,  $p = .13$  (see Figure 4).

<Insert Figure 4>

The four items measuring the extent to which participants focused on their preferences were highly intercorrelated ( $\alpha = .84$  for Americans and  $.87$  for Indians), and thus averaged. Submitting this measure to a 2 (Culture) X 2 (Condition) ANCOVA with gender and age as covariates, we found a similar pattern of results as for the consistency measure. There was a main effect of culture,  $F(1, 500) = 22.07$ ,  $p < .001$ , a main effect of condition,  $F(1, 500) = 5.54$ ,  $p = .02$ , followed by a significant Culture X Condition interaction,  $F(1, 500) = 10.02$ ,  $p = .002$ . Tests of the marginal effects found a nonsignificant effect of condition for Americans,  $\chi^2 (df = 1) = 0.30$ ,  $p = .58$ ,  $M_{\text{Inconsistent}} = 6.37$ ,  $SE = .074$  vs.  $M_{\text{Consistent}} = 6.30$ ,  $SE = .082$ . However, Indian participants stated that they were focusing on their preferences to a significantly lower degree in the preference-inconsistent norm condition than in the preference-consistent norm condition,  $\chi^2 (df = 1) = 16.46$ ,  $p < .001$ ,  $M_{\text{Inconsistent}} = 5.66$ ,  $SE = .084$  vs.  $M_{\text{Consistent}} = 6.09$ ,  $SE = .076$ .

Next, we tested whether the reduced focus on personal preferences mediates the culture X condition interaction on preference-choice consistency in the Poisson regression reported earlier. After controlling for focus on personal preferences, the culture X condition interaction on preference-choice consistency was non-significant,  $B = -.052$ ,  $SE = .043$ ,  $z = 1.23$ ,  $p = .22$ , whereas the effect of focus on personal preferences was significant,  $B = .085$ ,  $SE = .014$ ,  $z = 6.11$ ,  $p < .001$ .

**Discussion**

Experiment 3 conceptually replicated the findings of Experiment 2 by directly manipulating the norm content presented to participants. We found that Indians exhibited greater preference-choice consistency when exposed to the idea that most others in their society approve of individuals who choose primarily based on their own preferences than when exposed to the idea that most others disapprove of individuals who choose primarily based on their own preferences. Americans' preference-choice consistency, however, was unaffected by this norm manipulation. Further, the mediation analysis showed that Indian participants in the inconsistent norm condition exhibited lower preference-choice consistency not because they were choosing randomly but because they altered the extent to which they were focusing on their preferences. Experiment 3 provides further evidence showing that Indians' decision making is more susceptible to normative influence than Americans'.

One might have expected preference-choice consistency to be the highest when the stated norm was to make choices primarily based on one's preference, and participants were motivated to follow cultural norms (i.e., were from Indian culture). However, this was not the case as Americans had directionally higher consistency than Indians across conditions. A potential explanation for this finding is that participants were not completely convinced of the injunctive norm about preference-choice consistency presented in the manipulation.

**Experiment 4**

The goal of Experiment 4 was to provide additional support for our argument that Indians' decision making is more susceptible to normative influence than Americans'.

We do so using a manipulation of normative influence that has already been demonstrated as being effective with both Indian and American samples taken from the same subject pool as used in our study. Specifically, we manipulated whether participants were led to believe that they are very different from most others in their culture or very similar to most others in their culture. Following from the *optimal distinctiveness theory* (Brewer, 1991), which argues that individuals want to be neither too similar nor too different from their group, individuals who are made to feel very different from their group are motivated to act normatively to increase their match with their culture. In contrast, individuals who are made to feel very similar to their group are motivated to act counter-normatively to increase their distance from their culture (Kreuzbauer, Chiu, Lin, & Bae, 2014, Study 2; see also Kwan, Lee, Yap, & Chiu, this issue, Study 2; Pickett, Bonner, & Coleman, 2002).

We hypothesized that if Indians are susceptible to normative influence, and if preference-inconsistent choices are normative in Indian culture, then motivating Indians to act counter-normatively would increase their preference-choice consistency compared to motivating them to act normatively. On the other hand, we hypothesized that if Americans are not as susceptible to normative influence, then inducing the motivation to behave normatively or counter-normatively would not influence their preference-choice consistency to the same extent even if preference-inconsistent choices are normative in American culture.

## **Method**

**Participants.** Surveys seeking US residents and India residents were posted on Amazon Mechanical Turk. Eight hundred and four participants were randomly assigned

to either the *motivation to act normatively* condition or the *motivation to act counter-normatively* condition. Of these, we excluded five participants who did not provide their residency information and twenty who were not residents of the targeted country. We also excluded four participants who gave an identical preference rating to all the 40 pairs of shoes, indicating insincere responding. The final sample included 396 Americans (234 women, 162 men; mean age 39.45 years) and 379 Indians (124 women, 254 men, 1 unreported; mean age 30.94 years). Given the differences in gender and age between the two samples, we controlled for gender and age in the analyses.

**Preference task.** The preference-rating task was identical to that used in Experiment 3.

**Manipulation.** The experimental manipulation was implemented after the preference task. We closely followed the manipulation used by Kreuzbauer et al. (2014, Study 2). Specifically, participants were first asked to respond to the 56-item Schwartz Values Survey (Schwartz, 1994). Thereafter, they were informed that they had just completed the “Schwartz Values Survey” that measured their values on 10 different dimensions.

Next, they were presented with a graph that showed “their value profile” compared to the “value profile of the average Indian / American,” which was supposedly calculated based on a large sample. Participants were also presented with a score indicating the degree of correspondence.

In the *motivation to act normatively* condition, the graph depicted participants’ value profile as being very different from that of the average person in their country (see

Kreuzbauer et al., 2014, p. 658), and the degree of correspondence was stated to be a low .23 on a scale from 0 to 1. Participants were told, "Your value profile is very dissimilar to the value profile of most Americans / Indians." Previous research with both Indian and American participants sampled from the same subject pool as the present experiment has found that participants given this message were subsequently motivated to act culturally normatively (Kreuzbauer et al., 2014).

In the *motivation to act counter-normatively* condition, the graph depicted participants' value profile as being very similar to that of the average person in their country (see Kreuzbauer et al., 2014, p. 657), and the degree of correspondence was stated to be a high .93. Participants were told, "Your value profile is very similar to the value profile of most Americans / Indians." Previous research has found that participants given this message were subsequently motivated to act culturally counter-normatively (Kreuzbauer et al., 2014).

**Choice task.** The subsequent choice task was identical to that used in Experiment 3.

**Manipulation check.** After the choice task, participants were presented with a manipulation check question in which they were asked to rate how similar their value profile was to the average person in their country, on a 5-point scale ranging from *very dissimilar* to *very similar*.

## Results

Analyses of the manipulation check confirmed that in both cultures, participants saw their value profile as being more similar to the value provide of the average person

from their culture in the counter-normative condition than in the normative condition,  $t_s > 10$ ,  $p_s < .0001$ , for both groups.

We used the same procedure as in Experiments 2 and 3 to compute participants' preference-choice consistency, that is, the number of trials on which participants chose their most highly rated item. We submitted this measure to a Poisson regression with robust standard errors, with culture (US = 0, India = 1) and condition (Counter-normative = 0, Normative = 1) as independent variables and gender and age as covariates. The Pearson goodness of fit statistic indicated that the model fit the data reasonably well,  $\chi^2 (df = 769) = 328.93$ ,  $p = 1.00$ . The only significant effect was a culture X condition interaction,  $B = -.074$ ,  $SE = .035$ ,  $z = 2.08$ ,  $p = .037$ .

Tests of the marginal effects of condition by culture found a nonsignificant effect of condition for Americans,  $\chi^2 (df = 1) = 1.05$ ,  $p = .31$ ,  $M_{\text{Normative}} = 7.41$ ,  $SE = .12$  vs.  $M_{\text{Counter-normative}} = 7.56$ ,  $SE = .11$ . However, Indian participants had significantly lower preference-choice consistency in the *motivation to act normatively* condition than in the *motivation to act counter-normatively* condition,  $\chi^2 (df = 1) = 11.55$ ,  $p < .001$ ,  $M_{\text{Normative}} = 6.49$ ,  $SE = .14$  vs.  $M_{\text{Counter-normative}} = 7.15$ ,  $SE = .13$  (see Figure 5).

Additional tests of the marginal effects of culture by condition found a significant cultural difference in the *motivation to act normatively* condition,  $\chi^2 (df = 1) = 18.19$ ,  $p < .001$ , indicating that Indians had significantly lower preference-choice consistency than Americans in this condition. In the *motivation to act counter-normatively* condition, the difference between Indians and Americans was marginally significant,  $\chi^2 (df = 1) = 3.20$ ,  $p = .07$  (see Figure 5).

<Insert Figure 5>

## Discussion

The findings of Experiment 4 provided further support for the central thesis that Indians' decision making is more susceptible to normative influence than Americans'. When motivated to act normatively with respect to their culture (after being told that their values are very dissimilar from those of the average person in their culture), Indians' preference-choice consistency was lower than when they were motivated to act counter-normatively with respect to their culture (after being told that their values are very similar from those of the average person in their culture). Motivating Indians to act normatively shifted their preference-choice consistency in the direction of the perceived norm elucidated by Experiment 1, which showed that Indians tend to believe that most others in their society would approve individuals who chose inconsistent with their preferences compared to individuals who choose consistent with their preferences. In contrast, motivating Americans to act normatively versus counter-normatively did not impact their preference-choice consistency despite the perceived norm elucidated by Experiment 1. Thus, we find once again that Indians are more likely to change their decision making strategies based on the changing normative significance in the environment compared to Americans.

The finding that the manipulation influenced Indians but not Americans seems somewhat inconsistent with that of Kreuzbauer et al. (2014, Study 2), who found that the same manipulation influenced both Indian and American participants recruited from the same subject pool. One explanation for this seeming inconsistency is that in our paradigm, participants indicated their preferences before the norm manipulation was implemented. Therefore, the norm manipulation had to be strong enough to overpower

participants' motivation to make choices consistent with their recently stated preferences. Perhaps the manipulation was strong enough to shift Indians' consistency motivation but not Americans' given Americans' relatively lower susceptibility to normative influence (as shown in Experiments 2 and 3).

### **General Discussion**

Four studies investigated cultural differences in susceptibility to normative influence in the domain of preference-choice consistency. Experiment 1 established that perceived injunctive norms are relevant to preference-choice consistency. Specifically, Experiment 1 showed that both Indians and Americans perceived that most others in their society would negatively evaluate individuals who choose primarily based on their own preferences compared to those who also take other factors into account. Experiment 2 found that Indians were more likely to change decision strategies in response to the changing normative significance in the environment: Indians' preference-choice consistency decreased when general normative concerns were incidentally highlighted by exposing participants to schematic representations of human eyes, whereas Americans' consistency was unaffected by this manipulation.

Experiment 3 directly manipulated specific norm content by exposing participants to the idea it is normative to make preference-consistent choices versus preference-inconsistent choices in their society. Again, Indians were more influenced by this manipulation than Americans, showing decreased preference-choice consistency when exposed to the preference-inconsistent norm than when exposed to the preference-consistent norm. Finally, Experiment 4 manipulated the direction of the normative influence. Indians exhibited lower preference-choice consistency when motivated to act

normatively than when motivated to act counter-normatively, consistent with the idea that a perceived norm of making preference-inconsistent choices exists in India, and providing further support for Indians' susceptibility to normative influence. In contrast, Americans exhibited similar levels of preference-choice consistency across both conditions, indicating that they are not as susceptible to normative influence. These findings suggest that India-US differences in preference-choice consistency (Savani et al., 2008) might occur because of differential susceptibility to normative influence.

### **Implications**

Past research on normative accounts of cultural differences has often assumed that while different behaviors are normative in different cultures, people's motivation to adhere to social norms is similar across cultures (Shtyenberg et al., 2009; Zou et al., 2009). The present research provides support for another normative account of cultural differences, that even when similar norms are present in different cultures, people from more interdependent cultures are more motivated to adhere to social norms than people from more independent cultures. Our *similar norms – different adherence motivation* account complements the *different norms – similar adherence motivation* account of past research by indicating that both the content of norms and the motivation to adhere to norms can differ across cultures depending on the context. Instead of focusing on either norm content or norm adherence motivation, the present findings suggest that researchers need to explicitly consider both when conducting research at the intersection of social norms and cultural dynamics.

### **Limitations and Future Directions**

The current research focused on one particular type of norms, injunctive social

norms, which refer to “what most others approve or disapprove” (Cialdini et al., 1990, 1015). For example, Experiment 1 measured people’s perceived injunctive norms about preference-choice consistency, and Experiment 3 manipulated the injunctive norms presented to participants as being prevalent in their society. We focused on injunctive norms in the present research given previous findings that injunctive norms are more likely than descriptive norms to activate public self-awareness, such as concerns about group memberships, social roles, and interpersonal relationships (Jacobson, Mortensen, & Cialdini, 2011), thus making people overall more susceptible to normative influence. Future research might test this prediction directly by comparing how parallel manipulations of either injunctive or descriptive norms influence people across cultures.

The present studies tested cultural differences in susceptibility to normative influence yet did not investigate the specific normative factors that influenced individuals’ decisions. For example, in Experiment 2, although Indians were less likely to base choices on their preferences after exposure to schematic representations of human eyes, it is not clear whether they were basing choices on their perceptions of societal preferences (i.e., what they believe most people in their society would like) or on other factors. Future research can complement the experimental methodology used in the current research while also measuring perceived societal preferences, as has been done in past research (e.g., Fischer et al., 2009; Shteynberg et al., 2009; Zou et al., 2009). Such a methodology would allow researchers to test whether the relationship between perceived societal preferences and behavior is stronger in certain cultures than in others under different conditions of normative salience.

It might appear that our findings are inconsistent with previous research showing

that Americans' behaviors are greatly influenced by social norms, including previous manipulations that either directly approved or disapproved participants' behaviors (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007) or indicated behaviors that other people approved or disapproved (Cialdini et al., 1990; Cialdini et al., 2006), as in the manipulation employed in Experiment 3. This inconsistency is likely a consequence of our experimental design in which participants stated their personal preferences before normative influence was manipulated, which minimized the chances of observing any effects of the manipulation. In this special case, Indians' preference-choice consistency was influenced by social norms but Americans' was not, but in other cases, both groups are likely to be influenced by social norms albeit to different extents. We do not mean to claim that Americans are uninfluenced by social norms but merely that they are less motivated to adhere to social norms compared to people from more interdependent cultures.

The findings of Experiment 1, which showed that both Indians and Americans perceive that an injunctive norm of not basing choices primarily on one's preferences is prevalent in their respective societies, need to be reconciled with that of Experiment 4, which showed that motivating participants to act normatively versus counter-normatively with respect to their culture influenced only Indians' preference-choice consistency, not Americans'. Experiment 4's finding is somewhat surprising given previous research that the same manipulation influenced both Indians' and Americans' relationship between relational identity signaling and life satisfaction (Kreuzbauer et al., 2014). However, Kreuzbauer et al. (2014) showed that this manipulation had opposite effects on the relationship between relational identity signaling and life satisfaction across cultures but

did not compare the effect size or normative influence across cultures. While the overall effect size of the norm manipulation on the dependent measure seems to have been stronger with Kreuzbauer et al.'s (2014) dependent measure than with ours, we show that the relative effect of the manipulation is stronger among Indians than among Americans.

In the present experiments, we first measured people's preferences, manipulated normative influence, and then assessed the extent to which people based their choices on their previously stated preferences. However, research shows that preferences themselves are influenced by normative concerns. Kwan et al. (this issue, Studies 2 and 3) found that motivating participants' motivation to act normatively (rather than counter-normatively) with respect to their culture led them to adjust their preferences to match what they believed most others in their society would be familiar with. The implication of Kwan et al.'s (this issue) findings for ours is that the specific reason why Indians exhibited lower preference-choice consistency when motivated to act normatively could be that they shifted their preferences to match what they thought most others in their culture would be familiar with. Future research can test this possibility by assessing whether the correlation between personal preferences and perceptions of societal familiarity of the options increases following the normative manipulation. The implication of our findings for theirs is that Asians are more influenced by the induced motivation to act normatively or counter-normatively with respect to their culture compared to Americans, so the effects observed by Kwan et al. (this issue) with participants from Singapore might be weaker in Western cultures. Future research can test this possibility by assessing how normative influences alter the alignment between personal

preferences and perceptions of societal familiarity across cultures.

While documenting cultural differences in susceptibility to normative influence and in the motivation to adhere to social norms, the present research did not specifically examine the source of this cultural difference. We suggest that Westerners might be less influenced by normative concerns because their selves are not defined by how others view them (Markus & Kitayama, 1991), so they act consistent with social norms only to the extent that they have either internalized the norm (so it does not threaten their independence) or to the extent that they would risk strong censure for violating the norm (so they have a strong justification for acting against their personal inclinations). In contrast, Asians might be more influenced by normative concerns because how others perceive them plays a central role in how they perceive themselves (Cohen et al., 2007), and thus even weak cues about social norms influence their judgments and behaviors. Future research can test these mechanisms for cultural differences in susceptibility to normative influence.

## **Conclusion**

Extensive research has shown that people's behaviors—whether they litter, whether they steal petrified wood, whether they waste electricity—is influenced by social norms. The present research shows that a more subtle outcome, the extent to which behavior reflects the person's subjective and private attitudes, is also influenced by social norms. The present findings highlight that normative influence goes much deeper than currently conceptualized, and more so in cultural contexts that emphasize the inherent interdependence between the individual and society.

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### **Acknowledgements**

This research was supported by grant R-317-000-105-133 awarded by the National University of Singapore to Krishna Savani. We thank Anyi Ma and David D. W. Wang for helpful feedback on earlier drafts, and Amie Blocker, Elizabeth Goodman, and Ramya Ramesh for their invaluable assistance with data collection.

**Footnotes**

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<sup>1</sup> We use the term *preferences* interchangeably with *evaluations*, following Zajonc's (1980) definition of *preference* as a person's subjective evaluation of a stimulus on the dimension of valence.

### Figure Captions

*Figure 1.* Mean perceived evaluation of target by most others in society, by culture and condition (Experiment 1). Error bars represent the standard error of the mean.

*Figure 2.* Images shown in the difficulty rating trials across the two conditions (Experiment 2).

*Figure 3.* Percentage of trials on which participants chose their most highly rated item, by culture and condition (Experiment 2). Error bars represent the standard error of the mean.

*Figure 4.* Percentage of trials on which participants chose their most highly rated item, by culture and condition (Experiment 3). Error bars represent the standard error of the mean.

*Figure 5.* Percentage of trials on which participants chose their most highly rated item, by culture and condition (Experiment 4). Error bars represent the standard error of the mean.

Figure 1.

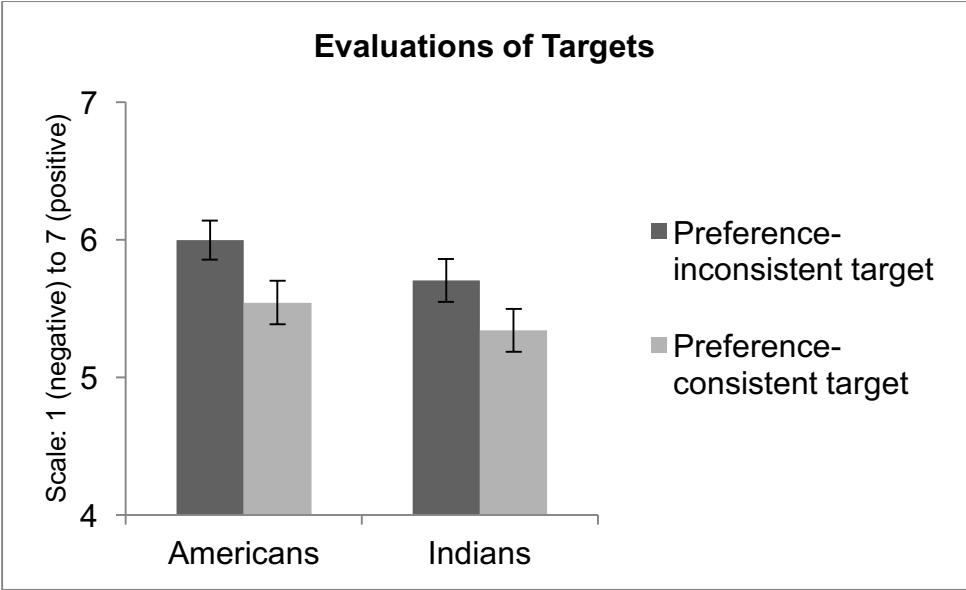


Figure 2.

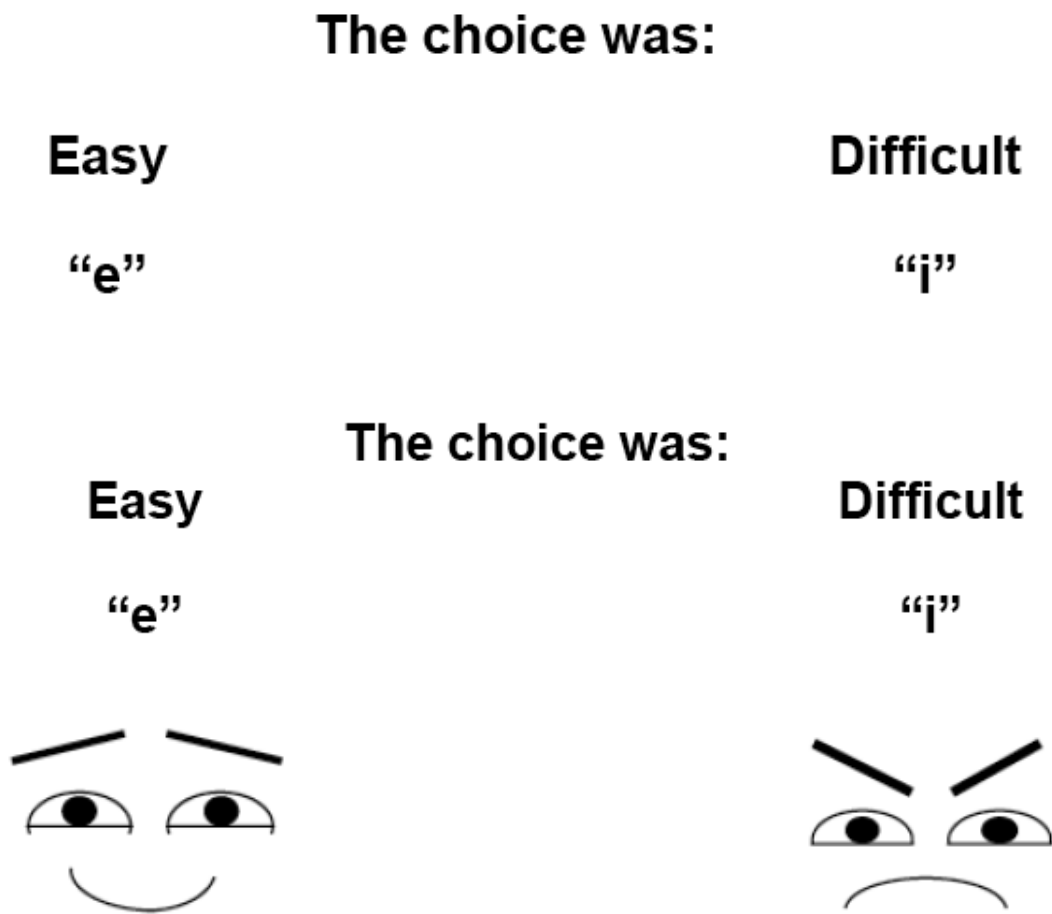


Figure 3.

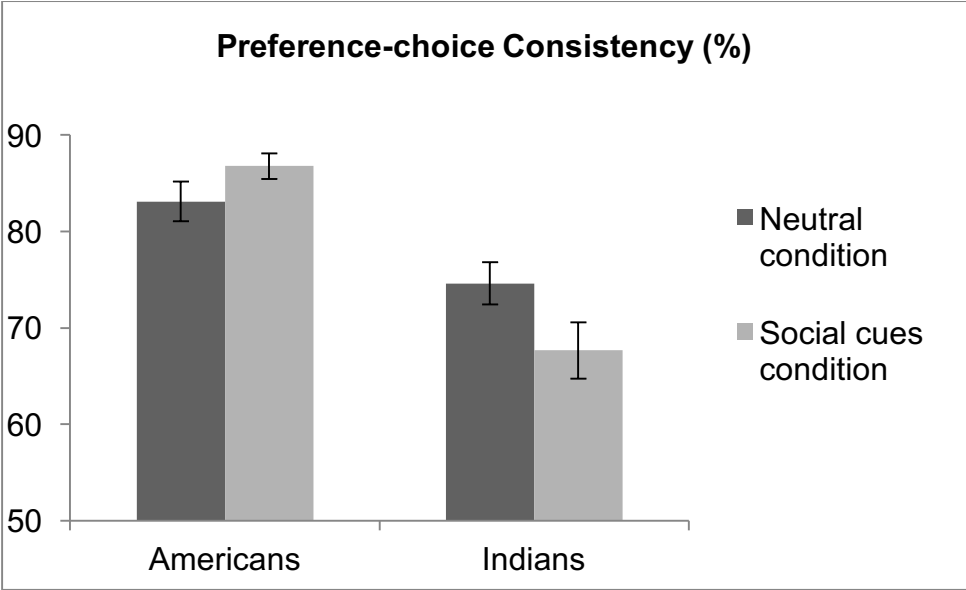


Figure 4.

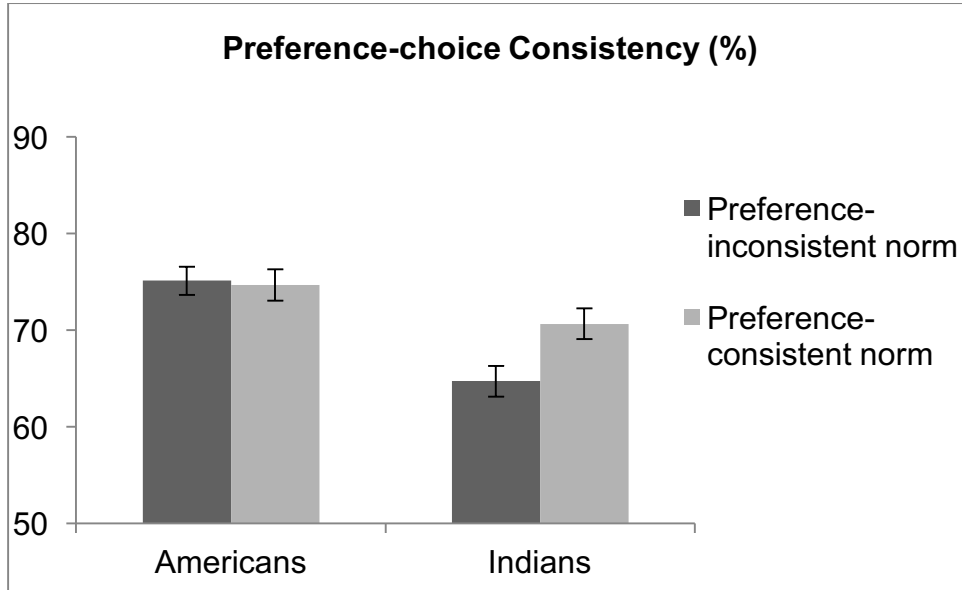


Figure 5.

