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Reports

On the ideology of hypodescent: Political conservatism predicts categorization of racially ambiguous faces as Black

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HIGHLIGHTS

- We examined the relation between political ideology and racial categorization.
- People categorized morphed faces that ranged from 100% Black to 100% White.
- Conservatism (vs. liberalism) was associated with the tendency to categorize racially ambiguous faces as Black.
- Relation between ideology and categorization was mediated by opposition to equality.
- This research helps to explain the ideological underpinnings of hypodescent.

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ABSTRACT

According to the principle of hypodescent, multiracial individuals are categorized according to their most socially subordinate group membership. We investigated whether the tendency to apply this principle is related to political ideology. In three studies, participants categorized a series of morphed faces that varied in terms of racial ambiguity. In each study, self-reported conservatism (vs. liberalism) was associated with the tendency to categorize ambiguous faces as Black. Consistent with the notion that system justification motivation helps to explain ideological differences in racial categorization, the association between conservatism and hypodescent was mediated by individual differences in opposition to equality (Study 2) and was stronger when U.S. participants categorized American than Canadian faces (Study 3). We discuss ways in which the categorization of racially ambiguous individuals in terms of their most subordinate racial group may exacerbate inequality and vulnerability to discrimination.

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Introduction

Barack Obama (2004) jokingly describes his mother as “White as milk,” but the fact is that he is seen as the United States’ first Black president. Following the repeal of anti-miscegenation laws and the gradual normalizing of interracial relationships, the United States of America has become an increasingly multiracial society, with a 32% increase in the number of citizens identifying with more than one race over the last decade (U.S. Census Bureau, 2011). Nevertheless, monoracial labels are frequently applied to multiracial individuals, and “White” is rarely applied to persons of mixed racial heritage (Hirschfeld, 1995).

The tendency to categorize multiracial individuals according to their most socially subordinate racial group membership reflects

the principle of hypodescent, which is closely associated with the notorious “one drop rule” in American history (Banks & Eberhardt, 1998; Hollinger, 2003). From the earliest days of American slavery through the Civil Rights Era, this principle was formally employed to subjugate individuals with any non-White heritage by denying them full rights and liberties under the law. For instance, individuals who had lived in the United States for years but were one-quarter or even one-eighth Japanese were forced to live in internment camps during World War II (Werner, 2000).

Social psychological research reveals that the principle of hypodescent characterizes racial categorization even today. When research participants are presented with images of Black/White biracial targets, they are more likely to classify them as Black than White (e.g., Halberstadt, Sherman, & Sherman, 2011; Ho, Sidanius, Levin, & Banaji, 2011; Peery & Bodenhausen, 2008). Furthermore, it appears to take fewer minority characteristics (e.g., facial features or ancestors) to be judged as “Black,” compared with the proportion of majority characteristics it takes to be judged as “White” (Ho et al., 2011).

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One prominent explanation for the phenomenon of hypodescent emphasizes basic attentional processes that are related to exposure to different types of faces. For instance, studies suggest that perceivers allocate more attention to the salient features of relatively unfamiliar minority groups as a way of distinguishing between in-group and out-group members (Halberstadt et al., 2011). However, a purely attentional account cannot explain why hypodescent occurs even in the absence of visual perception, as when participants categorize an *unseen* child with two White and two Black grandparents as Black (Ho et al., 2011). Attentional and ideological explanations are by no means mutually exclusive; indeed, they may work together to produce hypodescent. Thus, it appears that multiple factors may contribute to observed patterns of hypodescent in race categorization.

In this article, we focus on the possibility that biased racial categorization is related to ideological motives. Prior research has indicated that race perception and categorization may be influenced by a number of factors, including social identification (Knowles & Peng, 2005) and biological essentialism (Plaks, Malahy, Sedlins, & Shoda, 2012). Furthermore, Caruso, Mead, and Balcetis (2009) found that political conservatives were more likely to believe that a darkened photo of Barack Obama represented his actual appearance, as compared with liberals and moderates. These results are broadly consistent with public opinion data revealing that among White Americans, 38% of Republicans state that President Obama is Black rather than mixed-race, vs. 33% of Democrats and 30% of Independents (Pew Research Center, 2011). In the current research, we explored whether liberals and conservatives would differ in their categorization of racially ambiguous individuals in a nonpolitical context and examined potential psychological mediators of this proposed relationship. More specifically, we conducted three studies to investigate the hypothesis that there would be ideological differences in biased racial categorization.

There are several possible explanations for why conservatives might be more likely than liberals to categorize a biracial person as a member of their most socially subordinate race. One possible explanation concerns *cognitive style*. Conservatives exhibit stronger preferences for order, structure, and closure, and greater intolerance of ambiguity in comparison with liberals (Jost, Glaser, Kruglanski, & Sulloway, 2003). Given these differences in cognitive style, conservatives might be more motivated to resolve racial ambiguity and to resolve it in the most common or culturally-accessible manner (see Chiu, Morris, Hong, & Menon, 2000)—in this case, according to the principle of hypodescent. Consistent with this supposition, several studies demonstrate that individuals who score higher on the Personal Need for Structure scale tend to rely more heavily on social stereotypes (e.g., Neuberg & Newsom, 1993; Schaller, Boyd, Johannes, & O'Brien, 1995). Therefore, to the extent that ideological differences in racial categorization are attributable to differences in cognitive style, we would hypothesize that they would be mediated by individual differences in personal need for structure. This possibility was investigated in Study 2.

Another possibility is that differences in the *contents* of ideological beliefs affect racial categorization (Jost, 2006). Compared with liberals, conservatives are more supportive of traditional arrangements and more accepting of inequality (Jost et al., 2003), more likely to exhibit implicit and explicit racial bias (e.g., Jost, Banaji, & Nosek, 2004; Sidanius, Pratto, & Bobo, 1996), and score higher on measures of social dominance (Sidanius & Pratto, 1999). To the extent that ideological differences in racial categorization are attributable to the specific contents of ideological beliefs and values, we hypothesize that they would be mediated by individual differences in Social Dominance Orientation (Pratto, Sidanius, Stallworth, & Malle, 1994).

Social Dominance Orientation is an ideological disposition that comprises two distinct factors or dimensions: *group-based dominance* and *opposition to equality*. According to Jost and Thompson (2000), these two dimensions are linked, respectively, to (a) group justification motives to maintain and defend the interests and esteem of the

in-group (sometimes at the expense of the interests and esteem of competing out-groups) and (b) system justification motives to maintain and defend the legitimacy and stability of the overarching social order or social system (sometimes at the expense of the interests and esteem of the in-group). Subsequent research has empirically validated this conceptual distinction, demonstrating, for instance, that group-based dominance is more strongly associated with in-group favoritism, out-group hostility, and other social identity motives than is opposition to equality, whereas the latter is more strongly associated with the endorsement of political conservatism and other system-justifying attitudes (e.g., Ho et al., 2012; Jost & Thompson, 2000; Kugler, Cooper, & Nosek, 2010).

Ho et al. (2012) proposed that group-based dominance and opposition to equality could both be related to biased racial categorization.

Perceiving mixed-race individuals as belonging more to their subordinate parent group (i.e., according to a rule of *hypodescent*) might entail the belief that the subordinate parent group is inferior but at the same time constitute a relatively subtle means of maintaining status boundaries (p. 595).

Although group-based dominance and opposition to equality would both clearly predict the tendency to categorize racially ambiguous faces as Black, we believe that there are a few important reasons to hypothesize that opposition to equality would be more likely to mediate the effect of ideology on racial categorization. First, as noted above, opposition to equality is more strongly associated with political conservatism than is group-based dominance (Kugler et al., 2010). Second, and more importantly, Ho et al. (2011, pp. 504–505) discovered that members of racial minority groups (i.e., Blacks and Asians) were just as likely as Whites to apply the principle of hypodescent in making racial judgments. This suggests that biased racial categorization is not simply a group-justifying bias exhibited by Whites, such as the “ingroup overexclusion” effect (Castano, Yzerbyt, Bourguignon, & Seron, 2002; see also Knowles & Peng, 2005). Rather, it would appear to have more in common with system-justifying biases, insofar as members of both advantaged and disadvantaged groups maintain traditional boundaries associated with the hierarchical social order (Jost et al., 2004). Therefore, we hypothesized that ideological differences in racial categorization would be mediated by opposition to equality rather than group-based dominance. This prediction was tested in Study 2.

Finally, we reasoned that U.S. conservatives should be more motivated than U.S. liberals to maintain racial divisions that are part of the traditional American social system, but they should not necessarily be more motivated to maintain or justify aspects of an irrelevant system. Therefore, in Study 3, we activated system justification concerns directly by manipulating the salience of the American (vs. Canadian) social system and examined the relationship between ideology and racial categorization. We hypothesized that the relationship between ideology and biased racial categorization would be stronger when participants were classifying “American” than “Canadian” faces.

Study 1

To test the basic hypothesis that conservatives would be more likely than liberals to categorize a morphed Black/White face as Black, we first examined the relationship between participants' political ideology and the extent to which they categorized a series of racially ambiguous and unambiguous faces (defined objectively in terms of the two parent faces) as either Black or White.

Method

Participants

We recruited 31 participants (18 female; mean age = 37 years) through Amazon's Mechanical Turk and paid them \$.50 for participation. All self-identified as White.

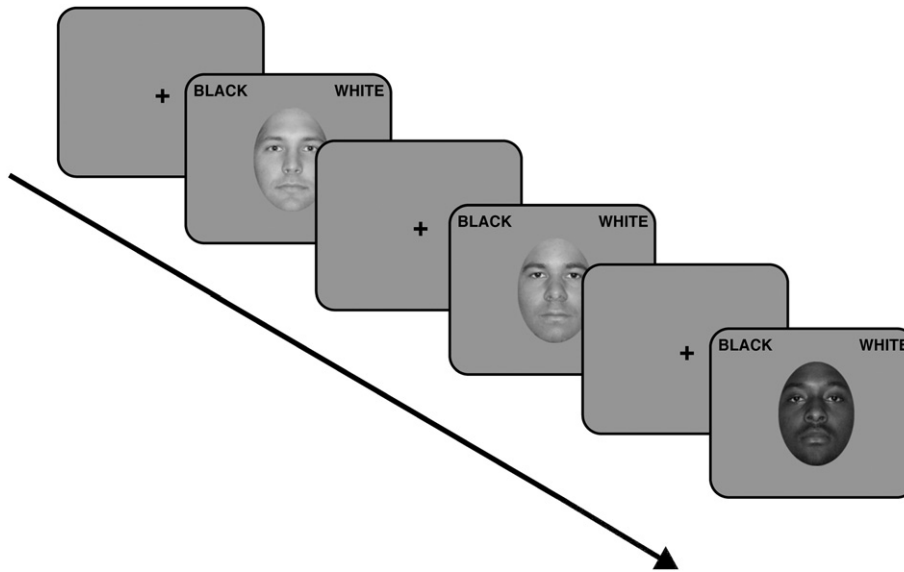


Fig. 1. Three sample trials of the racial categorization task (not shown to scale). Trials representing each of the 11 face-types were presented in random order. Trials began with a fixation cross (1000 ms) followed by the face stimulus, which remained on the screen until participants registered their categorization of the face as “Black” or “White”.

Stimuli

To create each stimulus face, we combined two unique “parent” faces from a large subset of Black and White faces from the Eberhardt Laboratory Face Database (Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006) and varied the degree to which each parent was represented using morphing software (Morph Age Express 4.1, Creaceed Software, 2011). Selected faces were male, had neutral expressions, and were matched for facial structure and facial hair. We presented male faces because previous research indicates that effects of hypodescent are more readily observed with respect to male than female faces (Ho et al., 2011). Face images were created to represent each of 11 subcategories ranging from 100% Black to 0% Black (i.e., 100% White) at 10% increments of racial ambiguity (e.g., 100% Black, 90% Black ... 0% Black). We created the 100% and 0% faces by morphing two Black and two White parent faces, respectively (Langlois & Roggman, 1990). This procedure yielded 110 faces (10 per subcategory). Final images were presented on a gray background, and were cropped and

resized so that the 293 × 400 pixel oval images excluded hairstyles, necks, and ears.

Procedure

Participants were told they would see a series of faces, and that although some faces were of mixed-race heritage, they should use the racial label (Black or White) they felt most closely reflected the persons’ race. Participants viewed the 110 stimulus faces in a randomized, sequential order and were instructed to categorize each face as Black or White as quickly as possible by pressing the “q” or “p” keys with their index fingers (see Fig. 1). Race/key assignment was counterbalanced across participants to control for handedness, and participants were randomly assigned to report demographic information either before or after completing the face-categorization task. Neither handedness nor the order in which participants answered these questions had any bearing on the results, and thus were not included in the following analyses.

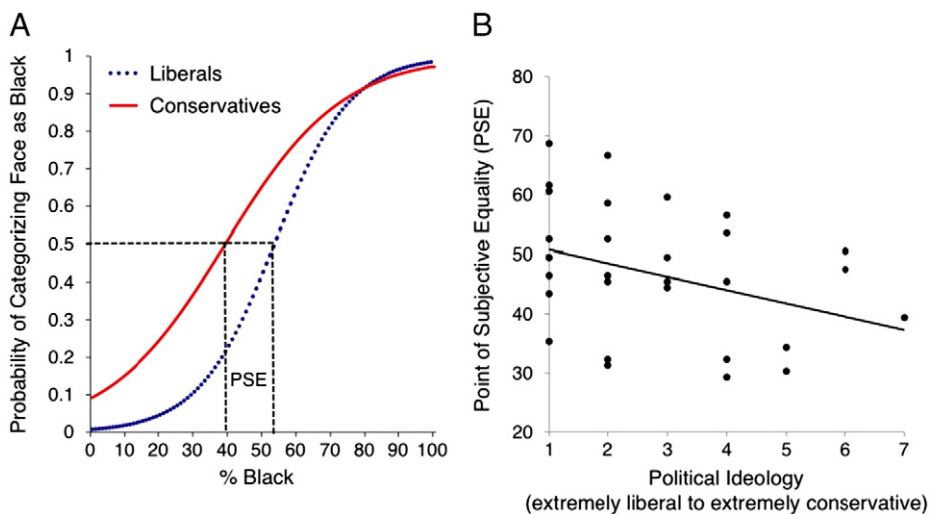


Fig. 2. Panel A represents the estimated probability of categorizing a face as Black as a function of face type and political ideology (“Liberals” = two standard deviations below and “Conservatives” = two standard deviations above the grand mean for ideology), in Study 1. Panel B represents the negative continuous relationship between conservatism (1 = “extremely liberal” and 7 = “extremely conservative”) and the Point of Subjective Equality (PSE), in Study 1.

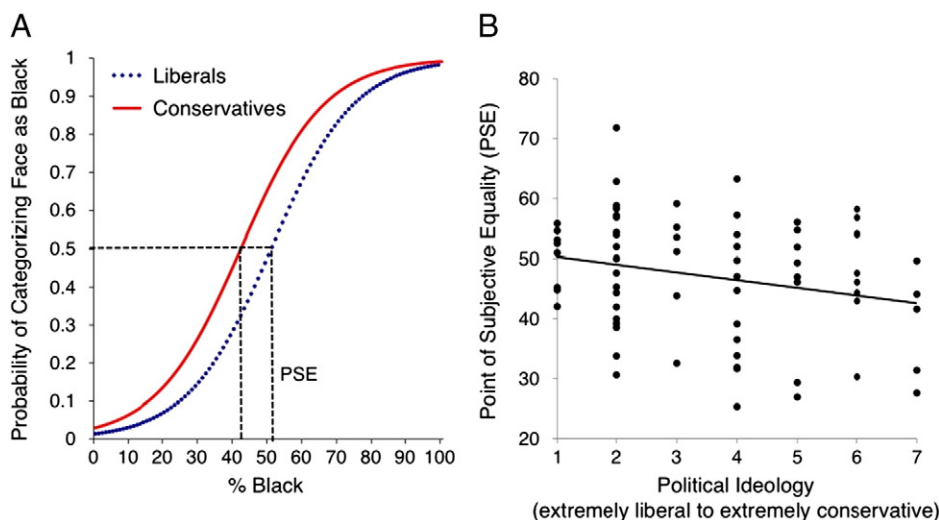


Fig. 3. Panel A represents the estimated probability of categorizing a face as Black as a function of face type and political ideology (“Liberals” = two standard deviations below and “Conservatives” = two standard deviations above the grand mean for ideology) in Study 2. Panel B represents the negative continuous relationship between conservatism (1 = “extremely liberal” and 7 = “extremely conservative”) and the Point of Subjective Equality (PSE) in Study 2.

Political ideology was measured using a 7-point scale (1 = *extremely liberal* to 7 = *extremely conservative*; see Jost, 2006). Participants were slightly liberal on average ($M = 2.84$, $SD = 1.73$, where the midpoint of the scale = 4).

Results and discussion

Evidence of hypodescent

We first examined the data for evidence of hypodescent. To obtain an index of racial categorization threshold, we computed each participants' Point of Subjective Equality (PSE)—the point at which faces are equally likely to be categorized as Black or White.¹ We estimated PSE by fitting each participant's categorization judgments to a cumulative normal function and calculating the point at which the curve crossed 0.5 on the ordinate axis, which represented an equal probability of categorizing a face as Black or White. To the extent that racially ambiguous faces were more often categorized as Black than White, mean PSE should be *lower* than 50 (where 50 represents a 50/50 chance of categorizing a face as Black or White). A *t*-test revealed that mean PSE ($M = 46.63$, $SD = 11.15$) was marginally below 50, $t(30) = -1.68$, $p = .10$, consistent with the phenomenon of hypodescent.

Effect of political ideology

More importantly, we hypothesized that political ideology would be associated with the tendency to categorize racially ambiguous faces as Black. As hypothesized, a regression analysis confirmed that ideology was a significant predictor of PSE scores, $b = -2.24$, $SE = 1.12$, $\beta = -.35$, $t = -2.00$, $p = .05$, such that conservatism was associated with a lower threshold for categorizing racially ambiguous faces as Black (Fig. 2). These results provide preliminary evidence that political ideology is related to race categorization such that political conservatives show greater hypodescent in their categorization of mixed-race faces than political liberals.

¹ We also fit logistic hierarchical regression models that accounted for individual differences in racial categorization in the context of a repeated measures design. The results across all studies were virtually identical; therefore, we report PSE analyses because they are easier to interpret.

Study 2

In Study 2, we explored whether ideological differences in racial categorization were mediated by individual differences in (a) *cognitive style*, such as personal need for structure, and/or (b) the *contents* of ideological attitudes, such as group-based dominance and opposition to equality. To test these hypotheses, we examined the relationship between participants' political ideology and the extent to which they categorized a series of racially ambiguous and unambiguous faces as either Black or White.

Method

Participants and design

We recruited seventy-one participants (50 female; mean age = 35 years) through Amazon's Mechanical Turk and paid them \$.50 for participation. Fifty-four identified as White/Caucasian, six as Biracial/Multiracial [non-Black], five as East Asian, four as Hispanic/Latino, one as South Asian, and one as Native American.²

Stimuli and procedure

The stimuli, procedure, and analysis were nearly identical to Study 1, except that we examined whether individual differences in cognitive style and ideological content mediated the relationship between political ideology and racial categorization. Again, neither handedness

² To investigate the possibility that ideological differences in skin tone perception or perceptual expertise drive the effects of ideology on racial categorization, we included two additional control conditions, in which participants were randomly assigned to see faces presented upright in *color* ($n = 44$) or *inverted* in grayscale ($n = 31$). Thirty-nine of the participants assigned to these conditions were female; 63 identified as White/Caucasian, two as Biracial/Multiracial [non-Black], two as East Asian, three as Hispanic/Latino, three as South Asian, and two as Native American; their mean age was 35. When we regressed racial categorization onto image color (dummy-coded), face orientation (dummy-coded), ideology, and their interactions, only the hypothesized association between ideology and racial categorization emerged ($b = -1.29$, $SE = .60$, $\beta = -.24$, $t = -2.15$, $p = .03$). There were no significant main effects of color ($p = .69$) or inversion ($p = .14$), nor did either of these variables interact significantly with ideology to predict racial categorization ($ps = .65$ and $.20$, respectively). In other words, the relationship between ideology and biased racial categorization did not differ when faces were presented in upright grayscale, inverted grayscale, or upright color. Therefore, it would appear that ideological motives influence racial categorization even after controlling for differences in skin tone perception (color vs. grayscale) and perceptual expertise (with respect to upright vs. inverted faces).

nor order had any bearing on the results, and thus these factors were not included in the following analyses.

Political ideology was measured using a 7-point scale (1 = *extremely liberal* to 7 = *extremely conservative*; see Jost, 2006). Participants were distributed across the ideological spectrum, with a slight liberal skew ($M = 3.54, SD = 1.85$). We measured cognitive style using the Personal Need for Structure scale (Neuberg & Newsom, 1993; sample item: “I don’t like situations that are uncertain”) and ideological content using the Social Dominance Orientation scale (Jost & Thompson, 2000), which includes two factors: *group-based dominance* (sample item: “If certain groups stayed in their place, we would have fewer problems”) and *opposition to equality* (sample item, reverse scored: “We should do what we can to equalize conditions for groups”). The PNS scale consisted of 8 items ($\alpha = .88$), the group-based dominance subscale consisted of 6 items ($\alpha = .91$), and the opposition to equality subscale consisted of 2 items ($\alpha = .82$). Responses were provided on 7-point scales with higher scores indicating greater personal need for structure ($M = 4.62, SD = 1.14$), group-based dominance ($M = 2.47, SD = 1.37$), and opposition to equality ($M = 2.76, SD = 1.73$).

Results and discussion

Evidence of hypodescent and the effect of political ideology

Consistent with the pattern of results in Study 1, a *t*-test revealed that mean PSE ($M = 47.09, SD = 10.05$) was significantly below 50, $t(70) = -2.44, p = .02$. Thus, racially ambiguous faces were more often categorized as Black than White. Furthermore, a regression analysis confirmed that ideology was a significant predictor of PSE scores, $b = -1.29, SE = .64, \beta = -.24, t = -2.02, p < .05$, such that conservatism was associated with a lower threshold for categorizing racially ambiguous faces as Black (see Fig. 3).

Tests of mediation

To examine whether ideological differences in racial categorization were attributable to individual differences in cognitive style and/or ideological content, we conducted a mediation analysis. As a preliminary basis for mediation, we inspected a set of zero-order correlations (see Table 1): ideology was correlated with personal need for structure ($p = .02$), group-based dominance ($p < .01$), and opposition to equality ($p < .01$). However, racial categorization (i.e., PSE) was correlated with opposition to equality ($p < .01$), but not group-based dominance ($p = .15$) or personal need for structure ($p = .27$). Using the SPSS macro to investigate multiple mediators (Preacher & Hayes, 2008), we discovered that opposition to equality mediated the effect of political ideology on racial categorization ($a \times b$ cross product = $-1.45, 99\% CI = -4.08, -.19, p < .01$; see Fig. 4). Neither personal need for structure nor group-based dominance was a significant mediator of this relationship (p 's $> .72$). We also considered an alternative model in which political ideology

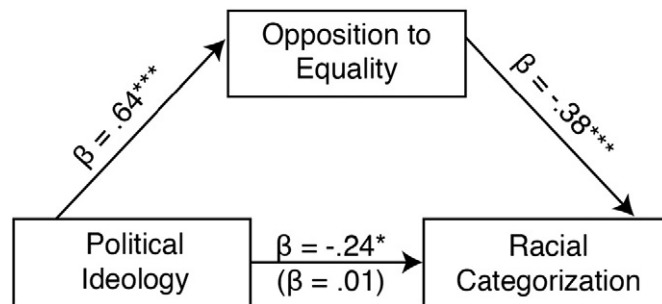


Fig. 4. Mediation model illustrating the effect of Political Ideology on the Point of Subjective Equality (PSE), is mediated by the Opposition to Equality facet of Social Dominance Orientation (in Study 2). Parameter estimates are standardized coefficients. * $p < .05$, *** $p < .001$.

mediated the effect of opposition to equality on racial categorization, and found that it was not statistically significant ($p = .94$).³

Study 2 provided evidence that ideological differences in racial categorization can be attributed to individual differences in ideological contents, rather than differences in cognitive style. Specifically, we found the *opposition to equality* dimension of Social Dominance Orientation mediated the effect of political ideology on racial categorization. To the extent that opposition to equality reflects system justification motives (Jost & Thompson, 2000; Kugler et al., 2010), these results suggest that conservatives may be categorizing mixed-race faces as Black to justify racial divisions that are part of the historical legacy of the social system in the United States. However, because of the correlational nature of this study, we cannot determine whether system justification motives, such as the opposition to equality, play a causal role when it comes to biased racial categorization. The purpose of Study 3 was to activate system justification concerns more directly by manipulating the salience of the American (vs. Canadian) social system.

Study 3

In Study 3, we experimentally manipulated system justification concerns and examined the relationship between political ideology and racial categorization. Specifically, U.S. participants categorized mixed-race faces that were described as either “American” or “Canadian.” We hypothesized that the relationship between political ideology and the application of the principle of hypodescent would be stronger when participants classified “American” as opposed to “Canadian” faces. This is because U.S. conservatives should be more motivated than U.S. liberals to maintain racial divisions that are part of the traditional American social system, but they

Table 1
Correlations among political ideology, PSE, and potential mediators.

Measure	Group-based dominance	Opposition to equality	Personal need for structure	PSE
Political ideology	.46*	.64*	.28*	-.24*
Group-based dominance		.58*	.08	-.17
Opposition to equality			.24*	-.38*
Personal need for structure				-.13

Note. Higher scores on Political Ideology indicate greater conservatism.
* $p < .05$.

³ In general, it is possible that the categorization of racially ambiguous faces as Black reflects an “in-group over-exclusion” effect, whereby individuals set a disproportionately high threshold for categorizing someone as an in-group member (Yzerbyt, Leyens, & Bellour, 1995). Prior research indicates that in-group identification is positively associated with Whites’ over-exclusion of ethnically or racially ambiguous targets (Castano et al., 2002; Knowles & Peng, 2005). As noted above, non-White (as well as White) participants exhibit the phenomenon of hypodescent (Ho et al., 2011), suggesting that in-group over-exclusion cannot fully explain the pattern of results. Nevertheless, we considered the possibility that conservatives’ stronger identification with the group of “Whites” would account for the effect of ideology on race categorization. Within our subsample of White participants ($n = 54$), we found that White identification (measured with 11 items, $\alpha = .92$, from Leach et al., 2008) was indeed correlated with political conservatism, $r = .40, p < .01$, but it was only marginally correlated with PSE, $r = -.22, p = .11$. Furthermore, White identification failed to mediate the relationship between ideology and PSE, $a \times b$ cross product = $-0.40, 95\% CI = -1.16, 0.14, p = .28$. We conclude that ideological differences in White identification cannot entirely explain the relationship between conservatism and racial categorization in this study.

should not necessarily be more motivated to maintain or justify aspects of the Canadian social system.

Method

Participants

We recruited 62 participants (34 identified as female, 27 as male, and one as transgender; mean age = 35 years) through Amazon's Mechanical Turk and paid them \$.50 for participation. All identified themselves as White.

Stimuli and procedure

The stimuli, procedure, and analysis were similar to Study 1, except that half of the faces presented were described as “American,” as (indicated by a blue background) and the other half were “Canadian,” (indicated by a red background). The national identity of the faces was manipulated within subjects. Response hand and order were counterbalanced; neither had any bearing on the results and were therefore excluded from our analyses. Across participants, we systematically varied which stimulus set was described as American (vs. Canadian).

Political ideology was measured using a 7-point scale (1 = extremely liberal to 7 = extremely conservative; see Jost, 2006). Participants were distributed across the ideological spectrum, with a slight liberal skew ($M = 3.16$, $SD = 1.53$).

Results and discussion

Evidence of hypodescent as a function of face nationality

We first examined whether racial categorization differed as a function of face nationality. Based on our finding in Study 2 that opposition to equality mediated the effect of political ideology on racial categorization, we predicted a stronger pattern of hypodescent in the categorization of American than Canadian faces, insofar as the U.S. has a stronger history of justifying Black–White inequality. Consistent with this prediction, a paired t -test revealed that PSE was lower for American faces ($M = 48.09$, $SD = 11.99$) than Canadian faces ($M = 49.54$, $SD = 11.47$), $t(61) = -1.99$, $p = .05$. American participants engaged in greater biased racial categorization when the judgments were relevant (vs. irrelevant) to their own sociopolitical system. However, PSE scores for American and Canadian faces were both statistically indistinguishable from 50 ($ps = .22$ and $.76$, respectively).

Effect of political ideology

Using multivariate regression, we simultaneously regressed PSE for American and Canadian faces onto political ideology. Consistent with the notion that hypodescent serves a system-justifying function, ideology was significantly associated with PSE for American faces, $b = -3.45$, $SE = 1.45$, $t(59) = -2.36$, $p = .02$, but not Canadian faces, $b = -1.56$, $SE = 1.44$, $t(59) = -1.08$, $p = .28$. When we directly compared the strength of the relationship between ideology and PSE for American versus Canadian faces using a t -test that adjusted for the non-independence of correlations (see Howell, 2009, p. 277), we found the relationship between ideology and PSE to be significantly stronger for American than Canadian faces, $t(61) = -2.60$, $p = .01$ (Fig. 5). In other words, political conservatism was associated with a lower threshold for categorizing racially ambiguous faces as Black when it came to American, but not Canadian, faces.

General discussion

According to the principle of hypodescent, racially ambiguous individuals are categorized according to their most socially, subordinated group membership (Banks & Eberhardt, 1998; Halberstadt et al., 2011; Ho et al., 2011; Hollinger, 2003; Peery & Bodenhausen, 2008). In three studies, we found that application of the principle of hypodescent was related to political ideology: Specifically, we found that conservatives were more likely than liberals to categorize a racially ambiguous person as Black than White. The relationship between ideology and racial categorization was mediated by individual differences in opposition to equality—but not personal need for structure or group-based dominance. This pattern of findings suggests that ideological differences in racial categorization may be linked to system justification concerns.

Our findings advance the scientific understanding of individual differences in racial categorization in two important ways. First, they establish a connection between political ideology and racial categorization—even in the context of a non-political task. Second, they suggest that system justification motivation helps to explain why ideology is linked to biased racial categorization. Jost et al. (2003) have characterized political conservatism as a form of motivated social cognition insofar as its adherents are (for psychological reasons) inclined to maintain tradition and justify inequality in the social system (see also Jost and Amodio, 2012). Consistent with this model, we found that conservatives were indeed more likely than liberals to exclude racially ambiguous faces from the category “White.” Moreover, the influence of political ideology on racial categorization

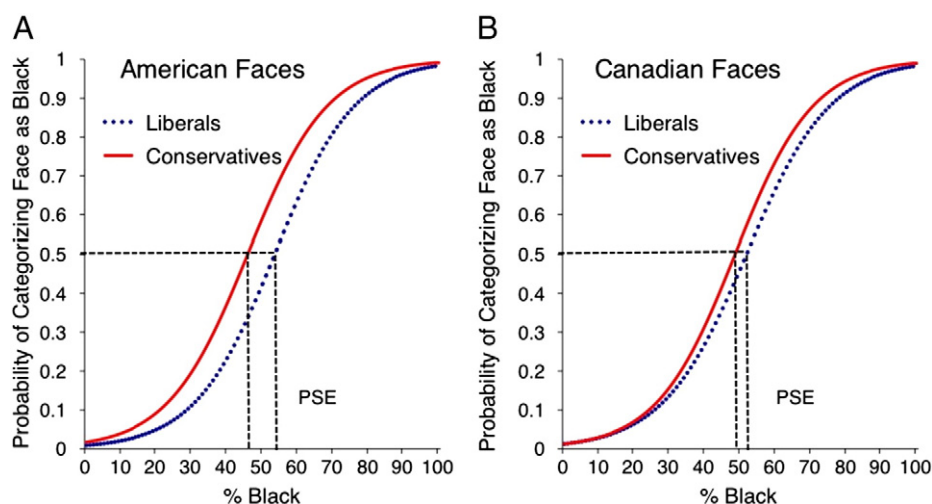


Fig. 5. The estimated probability of categorizing an “American” face (Panel A) and a “Canadian” face (Panel B) as Black as a function of face type and political ideology (“Liberals” = two standard deviations below and “Conservatives” = two standard deviations above the grand mean for ideology), in Study 3.

was mediated by opposition to equality—a component of Social Dominance Orientation that is more strongly linked to system justification (than group justification) motives (Ho et al., 2012; Jost & Thompson, 2000; Kugler et al., 2010). In our final study, we manipulated system justification concerns directly by varying the salience of the American system. We discovered that American conservatives were more likely than American liberals to exclude racially ambiguous individuals from the category “White” when those faces were said to be American, but not when they were said to be Canadian.

It seems reasonable to conclude on the basis of these results that bias in the process of racial categorization may reflect, among other things, the motivation to defend and uphold traditional racial divisions that are part of the historical legacy of the United States. Conservatives exhibit stronger system justification tendencies in general and are presumably more sensitive than liberals to challenges directed at the legitimacy or stability of the social order, with its attendant degree of racial inequality (e.g., Jost et al., 2004, 2008). In the current research program, we have observed that conservatives are also more likely than liberals to categorize racially ambiguous individuals as members of the individuals' most socially subordinate group, and that this categorization tendency is linked to opposition to equality and system justification concerns, rather than a desire for group-based dominance per se (see also Jost & Thompson, 2000). However, there may be contexts in which motives for group-based dominance would mediate the relationship between ideology and race categorization, such as situations of intense zero-sum competition.

We have obtained provisional evidence that system justification motives play a role in mediating the relationship between political ideology and racial categorization. At the same time, there are probably other important factors influencing this relationship. System justification and social identity motives are often aligned for members of advantaged groups (Jost & Thompson, 2000), and there is reason to believe that identity motives also shape social perception and categorization (e.g., see Van Bavel & Cunningham, 2011). Although White identification did not mediate the relationship between ideology and racial categorization (see Footnote 3), it is certainly conceivable that mechanisms associated with in-group over-exclusion (e.g., the development of a fixed in-group prototype, perceptual vigilance with regard to non-prototypical features, and so on) may also play a critical role in the phenomenon we have identified. Future research would do well to investigate the role of other psychological mediators when it comes to the effect of political ideology on biased racial categorization.

From a system justification perspective, it would also be useful to investigate whether Black participants show a similar pattern of racial categorization. Work by Ho et al. (2011) suggests that Black and Asian perceivers do indeed exhibit hypodescent. At the same time, it stands to reason that highly identified African Americans may be motivated to categorize certain category exemplars, such as President Obama, as Black to the extent that such categorization promotes group pride. Furthermore, Chen and Hamilton (2012) point out that racial categorization (e.g., Ratner & Amodio 2013; Van Bavel, Packer, & Cunningham, 2011) is altered when participants are explicitly given a biracial response option. At present we do not know whether ideological differences in racial categorization would occur if participants were given such an option.

The effects of political ideology and anti-egalitarianism on racial categorization that we have observed may have implications for real-world racial disparities. The categorization of biracial individuals as Black may magnify racial discrimination by increasing the number of people who are affected by it. This is an important social issue, given the extent to which individuals who are categorized as Black—and especially those who are seen as possessing more Afrocentric features—suffer a disproportionate degree of discrimination in society (e.g., Bertrand & Mullainathan, 2004; Eberhardt et al., 2006; Hebl, Williams, Sundermann, Kell, & Davies, 2012; Maddox, 2004). Future

research should explore the possibility that ideological differences in racial categorization affect perceptions of physical features and, ultimately, discriminatory behavior.

Furthermore, our results raise an intriguing question about the cognitive and perceptual processes underlying the relationship between political ideology and racial categorization. It is possible that ideology influences racial categorization through subjective judgments of racially ambiguous faces. That is, conservatives may simply be more likely to judge such faces as Black. It is also possible that ideology influences race categorization through more basic differences in selective attention or the perception of visual features of racially ambiguous faces. That is, conservatives may actually “see” ambiguous faces as more Black than liberals. If so, this would suggest that ideology may not only shape social judgments and behavior, but literally how people see the world around them. Future research is needed to understand precisely the roles of visual processing and ideological differences in racial categorization and other forms of judgment.

Conclusion

Social scientists have known for many decades that a person's race exerts a profound impact on his or her position in society. For multi-racial individuals, the consequences of racial categorization are especially significant, insofar as social, political, and economic privileges can be extended (or withheld) on the basis of a single judgment about one's racial or ethnic group membership. In three studies, we have demonstrated that political ideology is associated with how people categorize racially ambiguous faces. This research may help explain how, why, and when multiracial individuals are categorized as members of their most subordinate racial group—a phenomenon that is likely to enhance their vulnerability to prejudice and discrimination and exacerbate existing inequalities.

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References

- Banks, R. R., & Eberhardt, J. L. (1998). Social psychological processes and the legal bases of racial categorization. In J. L. Eberhardt, & S. T. Fiske (Eds.), *Confronting racism: The problem and the response* (pp. 54–75). Thousand Oaks, CA: Sage Publications.
- Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *The American Economic Review*, 94, 991.
- Caruso, E. M., Mead, N. L., & Balcetis, E. (2009). Political partisanship influences perception of biracial candidates' skin tone. *Proceedings of the National Academy of Sciences*, 106, 20168–20173.
- Castano, E., Yzerbyt, V., Bourguignon, D., & Seron, E. (2002). Who may enter? The impact of in-group identification on in-group/out-group categorization. *Journal of Experimental Social Psychology*, 38(3), 315–322.
- Chen, J. M., & Hamilton, D. L. (2012). Natural ambiguities: Racial categorization of multiracial individuals. *Journal of Experimental Social Psychology*, 48, 152–164.
- Chiu, C. Y., Morris, M. W., Hong, Y. Y., & Menon, T. (2000). Motivated cultural cognition: The impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *Journal of Personality and Social Psychology*, 78, 247–259.
- Eberhardt, J. L., Davies, P. G., Purdie-Vaughns, V. J., & Johnson, S. L. (2006). Looking deathworthy: Perceived stereotypicality of Black defendants predicts capital-sentencing outcomes. *Psychological Science*, 17, 383–386.
- Halberstadt, J., Sherman, S. J., & Sherman, J. W. (2011). Why Barack Obama is Black: A cognitive account of hypodescent. *Psychological Science*, 22, 29–33.

- Hebl, M. R., Williams, M. J., Sundermann, J. M., Kell, H. J., & Davies, P. G. (2012). Selectively friending: Racial stereotypicality and social rejection. *Journal of Experimental Social Psychology, 48*, 1329–1335.
- Hirschfeld, L. A. (1995). The inheritability of identity: Children's understanding of the cultural biology of race. *Child Development, 66*, 1418–1437.
- Ho, A. K., Sidanius, J., Levin, D. T., & Banaji, M. R. (2011). Evidence for hypodescent and racial hierarchy in the categorization and perception of biracial individuals. *Journal of Personality and Social Psychology, 100*, 492–506.
- Ho, A. K., Sidanius, J., Pratto, F., Levin, S., Thomsen, L., Kteily, N., et al. (2012). Social dominance orientation: Revisiting the structure and function of a variable predicting social and political attitudes. *Personality and Social Psychology Bulletin, 38*, 583–606.
- Hollinger, D. A. (2003). Amalgamation and hypodescent: The question of ethnoracial mixture in the history of the United States. *The American Historical Review, 108*, 1363–1390.
- Howell, D. C. (2009). *Statistical methods for psychology*. Wadsworth Publishing Company.
- Jost, J. T. (2006). The end of the end of ideology. *American Psychologist, 61*, 651–670.
- Jost, J. T., & Amodio, D. M. (2012). Political ideology as motivated social cognition: Behavioral and neuroscientific evidence. *Motivation and Emotion, 36*, 55–64.
- Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology, 25*, 881–919.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*, 339–375.
- Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science, 3*, 126–136.
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology, 36*, 209–232.
- Knowles, E. D., & Peng, K. (2005). White selves: Conceptualizing and measuring a dominant-group identity. *Journal of Personality and Social Psychology, 89*, 223–243.
- Kugler, M. B., Cooper, J., & Nosek, B. A. (2010). Group-based dominance and opposition to equality correspond to different psychological motives. *Social Justice Research, 23*, 117–155.
- Langlois, J. H., & Roggman, L. (1990). Attractive faces are only average. *Psychological Science, 1*, 115–121.
- Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L., Pennekamp, S. F., Doosje, B., et al. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*, 144.
- Maddox, K. B. (2004). Perspectives on racial phenotypicality bias. *Personality and Social Psychology Review, 8*, 383–401.
- Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simpler structure. *Journal of Personality and Social Psychology, 65*, 113–131.
- Obama, B. (2004). *Dreams from my father: A story of race and inheritance*. New York, NY: Three Rivers Press.
- Peery, D., & Bodenhausen, G. V. (2008). Black + white = black: Hypodescent in reflexive categorization of racially ambiguous faces. *Psychological Science, 19*, 973–977.
- Pew Research Center (2011). *Race II dataset* [Data file and code book]. Available from: <http://www.pewsocialtrends.org/category/datasets>
- Plaks, J. E., Malahy, L. W., Sedlins, M., & Shoda, Y. (2012). Folk beliefs about human genetic variation predict discrete versus continuous racial categorization and evaluative bias. *Social Psychological and Personality Science, 3*, 31–39.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741–763.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879–891.
- Ratner, K. G., & Amodio, D. M. (2013). Seeing “us vs. them”: Minimal group effects on the neural encoding of faces. *Journal of Experimental Social Psychology, 49*, 298–301.
- Schaller, M., Boyd, C., Yohannes, J., & O'Brien, M. (1995). The prejudiced personality revisited: Personal need for structure and formation of erroneous group stereotypes. *Journal of Personality and Social Psychology, 68*, 544–555.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.
- Sidanius, J., Pratto, F., & Bobo, L. (1996). Racism, conservatism, affirmative action, and intellectual sophistication: A matter of principled conservatism or group dominance? *Journal of Personality and Social Psychology, 70*, 476–490.
- U.S. Census Bureau (2011). Overview of race and Hispanic origin: 2010. Retrieved from: <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Van Bavel, J. J., & Cunningham, W. A. (2011). A social neuroscience approach to self and social categorisation: A new look at an old issue. *European Review of Social Psychology, 21*, 237–284.
- Van Bavel, J. J., Packer, D. J., & Cunningham, W. A. (2011). Modulation of the Fusiform Face Area following minimal exposure to motivationally relevant faces: Evidence of in-group enhancement (not out-group disregard). *Journal of Cognitive Neuroscience, 23*, 3343–3354.
- Werner, E. E. (2000). *Through the eyes of innocents: Children witness World War II*. Boulder, CO: Westview.
- Yzerbyt, V. Y., Leyens, J. P., & Bellour, F. (1995). The ingroup overexclusion effect: Identity concerns in decisions about group membership. *European Journal of Social Psychology, 25*, 1–16.