

Property and prejudice: How racial attitudes and social-evaluative concerns shape property appraisals

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## Abstract

Property evaluations rarely occur in the absence of social context. However, no research has investigated how intergroup processes related to prejudice extend to concepts of property. In the present research, we propose that factors such as group status, prejudice, and pressure to mask prejudiced attitudes affect how people value the property of racial ingroup and outgroup members. In Study 1, White American and Asian American participants were asked to appraise a hand-painted mug that was ostensibly created by either a White or an Asian person. Asian participants demonstrated an ingroup bias. White participants showed an outgroup bias, but this effect was qualified. Specifically, among White participants, higher racism towards Asian Americans predicted higher valuations of mugs created by Asian people. Study 2 revealed that White Americans' prejudice towards Asian Americans predicted higher valuations of the mug created by an Asian person *only* when participants were highly concerned about conveying a non-prejudiced personal image. Our results suggest that, ironically, prejudiced majority group members evaluate the property of minority group members whom they dislike more favourably. The current findings provide a foundation for melding intergroup relations research with research on property and ownership.

*Keywords:* Prejudice; Ingroup bias; Ownership; Social evaluation

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The influence of social context on concepts of ownership has historically enjoyed a large amount of philosophical and psychological attention (e.g., Hohfeld, 1913; James, 1890; Locke, 1690; Sartre, 1943), yet only recently has it become a focal point of experimental research. Much of this research has focussed on comparing how people value objects *they* own compared to objects others own. A classic example of this is the endowment effect (Thaler, 1980), whereby simply owning an item will increase the valuation someone places on it. For an item they own, participants will typically demand a higher price than they would be willing to pay if they were buying the same item (Kahneman, Knetsch & Thaler, 1990). Thus, people show biases towards objects that they possess. What is not known, however, is whether valuation biases also emerge when people appraise items owned by an ingroup or outgroup member, nor if such biases exist, why they emerge.

Research investigating how owner characteristics influence perceptions of property is in its infancy. However, evidence is emerging that suggests information about the owner of an object may affect how the object is appraised and treated (Constable, Kritikos, & Bayliss, 2011; Ledgerwood, Liviatan, & Carnevale, 2007; Maddux et al., 2010). It has been proposed that objects are perceived as an extension of the self (Newman, Bartels, & Smith, 2014), and thus it is possible that the influence of intergroup processes on evaluations of ingroup and outgroup members extends to evaluations of their respective property. Here, we test whether the ethnicity of an object's owner influences how it is appraised, and examine when group-biased property appraisals arise. Specifically, we propose that racial attitudes and norms related to prejudice shape how people value items owned by racial ingroup and outgroup members.

### **Property and ingroup bias**

The mere perception of belonging to a distinct social group promotes ingroup favouritism in a range of settings (see Tajfel & Turner, 1979). Such ingroup biases require no conflict or difference of opinion between groups in order to emerge, and thus ingroup bias effects are robust across a range of different social categories, including ethnicity. Although contemporary attitudes towards racism have reduced the extent of overt racial ingroup preference and outgroup discrimination, ingroup biases are still evident in more subtle forms. For example, studies suggest that people show preferences for same-race people over other-race people when officiating sporting matches (Price & Wolfers, 2007) and when making legal judgments (Rachlinski, Johnson, Wistrich, & Guthrie, 2008).

Few experiments have investigated how group processes and biases extend to concepts of property. However, there is evidence that ingroup bias is enhanced when an object is closely tied to one's group identity (Ledgerwood, Liviatan, & Carnevale, 2007). In their study, Ledgerwood and colleagues found that buildings highly symbolic of a group's identity were valued more highly, and that people who were more committed to group identity goals placed greater value on buildings that had ingroup significance. Similarly, women have been shown to value items more highly when the item is a gift from a close friend rather than a stranger (Jefferson & Taplin, 2011), and valuation biases for ingroup objects are enhanced when one's social identity is threatened (Dommer & Swaminathan, 2013). Thus, ingroup bias related to objects is more likely to occur when the object is connected to ingroup-identities.

Extending on the work presented above, in the present studies we use an object (hand-painted mug) that is not tied to group-identity goals. In doing so, we aim to determine the impact of group processes on objects that are owned by, but are not symbolic of, either the ingroup or outgroup. Given the clear ingroup bias demonstrated in several previous studies, one hypothesis would be that people will value ingroup owned objects more highly than

outgroup owned objects, even if they do not symbolise or embody the ingroup identity. Further to this, the extent to which people report prejudice towards outgroups is reliably associated with ingroup bias. For example, more prejudiced people also report more outgroup avoidance (see Barlow, Louis & Hewstone, 2009). Thus, should a pattern of favouritism for ingroup owned objects be evident, it is possible that highly prejudiced people might be the most likely to devalue outgroup owned objects.

### **Prejudice and overcompensation**

Above we suggested that people might show ingroup bias when evaluating property owned by in- and out-groups. An alternative hypothesis is that people will show a valuation bias in *favour* of outgroup objects in an attempt to hide prejudiced attitudes. Although campaigns to eliminate racial discrimination have led to changes in societal norms surrounding prejudiced attitudes and behaviours, these shifts have not incontrovertibly changed people's implicit racial attitudes. Thus, people continue to harbor stereotypical or prejudiced attitudes as societal expectations change, but these negative attitudes may be suppressed in order to maintain unprejudiced personal images (Carver, Glass, & Katz, 1978; Muraven, 2008; Richeson & Shelton, 2003). This drive to restrain prejudiced attitudes has been found to produce overcompensation among majority group members, whereby people who hold stronger racial biases are those most likely to go out of their way to *not* appear prejudiced (Shelton, Richeson, Salvatore, & Trawalter, 2005; Vorauer & Turpie, 2004). Indeed, it has been found that White participants particularly concerned about appearing prejudiced overcompensate for racial biases and expend greater self-regulatory effort in order to appear tolerant during an interaction with a Black confederate (Richeson & Shelton, 2003). Similarly, majority group members who are high in prejudice act more positively towards minority group members compared to less racially biased majority group members (Shelton et al., 2005).

Overcompensatory positivity among high bias individuals may be due to social evaluative concerns (Carver et al., 1978). In one study, Carver and colleagues found that participants rated an interviewee more favourably when he was identified as 'Black' compared to when the race of the interviewee was not specified. However, the Black interviewee was rated less favourably compared to a candidate of unknown race when participants were ostensibly informed that the experimenter would have access to physiological data that would reveal their actual feelings towards the interviewee. Therefore, only when participants thought that they would be unable to hide their beliefs did they evaluate the Black candidate negatively. Taken together, past research on interracial contact suggests that majority group members feel social pressure to act favourably towards minority groups, and that people high in prejudice attempt to compensate for their negative attitudes with enhanced positivity towards minority group members.

Minority group members, on the other hand, are not under the same pressure to appear non-prejudiced. Instead, minority group members are typically the targets (rather than perpetrators) of prejudice. Accordingly, majority group members express concerns over appearing prejudiced to minority group members, while minority group members tend to be more concerned with threats and devaluation by the majority group (Plant & Devine, 2003; Plant, 2004). Thus, overcompensatory positivity towards racial outgroup members is more likely to occur among majority rather than minority group members.

### **The present studies**

How overcompensatory or in-group favouring biases might relate to property is an open question. Although property and ownership are considered to be universals insofar as property rights can be found across cultures and species (Brown, 1991), it is critical to understand ownership from an intergroup perspective given that the rules and regulations surrounding property can vary dramatically. Indeed, increasing flexibility in foreign

ownership laws has led to greater worldwide foreign investment in land and corporations. Likewise, the immigrant share of small business ownership in America has increased from 12% to 18% over the past two decades (Fiscal Policy Institute, 2012). Thus, examining how intergroup processes influence concepts of property has implications for a diverse range of disciplines, including intergroup relations, commercial investment, property law, and financial market forecasting.

In the present research, we investigate the effect of racial group membership and racial outgroup prejudice on property appraisals among Asian and White Americans. As detailed above, past research has produced conflicting findings in relation to how racial attitudes manifest in behaviour towards ingroup and outgroup members. In some cases, people demonstrate biases towards ingroups (Price & Wolfers, 2007; Rachlinski et al., 2008; Tajfel & Turner, 1979); in others, people tend to overcompensate for their prejudiced attitudes and evaluate outgroups more positively (Richeson & Shelton, 2003; Shelton et al., 2005; Vorauer & Turpie, 2004). ). Consequently, we are left with two competing hypotheses. The first possible outcome is a traditional ingroup bias effect, whereby we would predict that people will rate objects owned by racial ingroup members as more valuable. In addition, if ingroup bias processes are present, we would expect stronger ingroup favouritism as prejudice against outgroup members increases. The second possibility is that people will show an outgroup valuation bias in order to appear racially tolerant. If this is the case, we would expect outgroup favouritism to be stronger in the majority group because majority group members are under more pressure to appear racially tolerant. Further, valuations of outgroup property should become higher as outgroup prejudice increases because it is more important for highly prejudiced majority group members to mask their underlying attitudes and avoid social consequences such as being labelled as “racist”.

### **Study 1**

In Study 1, we examined how people evaluate property owned by racial minority (Asian American) and majority (White American) group members. We presented White and Asian participants with a photograph of an item that had no clear market value (a hand-painted mug that was of average quality), and was ostensibly entered into what participants believed was a real online art contest by either a White or Asian artist. Consistent with previous research on ownership, we used a hand-painted mug to display clear ownership and personal investment in the object. Note also that past research has shown that it is assumed that the creator of an object is also its owner (Kanngiesser, Gjersoe & Hood, 2010; Kanngiesser & Hood, 2014). While an online setting may not precisely simulate the social influences experienced in participants' daily lives because of increased perceptions of anonymity, previous research has shown that anonymity has little influence on responses to measures of personality, psychopathology, and attitudes (Richman, Kiesler, Weisband, & Drasgow, 1999). Moreover, online responses have been found to be comparable to data obtained from other data collection methods (Buhrmester, Kwang, & Gosling, 2011). The aim of Study 1 was to determine whether valuations of racial ingroup and outgroup property are subject to ingroup favouritism or overcompensation biases, and further, if prejudice might be associated with any observed patterns.

## **Method**

### **Participants.**

Sample size was estimated based on recommendations laid out by Green (2010) for regression analyses predicting small effect sizes. We recruited 300 White Americans through the SocialSci.com website participant pool. Only participants who identified as Caucasian on their personal profiles were sent a survey link. Twenty-six participants who completed the survey indicated they were not Caucasian in the demographics section of the survey, resulting in a final sample size of 274 (140 females, 134 males). Participants were aged between 18



and 74 years ( $M=28.35$ ,  $SD=9.77$ ), and were reimbursed with points that could be exchanged for gift vouchers through the website.

Asian Americans were recruited through the Mechanical Turk website. Our survey link advertised specifically for Asian American participants. We also included an ethnicity item at the end of the survey that reassured participants they would be fully reimbursed for their participation if they did not identify as Asian American. Of the 314 respondents, 22 indicated that they did not identify as Asian American resulting in a final sample size of 292 (145 females, 145 males, 2 other). Ages ranged from 18 to 68 years ( $M=27.02$ ,  $SD=8.13$ ). Participants were reimbursed with \$US0.50 for their time.

There were no significant differences in age ( $t(561) = -1.76$ ,  $p = .078$ ,  $d = .15$ ) or socioeconomic status, as measured by income ( $t(561) = -.54$ ,  $p = .591$ ,  $d = .04$ ), between the two samples. Both websites also report similar standards of education: Forty per cent of socialsci participants from the U.S.A hold a bachelor's degree (SocialSci, 2015), which is comparable to Mechanical Turk's figure of 42% (Ross, Zaldivar, Irani, & Tomlinson, 2009). These data suggest that the two websites recruit comparable cross-sections of the population.

### **Design and procedure.**

Participants completed the study online. The study employed a 2 (participant ethnicity: Asian American, White American) x 2 (artist ethnicity: Asian, White) x 2 (artist gender: male, female) between-subjects design.

After agreeing to the terms of the study, participants were informed that they would be helping to judge an "everyday art competition", which involved art submissions from American college students. Participants were informed that the rules of the competition stipulated that submissions should be based on an object that people use every day. They were also informed that they would be presented with one piece of art at random to judge, and that they would complete a short survey at the end of the judging. The art piece was a

hand-painted mug that received moderate pre-ratings on measures of likability ( $M=5.15$  on a 9-point scale,  $N=22$ ). A picture of the piece was presented with a blurb about the submission and basic information about the artist, including age, gender, college enrolment status, and entrant ID (see Figure 1). To emphasise personal ownership, we also included the word “owner” in front of the artist’s name. The image and information were held constant for each condition with the exception of the artist’s name which was manipulated to be either a common Asian name or a common Caucasian name. In order to control for gender effects we also varied the gender of the artist, which resulted in participants being randomly allocated to one of four artist conditions: Asian female (Huifang Chan), Asian male (Kuan Hsu), White female (Sarah McDonald), or White male (Adam Chapman).

After reading the cover story and viewing the submission, participants were asked to provide judgments about the mug, followed by the blatant racism scale (Pettigrew & Meertens, 1995) and demographic questions. The blatant racism scale was administered after the mug evaluation so that participants would not be aware of the racial component of the study while they were evaluating the mug. The mug, blurb, and artist information were presented on the screen throughout the mug rating task, but not during the questionnaire. After completing the survey, participants were fully debriefed on the purpose of the study and use of deception.

### **Measures.**

#### ***Mug value.***

To assess participants’ perceptions of the value of the piece, they responded to five items. For three of the items, participants rated their level of agreement (1=*strongly disagree*, 7=*strongly agree*) with the statements: “I think this piece is valuable”, “I would be willing to pay money for this piece”, and “I would like to own this piece”. Participants also indicated the maximum price (\$USD) that they would be willing to pay for the piece, and gave the

piece a score out of 10. All items were converted to z-scores and then averaged to create a scale that accommodated varying anchor points. The overall scale showed good internal consistency,  $\alpha=.83$ .

### ***Blatant racism.***

The blatant racism scale (BRS) consists of 9 items, all of which assess discrimination that is explicitly attributable to racial biases. The BRS was chosen because it has been used extensively in published research, and has been found to be a reliable measure of outgroup prejudice (Pettigrew & Meertens, 1995). Further, items on the BRS are more suitable to adapt to both White and Asian participants compared to other similar scales (e.g. symbolic or modern indices of prejudice). Both White and Asian participants filled out the BRS with reference to outgroup members. The BRS includes items such as “Asian/White Americans have jobs that White/Asian Americans should have” and “I would not mind if a suitably qualified Asian/White American was appointed as my boss”. Participants rated their level of agreement on a 7-point scale, 1=*strongly disagree*, 7=*strongly agree*. All items were averaged to form a reliable scale,  $\alpha=.84$ .

## **Results**

### **Missing data.**

Less than 5% of the data were missing so we employed listwise deletion to account for missing values in each analysis.

### **Blatant racism.**

To confirm that our manipulation did not affect participants' blatant racism scores we conducted a 2 (participant ethnicity: Asian, White) x 2 (artist ethnicity: Asian, White) between-subjects ANOVA. Results revealed that artist ethnicity did not affect participants blatant racism scores ( $F(1,561)=.008, p=.928$ ), nor did the interaction between artist ethnicity and participant ethnicity,  $F(1,561)=.864, p=.353$ .

### **Mug valuations.**

We performed a hierarchical regression to examine the effects of participant ethnicity (-1 = Asian, 1 = White), artist ethnicity (-1 = White, 1 = Asian), and blatant racism on mug value (Table 1.). To control for the effects of gender, both participant gender (-1 = women, 1 = men) and artist gender (-1 = women, 1 = men) were entered at Block 1<sup>1</sup>. At Block 2, mug valuation was regressed onto the three predictors. Predictors were mean-centred and multiplied by each other to create all possible two-way interaction terms that were entered at Block 3. Finally, the three-way interaction between all predictors was entered at Block 4.

There was no effect of participant gender ( $\beta=.00, p=.926$ ) or artist gender ( $\beta= -.01, p=.796$ ) on mug value at Block 1,  $R^2_{adj}=.00, R^2_{ch}=.00, F(2,560)=.04, p=.964$ . At Block 2, the inclusion of the individual predictors contributed significantly to the model,  $R^2_{adj}=.08, R^2_{ch}=.08, F_{change}(3,557)=16.86, p <.001$ . Specifically, there was a significant main effect of artist ethnicity on mug value,  $\beta=.14, p=.001$ . Participants rated the mug owned by an Asian artist as significantly more valuable than the mug owned by a White artist. There was also a significant main effect of blatant racism on mug rating,  $\beta=.23, p <.001$ . Higher blatant racism scores were associated with higher mug values. There was no main effect of participant ethnicity on mug value,  $\beta= -.05, p=.276$ .

At Block 3, the inclusion of the two-way interactions did not contribute a significant portion of variance to the model,  $R^2_{adj}=.08, R^2_{ch}=.01, F_{change}(3,554)=2.56, p=.054$ . In particular, the main effect of artist ethnicity on mug value indicating a preference for the mug owned by an Asian artist was not qualified by an interaction with participant ethnicity,  $\beta=.07, p=.108$ . The interaction between artist ethnicity and blatant racism was also non-significant ( $\beta=.08, p=.056$ ), as was the interaction between participant ethnicity and blatant racism,  $\beta= -.07, p=.082$ .

However, the marginal two-way interactions were qualified by a significant three-way

interaction at Block 4,  $R^2_{adj.}=.09$ ,  $R^2_{ch.}=.01$ ,  $F_{change}(1,553)=5.37$ ,  $p=.021^2$ . Specifically, the interaction between participant ethnicity, artist ethnicity, and blatant racism on mug value was significant and positive  $\beta=.10$ ,  $p=.021$ . As shown in Figure 2, follow-up analyses revealed that the interaction between artist ethnicity and blatant racism was significant for White participants ( $\beta=.20$ ,  $p=.002$ ), but not for Asian participants,  $\beta= -.03$ ,  $p=.654$ . Subsequent simple slopes analyses revealed that higher blatant racism scores predicted higher mug values when White participants were evaluating a mug owned by an Asian artist,  $\beta=.32$ ,  $p <.001$ . Blatant racism and mug values were unrelated, however, when White participants were rating a mug owned by a White artist,  $\beta= -.03$ ,  $p=.762$ .

## Discussion

Study 1 found that White and Asian participants placed significantly higher valuations on the hand-painted mug when the artist was Asian compared to when the artist was White. Thus, responses among Asian participants were consistent with our first ingroup bias hypothesis. White participants showed an outgroup bias that was qualified by outgroup prejudice. Specifically, higher levels of blatant racism predicted higher mug valuations among White participants valuing the mug owned by an Asian person. However, Asian participants valued the Asian-owned mug higher than the White-owned mug, irrespective of how they felt about White Americans in general. Thus, White, but not Asian, participant responses were consistent with our overcompensation hypothesis. Unexpectedly, blatant racism emerged as an overall predictor of mug value; however, as predicted, the interaction between blatant racism and artist ethnicity was only evident among White participants.

Together, our findings from Study 1 provide support for ingroup favouritism among Asian Americans and outgroup favouritism among White Americans. Critically, among White Americans, there was a positive association between prejudice towards Asian Americans and valuations of the Asian-owned mug. Thus, majority group members may be

overcompensating for their racial biases by overvaluing minority group-owned property.

Asian Americans, on the other hand, displayed a preference for the mug owned by an Asian artist that was independent of their racial attitudes. This finding is consistent with the notion that minority group members are not concerned about displaying ingroup favouritism.

### **Study 2**

The findings from Study 1 suggested that Asian Americans displayed an ingroup bias, while White Americans rated the Asian-owned mug as more valuable as their level of prejudice against Asian Americans increased. The pattern of responses among White participants therefore provided preliminary support for the second of our competing hypotheses; that majority group members compensate for racial biases by expressing enhanced positivity towards minority group property. What is not known, however, is whether such ironic biases among majority group members arise specifically to compensate for negative attitudes towards the minority group, and consequently disguise their true racial attitudes. If it is the case that overcompensation is occurring in the majority group, we would expect the positive relationship between prejudice and valuations of minority group property to be evident only among people highly motivated to hide their prejudiced attitudes. In Study 2 we aimed to replicate our findings from Study 1, and test whether attitude masking could explain overcompensatory valuations by White Americans. We did so by measuring people's motivation to conceal racially prejudiced attitudes.

In Study 2 we assessed the impact of artist ethnicity, blatant racism, and external motivation to appear non-prejudiced on mug valuations amongst a White American sample. Given that we proposed our results for White participants in Study 1 were the result of overcompensation, we hypothesised that higher prejudice towards Asian Americans would be associated with higher valuations of the mug owned by an Asian person *only* when participants were concerned about appearing prejudiced. In Study 1 we post-measured the

moderator (blatant racism) so as not to prime race relations prior to the race manipulation. In Study 2, we wanted to establish that our effect held irrespective of survey order, and thus administered the blatant racism scale to half of the participants first, and half of the participants following the mug valuation.

## **Method**

### **Participants.**

Again we aimed for a final sample size of 600 participants in order to achieve adequate power (drawing on recommendations from Green, 2010). We recruited 878 online participants through the Mechanical Turk website and retained 639 participants who identified as White. From this subset of participants, we excluded participants who did not believe the art competition cover story. This resulted in a final sample size of 554 White American participants. Forty-one per cent of the final sample identified as female and 59% identified as male ( $M_{\text{age}}=33.50$  years,  $SD_{\text{age}}=11.73$  years). Including participants who did not believe the art competition cover story did not affect the direction or the significance of the effects relevant to our predictions.

### **Design and procedure.**

Participants completed the study online. Study 2 employed a 2 (artist ethnicity: Asian, White) x 2 (task order: pre-survey, post-survey) between-subjects design. The procedure was identical to Study 1 with four exceptions. First, we counterbalanced whether participants completed the survey measures (including the blatant racism scale) before or after they completed the art valuations ( $\alpha=.86$ ) so that we could examine task order effects. Because some participants would now be completing measures of prejudice before the art competition task, we informed participants that they would be completing multiple unrelated tasks, and we included several filler items in the questionnaire to disguise the purpose of the study. Filler items were selected at random from existing personality, political attitudes, and

prejudice scales (unrelated to Asian people). These filler items were chosen for the specific purpose of disguising the hypotheses. Thus, the items do not form coherent scales and are therefore not included in any analyses. Third, given that gender did not impact on our results in Study 1 we used gender-neutral artist names in the art competition task (Asian artist: Zhang Yu, Caucasian Artist: Ash Webb). Finally, we asked participants whether they believed the art competition cover story at the end of the study.

### **Questionnaire.**

The questionnaire included the blatant racism scale used in Study 1 ( $\alpha=.74$ ), an item assessing whether participants believed that the art competition was authentic, demographic questions, and the External Motivation to Respond Without Prejudice Scale (EMS; Plant & Devine, 1998). The EMS is a five-item scale designed to measure the extent to which people are motivated by social pressure to comply with non-prejudiced norms. We adapted the items such that they were specific to our study's intergroup context (e.g., "I attempt to appear non-prejudiced towards Asian Americans in order to avoid disapproval from others"; anchors: 1=*strongly disagree*, 7=*strongly agree*;  $\alpha=.86$ ). The blatant racism scale, EMS, demographic questions, and filler items were randomised.

### **Results**

We performed a hierarchical regression to examine the effects of artist ethnicity (-1 = White, 1 = Asian), task order (-1 = pre-questionnaire, 1 = post-questionnaire), blatant racism, and external motivation to appear non-prejudiced (EMS) on mug value (Table 2.). As less than 5% of the data were missing we employed listwise deletion to account for missing values in each analysis. Predictors were mean-centred and multiplied by each other to create all possible two-, three-, and four-way interaction terms. All of the individual predictors were entered at Block 1. At Block 2, the two-way interaction terms were entered into the model. The three-way interaction terms were entered at Block 3, and the four-way interaction



between all predictors was entered at Block 4. EMS and blatant racism were related, but not highly correlated ( $r(552) = .27, p < .001$ ), so multicollinearity between predictors was not an issue for this analysis.

At Block 1, the model was significant,  $R^2_{\text{adj.}} = .03, R^2_{\text{ch.}} = .03, F(4, 549) = 4.80, p = .001$ . We found a significant main effect of artist ethnicity on mug value,  $\beta = .11, p = .011$ . As in Study 1, participants rated the mug owned by the Asian artist as significantly more valuable than the mug owned by the Caucasian artist. A main effect of survey order also emerged at Block 1,  $\beta = -.11, p = .007$ . Overall, participants who completed the questionnaire before the art competition task gave higher mug valuations compared to participants who completed the questionnaire after the art competition task. There was also a marginally significant positive relationship between blatant racism and mug value  $\beta = .08, p = .055$ .

At Block 2, the inclusion of the two-way interaction terms did not contribute significantly to the model,  $R^2_{\text{adj.}} = .04, R^2_{\text{ch.}} = .02, F(6, 543) = 1.76, p = .105$ . While the addition of the three-way interaction terms at Block 3 did not reach significance ( $R^2_{\text{adj.}} = .04, R^2_{\text{ch.}} = .01, F(4, 539) = 1.37, p = .242$ ), inspection of the interaction terms revealed the predicted pattern. Specifically, consistent with predictions, we found a significant three-way interaction between artist ethnicity, EMS, and blatant racism on mug value ( $\beta = .10, p = .042$ ). As shown in Table 2, no other three-way interactions significantly predicted mug valuation, all  $\beta$ s  $< .03$ , all  $p$ s  $> .524$ ). The four-way interaction with survey order entered at Block 4 also did not significantly predict mug valuation,  $R^2_{\text{adj.}} = .04, R^2_{\text{ch.}} = .004, F(1, 538) = 2.52, p = .113$ .

As shown in Figure 3, planned follow-up analyses of our predicted significant three-way interaction revealed that the two-way interaction between EMS and blatant racism emerged among participants evaluating the mug owned by an Asian artist ( $\beta = .17, p = .008$ ), but not those evaluating the mug owned by a White artist,  $\beta = -.01, p = .930$ . Simple slopes indicated that among participants who evaluated the mug owned by an Asian artist, higher

blatant racism scores predicted higher mug valuations when participants scored high on EMS ( $\beta=.18, p=.020$ ), but not when they scored low on EMS,  $\beta= -.13, p=.178$ .

### **Discussion**

The results of Study 2 were consistent with the hypothesis that higher prejudice against Asian Americans would predict higher valuations of a mug owned by an Asian person, but only for participants highly motivated to appear non-prejudiced to other people. As in Study 1, we also found a preference for the Asian-owned mug among White participants. Together, the findings from Study 2 provide support for overcompensation among majority group members rather than our alternative hypothesis of ingroup favouritism. The findings mirror those of Study 1 and suggest that majority group members motivated to hide their prejudiced attitudes overcompensate for racial biases by displaying outgroup favouritism.

### **General Discussion**

We interact with and evaluate the property of outgroup members every day. To date, however, no work has examined how racial attitudes and social-evaluative concerns affect property valuations among majority and minority group members. The present research investigated how White and Asian Americans appraised property owned by racial ingroup and outgroup members. Previous literature provided support for two competing predictions. First, it was possible that participants would show traditional ingroup favouritism and rate the property of ingroup members as more valuable. Alternatively, it was possible that participants would demonstrate an outgroup bias in order to compensate for racially prejudiced attitudes (overcompensation). Our results showed support for the first hypothesis among minority group members, but the second among majority group members.

In Study 1 we found a clear preference for a piece of art owned by an Asian person among both White and Asian participants. Thus, Asian participants showed a classic pattern

of ingroup preference. White participants, conversely, showed a pattern of valuing minority group-owned property more highly as their level of prejudice against Asian Americans increased. The ingroup favouritism displayed by Asian Americans is consistent with theorising that differential social pressures exist to appear racially tolerant between majority and minority group members (Plant & Devine, 2003; Plant, 2004). Asian Americans, like many other minority groups, are typically the target of prejudice. As such, they do not have to be concerned about appearing prejudiced, and are therefore under no political pressure to display preferences for outgroups or outgroup objects. On the other hand, our finding that higher levels of prejudice among White participants predicted higher valuations of the Asian-owned mug in Study 1 suggested that majority group members may be compensating for racial biases by evaluating the property of people from minority groups more favourably. In short, they appeared to prefer the Asian owned mug when they had high levels of blatant prejudice that might require disguise. This finding is consistent with research suggesting that majority group members feel pressure to act in a socially appropriate manner during interracial interactions and therefore attempt to compensate for racial biases (Carver, Glass, & Katz, 1978).

If overcompensation was occurring among White participants in Study 1, then we would expect that the observed compensatory valuations would be most evident among White participants who are concerned about appearing prejudiced to others. The inclusion of a direct measure of motivation to hide prejudice attitudes in Study 2 revealed that the tendency for higher prejudice to predict higher mug ratings was only evident among White participants who were highly motivated to *not* appear racist to others. Taken together, our results suggest that majority group members concerned about their personal image may overvalue property owned by minority group members to mask prejudiced attitudes.

### **Implications and future directions**

Overall, our findings suggest that majority, but not minority, group members feel pressure to hide prejudiced attitudes, and that these effects flow through to interactions with personal property. One interesting avenue for future research involves investigating why ingroup biases emerge in some contexts, while overcompensation emerges in other contexts. One possibility is that situations involving snap decisions, such as rulings during sporting matches (Price & Wolfers, 2007), may yield greater ingroup biases among majority group members. Conversely, when people make slower, more deliberative decisions, social pressures may enter decision-making processes and make overcompensation more likely. Studies that ask participants to value property under varying time constraints may assist in explaining these divergent findings.

Our results are consistent with work by Shelton et al. (2005) who observed that among White participants, more prejudiced attitudes predicted better performance in a social interaction with a Black partner. We, however, extend these social lubrication effects to contexts involving property appraisals. Given that our studies were conducted within the context of an art competition where favourable evaluations increased the chances of the fictitious artist winning the contest, our findings fit with past research suggesting that possessing stronger negative racial outgroup biases in some cases results in unexpected positive behaviours towards racial outgroup members (Shelton et al., 2005; Vorauer & Turpie, 2004).

Our research is the first to show that people from majority and minority ethnic groups show contrasting valuation biases when valuing property, which may reflect the different social pressures experienced by majority and minority group members. In addition, we identify two individual difference variables (blatant racism and EMS) that influence valuations of minority group property by majority group members. While our work extends on existing ownership literature by investigating the factors that lead to valuation biases in

intergroup contexts, our studies did not assess the impact of buying versus selling ingroup and outgroup objects. Indeed, it is possible that valuations may have differed had we asked participants to value the item from a “sellers” rather than a “buyers” perspective. It would be of interest to examine in future studies whether majority group members selling outgroup property show similar overcompensatory biases.

Our results also inform research on endowment by suggesting that economic decisions related to property may be influenced by complex interpersonal and intergroup processes. Indeed, the tendency for people to place higher values on objects once they are given ownership rights may be influenced by social factors such as social evaluative concerns, prejudice, and owner characteristics. Because economic decisions are rarely made in a social vacuum, incorporating social constructs into economic models may assist in explaining and predicting valuation biases in applied settings.

The present studies lay a foundation for melding intergroup relations and ownership research to better understand how intergroup attitudes and social context influence evaluations of property. One avenue for future research involves examining whether the effects identified in our studies extend to other minority and majority groups. Public displays of prejudice towards minority groups is becoming increasingly intolerated, and research examining how people respond to such social pressures is likely to burgeon in the coming years. It will also be critical to examine whether the overcompensatory valuation biases identified here lead to more favourable physical treatment of ingroup or outgroup property. Studies examining ingroup and outgroup property treatment effects using kinematic procedures would be of particular interest.

### **Limitations and alternative explanations**

Of course, our suggestion that higher prejudice leads to outgroup favouritism among majority group members could be causally reversed. Past research has demonstrated that

majority group members who express non-prejudiced behavior often feel “morally licenced” to then act in a discriminatory manner (Monin & Miller, 2001). It is therefore possible that White participants who reported high levels of prejudice but displayed pro-Asian favoritism when evaluating the mug owned by an Asian artist felt that subsequent expressions of prejudice were justified in light of their previous non-prejudiced behavior. That our effects were not qualified by survey order in Study 2, however, casts doubt on this alternative explanation.

The extent to which the present findings generalise to other majority and minority groups, and other objects, should also be taken into account when interpreting the current effects. It is possible, for example, that there is a “norm” among White Americans high in racism to favour and overvalue exotic Asian artwork. However, given that our stimulus was a household mug chosen for its average quality and ostensibly painted by a university student, this explanation seems unlikely. Studies that include both hand-crafted and designer objects may help to identify whether norms related to exotic art objects influence property valuations.

Caution should also be taken when interpreting the role of social pressure to appear non-prejudiced in the context of anonymous online studies. While previous research suggests that online data is comparable to other data collection methods (Richman et al., 1999; Buhrmester et al., 2011), it is possible that different effects may be found if valuations were made in the presence of the artist, ingroup members, or outgroup members. Examining the influence of the presence of other people in a laboratory setting may assist in corroborating the effects identified in our studies.

Finally, it should be noted that the White and Asian samples recruited in Study 1 were drawn from different websites. This variation in sampling technique represents a potential confound of our observed differences between White and Asian participants. However, our data and data provided by the respective websites suggest that both samples represent similar

cross-sections of the population in terms of age, socioeconomic status, and education. As such, we believe it is unlikely that our observed main effect of ethnicity in Study 1 can be attributed to systematic differences between participants who custom the two websites. Nonetheless, future research should aim to replicate and extend our core findings drawing samples of White and Asian participants from the same pool of people.

### **Conclusions**

The current findings provide evidence that intergroup and interpersonal processes interact to play a central role in how property is valued. Counter-intuitively, it appears that more prejudiced attitudes among majority group members are associated with more favourable evaluations of minority group property. Thus, our research suggests that the overcompensatory biases identified among majority group members in previous intergroup relations research may extend to perceptions and valuations of objects owned by racial outgroup members. Minority group members, on the other hand, may be more likely to value ingroup property more favourably because they do not feel pressure to hide their personal preferences. The present findings have implications for global economics markets where property and companies undergo frequent ownership changes, for political negotiations involving disputed territory, and for theoretical models examining the behavioural scope of intergroup processes.

### Notes

<sup>1</sup> In addition to the reported analyses that controlled for artist gender and participant gender, we conducted a hierarchical regression that included artist gender and participant gender as factors. It should be noted that the data were underpowered to robustly test the interactive effects of gender. Nevertheless, results of the analysis revealed that all effects relevant to our hypotheses remained significant in the reported directions, and that none of the effects relevant to our hypotheses were moderated by gender.

<sup>2</sup> We also ran the regression model re-coding artist ethnicity as in-group artist (-1) vs. out-group artist (+1). Coding in this manner resulted in the three-way interaction becoming marginally significant,  $R^2_{\text{adj.}}=.09$ ,  $R^2_{\text{ch.}}=.01$ ,  $F_{\text{change}}(1,553)=3.00$ ,  $p=.084$ . All follow-up tests remained significant in the reported directions.




### References

- Barlow, F. K., Louis, W. R., & Hewstone, M. (2009). Rejected! Cognitions of rejection and intergroup anxiety as mediators of the impact of cross-group friendships on prejudice. *British journal of social psychology*, *48*(3), 389-405. doi: 10.1348/014466608X387089
- Brown, D.E. (1991). *Human Universals*. New York, N.Y. McGraw-Hill.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*(1), 3-5. doi: 10.1177/1745691610393980
- Carver, C. S., Glass, D. C., & Katz, I. (1978). Favorable Evaluations of Blacks and the Handicapped: Positive Prejudice, Unconscious Denial, or Social Desirability?'. *Journal of Applied Social Psychology*, *8*(2), 97-106.
- Constable, M. D., Kritikos, A., & Bayliss, A. P. (2011). Grasping the concept of personal property. *Cognition*, *119*(3), 430-437. doi: 10.1016/j.cognition.2011.02.007
- Constable, M.D., Kritikos, A., Lipp, O.V., & Bayliss, A.P. (2014). Object ownership and action: The influence of social context and choice on the physical manipulation of personal property. *Manuscript Under Review*.
- Fiscal PolicyInstitute. (2012). *Immigrant Small Business Owners. A Significant and Growing Part of the Economy*. Retrieved from <http://citesource.trincoll.edu/apa/apagovreportweb.pdf>
- Hohfeld, W. N. (1913). Some fundamental legal conceptions as applied in judicial reasoning. *The Yale Law Journal*, *23*(1), 16-59.
- James, W. (1890). *The principles of psychology*. Cambridge, MA: Harvard UP.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1990). Experimental Tests of the Endowment Effect and the Coase Theorem. *Journal of Political Economy*, *98*(6), 1325-1348.

- Kanngiesser, P., Gjersoe, N., & Hood, B. M. (2010). The effect of creative labor on property-ownership transfer by preschool children and adults. *Psychological Science, 21*(9), 1236–1241.
- Kanngiesser, P., & Hood, B. M. (2014). Young children's understanding of ownership rights for newly made objects. *Cognitive Development, 29*(1), 30-40.
- Ledgerwood, A., Liviatan, I., & Carnevale, P. J. (2007). Group-identity completion and the symbolic value of property. *Psychological Science, 18*(10), 873-878.
- Locke, J. (1690). *Two Treatises of Government*. New York: Hafner.
- Maddux, W. W., Yang, H., Falk, C., Adam, H., Adair, W., Endo, Y., Falk, C., & Heine, S. J. (2010). For Whom Is Parting With Possessions More Painful? Cultural Differences in the Endowment Effect. *Psychological Science, 21*(12), 1910-1917.
- Monin, B., & Miller, D. T. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology, 81*, 33-43. doi: 10.1037//0022-3514.81.1.33
- Muraven, M. (2008). Prejudice as Self-Control Failure. *Journal of Applied Social Psychology, 38*(2), 314-333.
- Newman, G. E., Bartels, D. M. and Smith, R. K. (2014), Are Artworks More Like People Than Artifacts? Individual Concepts and Their Extensions. *Topics in Cognitive Science*. doi: 10.1111/tops.12111
- Pettigrew, T. F., & Meertens, R. W. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology, 25*, 57-75.
- Plant, E. A., & Devine, P. G. (1998). Internal and External Motivation to Respond Without Prejudice. *Journal of Personality and Social Psychology, 75*(3), 811-832.
- Plant, E. A., & Devine, P. G. (2003). The Antecedents and Implications of Interracial Anxiety. *Personality and Social Psychology Bulletin, 29*, 790-801. doi: 10.1177/0146167203252880

- Plant, E. A. (2004). Responses to Interracial Interactions Over Time. *Personality and Social Psychology Bulletin*, 30(11), 1458-1471. doi: 10.1177/0146167204264244
- Price, J., & Wolfers, J. (2007). *Racial discrimination among NBA referees*. Centre for Economic Policy Research.
- Rachlinski, J. J., Johnson, S. L., Wistrich, A. J., & Guthrie, C. (2008). Does unconscious racial bias affect trial judges. *Notre Dame Law Review*, 84(3), 1195-1246.
- Richeson, J. A., & Shelton, J. N. (2003). When Prejudice Does Not Pay: Effects of Interracial Contact on Executive Function. *Psychological Science*, 14(3), 287-290.
- Richman, W. L., Kiesler, S., Weisband, S., & Drasgow, F. (1999). A meta-analytic study of social desirability distortion in computer-administered questionnaires, traditional questionnaires, and interviews. *Journal of Applied Psychology*, 84(5), 754.
- Ross, J., Zaldivar, A., Irani, L., & Tomlinson, B. (2009). Who are the turkers? worker demographics in amazon mechanical turk. *Department of Informatics, University of California, Irvine, USA, Tech. Rep.*
- Sartre, J. P. (1943). *Being and nothingness*. London: Routledge.
- Shelton, J. N., Richeson, J. A., Salvatore, J., & Trawalter, S. (2005). Ironic Effects of Racial Bias during Interracial Interactions. *Psychological Science*, 16(5), 397-402.
- SocialSci. (2015). Retrieved February 16, 2015, from <https://www.socialsci.com/participant-pool>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.
- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior and Organisation*, 1(1), 39-60.

Vorauer, J. D., & Turpie, C. A. (2004). Disruptive Effects of Vigilance on Dominant Group Members' Treatment of Outgroup Members: Choking Versus Shining Under Pressure. *Journal of Personality and Social Psychology*, 87(3), 384-399. doi: 10.1037/0022-3514.87.3.384



My name is Huifang Chan and I am a second year arts student. I have chosen to design a mug because my family and I often enjoy hot chocolate together and this mug reminds me of my family and the time we share.

Artist/Owner: Huifang Chan  
Info: 22yo, female, undergraduate  
Item: Mug  
Entrant ID: 1461

*Figure 1.* Example of stimulus presented to participants in both studies.

Table 1.

*Regression analyses predicting mug valuations in Study 1.*

	Block 1	Block 2	Block 3	Block 4
Participant gender	.00	-.03	-.03	-.04
Artist gender	-.01	-.00	.00	-.00
Participant ethnicity (PE)		-.05	-.05	-.05
Artist ethnicity (AE)		.14***	.14***	.18***
Blatant racism (BRS)		.23***	.24***	.24***
PA x AE			.07	.07
PE x BRS			-.07	-.08
AE x BRS			.08	.08
PE x AE x BRS				.10*
$F_{\text{change}}$	.04	16.86***	2.56	5.37*
$R^2_{\text{change}}$	.00	.08	.01	.01
$R^2_{\text{adjusted}}$	-.00	.08	.08	.09

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 2.

*Regression analyses predicting mug valuations in Study 2.*

	Block 1	Block 2	Block 3	Block 4
Artist ethnicity (AE)	.11*	.10	.08	.08
Blatant racism (BRS)	.08	-.11*	.07	.05
External motivation (EMS)	-.01	.01	-.001	.01
Survey order (SO)	-.11**	-.11*	-.11*	-.11*
AE x BR		-.03	-.05	-.07
AE x EMS		.04	.06	.05
AE x SO		-.05	-.05	-.03
BR x EMS		.08	.08	.09*
BR x SO		.09*	.10*	.10*
EM x SO		-.05	-.06	-.05
AE x BRS x EMS			.10*	.09
AE x BRS x SO			<.001	.01
AE x EMS x SO			-.03	-.04
BRS x EMS x SO			.02	.03
AE x BRS x EMS x SO				-.07
$F_{\text{change}}$	4.80**	1.76	1.37	2.52
$R^2_{\text{change}}$	.03	.02	.01	.004
$R^2_{\text{adjusted}}$	.03	.04	.04	.04

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

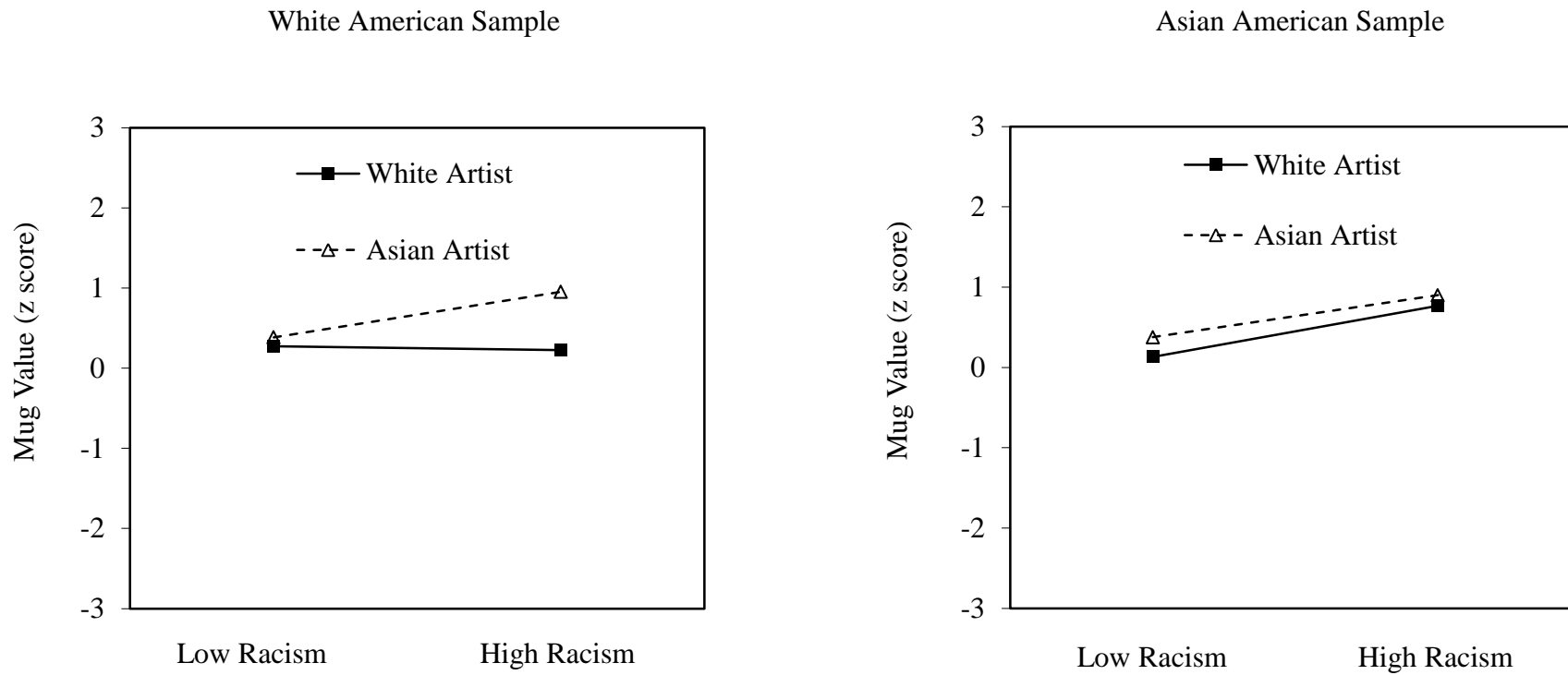


Figure 2. Three-way interaction between blatant racism, artist ethnicity, and participant ethnicity predicting mug value in Study 1.



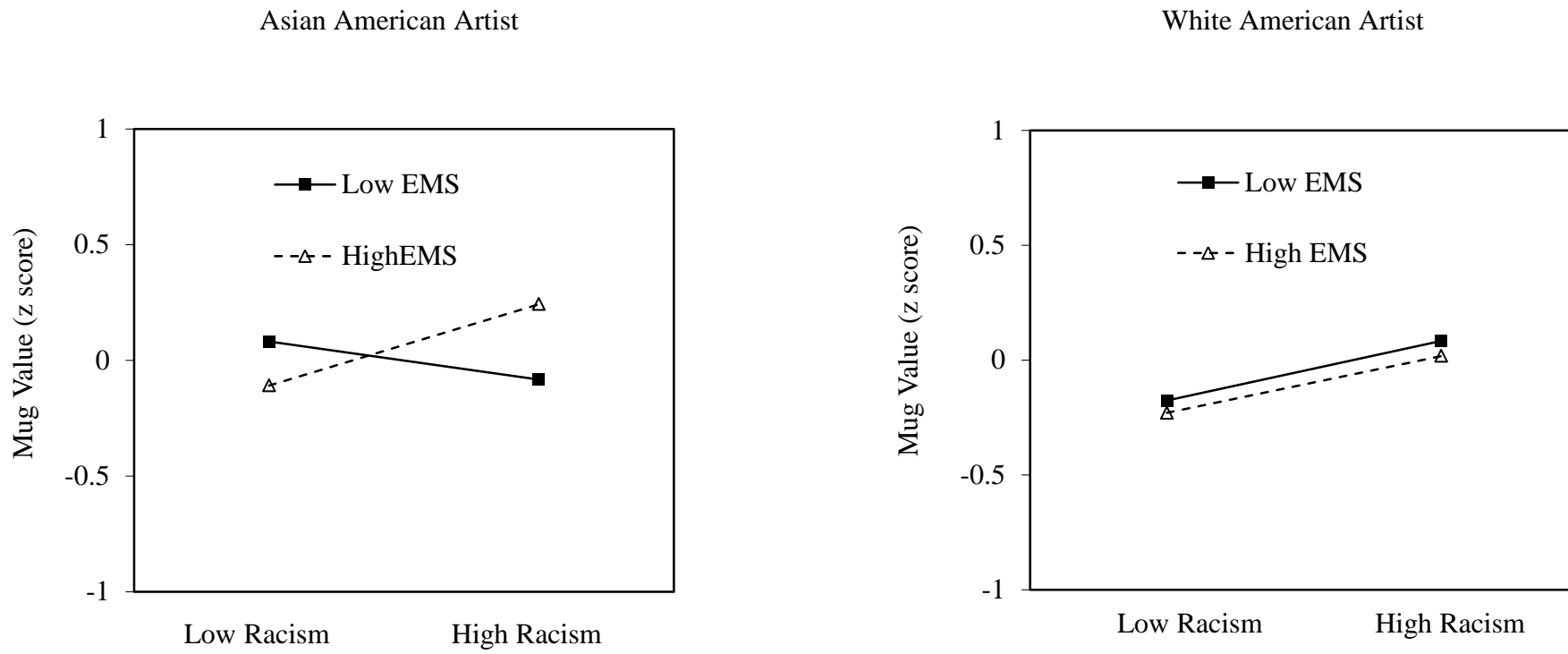


Figure 3. Three-way Interaction between blatant racism, artist ethnicity, and external motivation to appear non-prejudiced (EMS) predicting mug value in Study 2.