

IRLE

WORKING PAPERS

---

WP 2009-17

Diversity is in the Eye of the Beholder:  
How Majority and Minority Group Members Define  
Diversity

by

Miguel M. Unzueta

UCLA Anderson School of Management

Kevin R. Binning

Stanford University

May 2009



INSTITUTE FOR RESEARCH  
ON LABOR AND EMPLOYMENT  
UNIVERSITY OF CALIFORNIA, LOS ANGELES

Abstract

This paper suggests that the concept of diversity carries different meanings for majority (e.g., men, Whites) and minority (e.g., women, racial minorities) group members. Because diversity is in-group relevant for minority but not majority group members, group-interest may motivate minority but not majority group members to define diversity in ways that maximize benefits for the in-group. One such way is for minorities to define diversity in a relatively complex manner – that is, as entailing both the numerical *and* structural representation of minorities in an organization. Majority group members, on the other hand, since they are not motivated by group-interest, may define diversity as simply entailing minorities' numerical representation. Four studies tested these hypotheses. Theoretical and practical implications are discussed.

## Diversity is in the Eye of the Beholder:

## How Majority and Minority Group Members Define Diversity

When people say that an organization is “diverse,” what exactly do they mean? At a very basic level, they are probably referring to the fact that the organization in question employs a noticeable number of traditionally underrepresented minorities (i.e., racial minorities, women, or both). But beyond this basic (and imprecise) statement, little else is known about the factors that influence perceptions of diversity. Even though much research has uncovered evidence of the potentially beneficial aspects of maintaining and promoting diverse organizational environments (Phillips & Lloyd, 2006; Klein & Harrison, 2008; Gurin, Nagda, & Lopez, 2004; Richard, 2000; Bowen & Bok, 1998), the question of what characteristics lay perceivers pay attention to in determining if an organization can be considered “diverse” has remained largely unexplored (Plaut, 2002). Given the increasing relevance of diversity to organizations (Johnston & Packer, 1987; DeBruin et al., 2003) and to society more generally (Sidanius et al., 2008), it seems critical to explore the antecedents of perceived diversity.

This paper addresses this question by examining how the total number of traditionally underrepresented minorities and their distribution throughout an organization’s hierarchy affects perceptions of organizational diversity. Moreover, we examine if diversity carries different meanings for majority and minority group members. We suspect this might be the case because minority group members, more so than majority group members, may consider diversity to be an issue relevant to interests of the in-group. This asymmetry in in-group relevance may motivate minority group members to define diversity in ways that maximize benefits for the in-group. As such, a group-interest motivation may contribute to minorities conceiving diversity in a more

complex manner than majority group members. Prior to further developing this argument, we first consider two dimensions of perceived diversity.

### *Dimensions of Diversity*

We propose that diversity can be defined as consisting of at least two distinct dimensions: 1) the *numerical representation* of underrepresented minorities in an organization and 2) the *structural representation* of underrepresented minorities in specific levels of the organization's hierarchy.

Numerical representation refers to the total number of traditionally underrepresented minorities (e.g., racial minorities) in a particular organization. For example, an organization that employs 28 minorities would be considered more diverse than an organization that employs only 14 minority employees, assuming that both organizations employ the same number of total employees.

Structural representation, on the other hand, refers not to how many minorities an organization employs, but rather to *where* in the organization's hierarchy such individuals are represented. For example, imagine two, 100-employee organizations (A and B) that both employ 28 minority group members. Imagine further that Organization A has 12 of their 28 minority employees in management positions whereas Organization B has only 4 minority managers. If diversity were being assessed with structural representation in mind, then Organization A would be considered more diverse than Organization B because Organization A has more minorities in the upper levels of the organizational hierarchy. However, if diversity were being assessed only with numerical representation in mind, then Organizations A and B would be considered equally diverse because they both employ 28 minorities.

*Majority and Minority Group Members' Definitions of Diversity*

At the most basic level, diversity requires some sort of numerical representation of traditionally underrepresented minority group members. That is, for an organization to be considered diverse, it must include minority group members somewhere in its ranks. A company that employs only White men, for instance, could not be considered diverse in terms of race or gender. Thus, we expect all perceivers, be they majority or minority group members, to consider numerical representation when making assessments of an organization's perceived level of diversity.

Where we may expect differences to emerge between majority and minority perceivers is in their consideration of structural representation when making diversity assessments. One reason for this is that the consideration of structural representation, relative to numerical representation, may require more psychological effort from the individual. As such, only individuals motivated to define diversity complexly may end up considering structural representation when making diversity assessments.

In support of this idea, past research suggests thinking about structural phenomena is challenging for most people (Lopez, Gurin, & Nagda, 1998; Gilbert, 1998; Kluegel & Bobo, 1993). For example, difficulty in thinking about structural forces can be said to account for people's tendency to make dispositional as opposed to situational attributions for others' behavior (Ross, 1977; Hewstone, 1989; Ross & Nisbett, 1991). In addition, recent research suggests that difficulty in thinking about structure may account for people's tendency to think that racism is a phenomenon rooted in individuals' attitudes as opposed to society's institutions (O'Brien et al., 2008; Unzueta & Lowery, 2008; Adams, Tormala, & O'Brien, 2006). Given the difficulty associated with thinking about structure, perceivers may tend not to consider structural

representation when making diversity assessments - that is, unless they are motivated to define diversity in a manner that maximizes benefits for the in-group.

For minority group members, diversity conceptions might be motivated by the fact that diversity is an issue highly relevant to the in-group. Because diversity is more about the well-being of minorities than about the well-being of majority group members, a concern for the interests of the in-group may motivate minority group members to define diversity in a way that most benefits the in-group. One such way, we argue, is to define diversity as entailing both the numerical and structural representation of minority employees.

Research on the concept of group-interest suggests that individuals tend to develop attitudes and behave in ways that serve the interests of social groups with which they identify (Bobo, 1998; Bobo & Kluegel, 1993; Tuch & Hughes, 1996; Tajfel & Turner, 1979). For example, past work has shown that Black-Americans tend to support affirmative action more so than White-Americans, a pattern consistent with the idea that individuals maintain attitudes that benefit the interests of the in-group (Bobo, 1998; Kinder & Sanders, 1996; see also Lowery et al., 2006). If minorities consider diversity an issue relevant to the in-group, then such individuals may be motivated by group-interest to define diversity in ways that maximize benefits for in-group. Specifically, to be considered diverse, organizations may need to be seen by minority perceivers as not only employing a large number of minority employees (i.e., high numerical representation), but also providing members of the minority in-group with status and access to powerful roles in the organization (i.e., high structural representation).

Conversely, since majority group members probably consider diversity to be an issue primarily relevant to minority out-groups, these individuals may lack motivation to define diversity complexly. Consistent with this idea, recent research suggests that majority group

members tend to express indifference when thinking about minority out-groups and issues pertinent to such groups. For example, Lowery and his colleagues (2006) found that support for affirmative action was more strongly predicted by the manner in which Whites expected such policies to harm the in-group (i.e., fellow Whites), not benefit the out-group (i.e., Blacks) – a finding consistent with the idea that majority group members tend to be indifferent toward the outcomes of minority out-groups. Other research suggests that Whites' contemporary racial attitudes can be better characterized as reflecting racial *apathy*, not racial *antipathy*. That is, White Americans' contemporary racial attitudes have shown increasing levels of indifference toward minority-related issues like racial inequality (Forman, 2004; Forman & Lewis, 2006). Given that diversity is likely considered an issue relevant primarily to minority out-groups, majority group members may lack the motivation to define diversity complexly. As a consequence, majority group members may end up conceiving diversity in a relatively simple manner that primarily entails the numerical representation of minority employees.

In sum, we suggest that the tendency to consider diversity an issue relevant to minority out-groups may motivate minority but not majority group members to conceive diversity as entailing both the numerical and structural representation of minority employees. That is, majority group members may base their assessments of organizational diversity primarily on minority employees' numerical representation, the more basic dimension of diversity. Conversely, since diversity is likely considered to be an in-group relevant issue by minority perceivers, such individuals may be motivated by group-interest to define diversity in a more complex manner that benefits the in-group. Specifically, minority group members may tend to define diversity as entailing both numerical and structural representation.

### *Overview of Studies*

Study 1 tests the assumption that diversity is more in-group relevant for minority group members (i.e., women, racial minorities) than it is for majority group members (i.e., men, Whites). Studies 2, 3, and 4 manipulate the numerical and the structural representation of minority group members in a fictitious organization. Majority and minority perceivers are then asked to assess the organization's level of diversity. Study 2 examines male and female participants' perceptions of gender diversity. Study 3 examines White and Asian participants' perceptions of racial diversity. Moreover, Study 3 examines if perceptions of diversity are related to affirmative action support. Finally, Study 4 directly explores the role of group-interest by assessing Black participants' diversity conceptions as a function of their racial identity centrality (i.e., an individual difference measure of group interest).

### *Study 1*

The purpose of Study 1 was to test the assumption that diversity is more in-group relevant for minority group members (i.e., women, racial minorities) than majority group members (i.e., men, Whites).

### *Method*

#### *Participants*

Participants were 109 students (66 women; 43 men) from a private, West Coast university who participated in a mass testing session, lasting approximately 30 minutes, in exchange for \$10. Mean age was 19.69 years ( $SD = 2.61$ ). The self-identified racial make-up of the sample was as follows: 46 White participants, 34 Asian participants, 14 African-American participants, 11 Latino/a participants, and 4 participants from other or multiple categories. Due to



a small sample size, this latter group of 4 participants was excluded from the analyses reported below.

### *Procedure and Measures*

Participants received the study materials as part of a packet of unrelated surveys. Participants were asked, “When you think about the concept of ‘diversity,’ to what extent do you think about the following groups?” Below this question was a list of six target groups: men, women, Whites, Blacks, Asians, and Latinos. Participants indicated their response for each group on a 7-point scale (1 = *Don’t think about at all*, 7 = *Think about a great deal*).

### Results and Discussion

*Diversity and gender.* To test the hypothesis that women, compared to men, are more closely associated with the concept of diversity, we conducted a 2 (participant gender: female vs. male) x 4 (participant race: White vs. Black vs. Latino vs. Asian) x 2 (target group gender: men vs. women) mixed-model ANOVA, with repeated measures on target group gender. This analysis yielded a significant main effect for target group gender,  $F(3, 97) = 73.30, p < .001, \eta_p^2 = .43$ . Specifically, women were more closely associated with diversity ( $M = 4.25, SD = 1.39$ ) than were men ( $M = 2.82, SD = 1.39$ ). No other effects were significant ( $F_s < 1.0$ ). The lack of additional effects suggests there was general consensus – between male and female participants and among the various racial/ethnic groups – that women, compared to men, are more strongly associated with the concept of diversity. Therefore, this finding is consistent with the argument that diversity is a more in-group relevant issue for women than it is for men.

*Diversity and race.* To test the hypothesis that minority racial groups, compared to Whites, are more strongly associated with diversity, we conducted a 2 (participant gender: female vs. male) x 4 (participant race: White vs. Black vs. Asian vs. Latino/a) x 4 (target group

race: Whites vs. Blacks vs. Asians vs. Latinos) mixed-model ANOVA, with repeated measures on target group race. This analysis yielded a significant main effect and a significant two-way interaction. The main effect was on the target group race factor,  $F(3, 291) = 124.25, p < .001, \eta_p^2 = .56$ . However, this main effect was qualified by a significant Participant Race X Target Group Race interaction,  $F(9, 291) = 4.71, p < .001, \eta_p^2 = .13$ . The cell means for each target group, broken down by participant race, are displayed in Table 1.

Simple effects tests conducted on the marginal means revealed a large number of significant pair-wise comparisons (see subscripts in Table 1). Given the large number of significant pair-wise comparisons, we provide a summary of overall mean patterns here. In general, the mean patterns for the main effect of target group race held across participant groups. Namely, White targets were consistently less associated with diversity ( $M = 2.94, SD = 1.43$ ) than Black ( $M = 5.70, SD = 1.17$ ),  $F(1, 291) = 192.99, p < .001$ , Latino ( $M = 5.75, SD = 1.04$ ),  $F(1, 291) = 179.29, p < .001$ , and Asian targets ( $M = 5.02, SD = 1.17$ ),  $F(1, 291) = 113.15, p < .001$ . Black and Latino targets were seen as equally associated with diversity by all participants, regardless of race,  $F < 1.0, ns$ . We found divergence among participants regarding Asian targets' association to diversity. Specifically, White, Black, and Latino participants tended to perceive Asian targets (*combined*  $M = 4.97, SD = 0.99$ ) as less associated with diversity than Black (*combined*  $M = 5.79, SD = 1.12$ ),  $F_s(1, 291) > 5.86, p's < .02$ , or Latino targets (*combined*  $M = 5.80, SD = 1.13$ ),  $F_s(1, 291) > 14.28, p's < .001$ . Asian participants, on the other hand, tended to see no difference in the association to diversity between Asian ( $M = 5.56, SD = 1.01$ ), and Black targets ( $M = 5.19, SD = 1.15$ ),  $F < 1.0, ns$ , or between Asian and Latino targets ( $M = 5.28, SD = 1.16$ ),  $F < 1.0, ns$ .

In sum, aside from some variation in how participants tended to view out-groups, these results suggest that each minority group tended to regard itself as being highly associated with the concept of diversity. In contrast, all participants, Whites included, generally agreed that Whites are not associated with the concept of diversity. This study provides support for the theoretical assumption that diversity is more of an in-group relevant issue for minority group members (women, racial minorities) than it is for majority group members (men, Whites). The next three studies explore the idea that this asymmetry in in-group relevance creates systematic differences in how minority and majority group members define the concept of diversity.

### Study 2

In Study 2 we manipulate the numerical and the structural representation of female employees in a fictitious organization. We then ask male and female perceivers to assess the organization's level of diversity. Given that Study 1 demonstrated that diversity is more of an in-group relevant issue for women than it is for men, we expected women to conceive diversity more complexly than men. Specifically, we expected women to consider both numerical and structural representation when making their diversity assessment, whereas men should base their diversity assessment primarily on the numerical representation of female employees.

### *Method*

#### *Participants*

One hundred seventy-nine participants (107 women, 72 men) affiliated with a large, public West Coast university completed an online experiment in exchange for \$3. Participants were recruited from a database composed primarily of undergraduates interested in taking part in psychological studies in exchange for monetary compensation. The self-identified racial make-up of the sample was as follows: 74 Asian participants, 5 African-American participants, 60

White participants, 26 Latino/a participants, and 14 multiracial participants (i.e., participants who indicated more than one racial identity). Mean age was 21.90 years ( $SD = 6.77$ ).

*Procedure*

This experiment was described as a survey of company impressions. Participants read the following paragraph describing a purportedly real organization<sup>1</sup>:

Strathmore International is a consulting firm operating in the Los Angeles area. It specializes in the facilitation of export financing, tourism development, and environmental management.

Next, participants read:

Recently, Strathmore conducted an internal audit on the gender diversity of its employees at various levels of the organization.

Below are the results of the audit.

At this point participants were randomly assigned to read 1 of 4 tables describing the numerical and structural representation of minority employees within the organization. The title of each table read as follows: “Number of Female Employees at Various Levels of Strathmore’s Corporate Hierarchy.”

The upper level of the organizational structure was described as including chief officers, the board of directors, and executive managers. The lower level of the organizational structure was described as including clerical, administrative, and maintenance workers. In all tables, 20% of the total workforce was in the upper level of the organizational structure, whereas 80% of the workforce was in the lower level of the organizational structure. Below the table, participants read the following:

Since Strathmore typically recruits individuals like yourself, the management at Strathmore is interested in your perceptions of the company. Using the information provided about Strathmore, please answer the questions below.

At this point participants responded to several items assessing their perceptions of diversity and then completed a demographic questionnaire. Finally, participants were provided with a written debriefing statement.

#### *Manipulated Variables*

*Numerical representation.* Participants were randomly assigned to read that the organization employed either a relatively low (60 out of 240 total employees) or a relatively high (120 out of 240 total employees) number of female employees.

*Structural representation.* Participants who were randomly assigned to the low structural representation condition read that 10% of the female employees were represented at the high level of the corporate hierarchy (6 out of 60 in the low numerical representation condition, 12 out of 120 in the high numerical representation condition). Participants in the high structural representation condition read that 20% of the female employees were represented at the high level of the corporate hierarchy (12 out of 60 in the low numerical representation condition, 24 out of 120 in the high numerical representation condition).

#### *Dependent Variable*

*Perceived diversity.* To assess participants' perceptions of diversity, they were asked to indicate their agreement with the following items on a 1 (strongly disagree) to 7 (strongly agree) scale: "Strathmore has a high level of gender diversity," "I do not consider Strathmore to be a

diverse organization in terms of gender” (reverse scored), and “Strathmore has a low level of gender diversity” (reverse scored;  $\alpha = .93$ ).

### *Results and Discussion*

Participant race had no main or interactive effects when included as a factor in the analysis reported below. As such, we collapsed across this variable.

We hypothesized that perceptions of diversity among majority perceivers (i.e., men) would be primarily based on the numerical representation of female employees. Conversely, we hypothesized that minority perceivers (i.e., women) would define diversity as entailing both numerical and structural representation. To test these hypotheses, we subjected the measure of perceived diversity to a 2 (numerical representation) x 2 (structural representation) x 2 (participant gender) between-subjects analysis of variance (ANOVA). This analysis yielded three significant main effects, two significant two-way interactions, and a marginally significant three-way interaction.

*Main effects.* The main effects showed that men ( $M = 4.17$ ,  $SD = 1.74$ ) perceived higher levels of diversity than women ( $M = 3.58$ ,  $SD = 1.76$ ),  $F(1,171) = 9.81$ ,  $p < .01$ ;  $\eta_p^2 = .05$ . Participants also perceived more diversity when numerical representation was high ( $M = 5.03$ ,  $SD = 1.58$ ) compared to when it was low ( $M = 2.71$ ,  $SD = 1.28$ ),  $F(1, 171) = 151.31$ ,  $p < .001$ ,  $\eta_p^2 = .47$ . The third main effect showed that participants perceived more diversity when structural representation was high ( $M = 4.40$ ,  $SD = 1.92$ ) compared to when it was low ( $M = 3.34$ ,  $SD = 1.53$ ),  $F(1,171) = 31.35$ ,  $p < .001$ ,  $\eta_p^2 = .16$ .

*Two-way interactions.* The 2-way interactions illustrated the following. First, the Participant Gender x Structural Representation interaction revealed that men’s perceptions of diversity, compared to women’s perceptions of diversity, were less affected by female

employees' structural representation,  $F(1, 171) = 5.70, p < .05, \eta_p^2 = .03$ . Specifically, post hoc tests found that when structural representation was high, women ( $M = 4.34, SD = 2.03$ ) and men ( $M = 4.47, SD = 1.80$ ) did not differ in their perceptions of organizational diversity,  $F(1, 171) < 1.0, p > .05$ . However, when structural representation was low, women perceived significantly less diversity ( $M = 2.82, SD = 1.35$ ) than men ( $M = 3.86, SD = 1.63$ ),  $F(1, 171) = 16.16, p < .001$ . These findings are consistent with the hypothesis that majority group members, more so than minority group members, base their assessments of organizational diversity primarily on the numerical representation of minority employees.

There was also a significant Structural Representation x Numerical Representation interaction,  $F(1,171) = 9.63, p < .001, \eta_p^2 = .05$ , such that when numerical representation was low, there was a marginally significant effect on perceived diversity in the low ( $M = 2.47, SD = 1.11$ ) versus the high ( $M = 2.94, SD = 1.42$ ) structural representation conditions,  $F(1, 171) = 3.17, p = .08$ . However, when the numerical representation was high, there was a significant difference between the low ( $M = 4.21, SD = 1.42$ ) and the high ( $M = 5.85, SD = 1.01$ ) structural representation conditions,  $F(1, 171) = 36.97, p < .001$ . This interaction suggests that the combined effect of high structural representation and high numerical representation produced an increase in perceived diversity above and beyond the simple main effects associated with high numerical and structural representation.

*Three-way interaction.* Finally, the aforementioned effects were qualified by a marginally significant three-way interaction,  $F(1,171) = 3.13, p = .08, \eta_p^2 = .02$ . We probed this three-way effect by splitting the file along gender lines and examining the Structural Representation x Numerical Representation interaction for members of each gender (see Figure 1). These analyses revealed that, consistent with our hypotheses, men's perceptions of diversity

were primarily affected by the numerical representation of female employees, whereas women's perceptions of diversity were affected by *both* the numerical and the structural representation of female employees. That is, for men, there was a strong main effect of numerical representation, such that men in the low numerical representation condition perceived significantly less diversity ( $M = 2.96, SD = 1.31$ ) than men in the high numerical representation condition ( $M = 5.37, SD = 1.17$ ),  $F(1, 68) = 70.37, p < .001, \eta_p^2 = .51$ . There was also a significant, though considerably weaker, main effect of structural representation for men,  $F(1,68) = 4.46, p < .05, \eta_p^2 = .06$ . Specifically, men in the low structural representation condition perceived less diversity ( $M = 3.86, SD = 1.63$ ) than men in the high structural representation condition ( $M = 4.47, SD = 1.80$ ). The Structural Representation x Numerical Representation interaction did not attain significance,  $F(1, 68) < 1.0, ns$ .

For women, there were main effects of numerical representation,  $F(1, 103) = 83.86, p < .001, \eta_p^2 = .45$ , and structural representation,  $F(1, 103) = 38.11, p < .001, \eta_p^2 = .27$ . However, in contrast to men, these main effects were qualified by a significant Structural Representation x Numerical Representation interaction,  $F(1, 103) = 14.16, p < .001, \eta_p^2 = .12$ . Specifically, this interaction revealed that when numerical representation was low, women perceived organizations with low structural representation ( $M = 2.16, SD = 0.97$ ) as marginally less diverse than organizations characterized by high structural representation ( $M = 3.47, SD = 1.37$ ),  $F(1, 103) = 3.20, p = .08$ . But when numerical representation was high, there was a significant difference in perceived diversity between the low ( $M = 2.75, SD = 1.46$ ) and the high ( $M = 5.91, SD = 1.01$ ) structural representation conditions,  $F(1, 103) = 45.29, p < .001$ . . A planned contrast in which the high number – high structure condition was compared the other 3



conditions verified that the high number – high structure condition evoked the highest perceived diversity among female participants,  $t(3, 103) = 9.80, p < .01$ .

In sum, Study 2 provides initial evidence for the idea that majority and minority group members define diversity differently. Specifically, male perceivers tended to base their perceptions of gender diversity primarily on the numerical representation of women in the organization whereas female perceivers based their perceptions of gender diversity on both the numerical and the structural representation of women. These findings are consistent with the idea that individuals for whom diversity is an in-group relevant issue (i.e., women) may be motivated to define diversity in a way that most benefits the in-group. One such way would be to define diversity as entailing both the numerical and structural representation of female employees. Conversely, individuals for whom diversity is not in-group relevant (i.e., men) appear to define diversity in relatively simple terms – as primarily entailing numerical representation of minority employees.

### Study 3

Study 3 seeks to conceptually replicate the findings from Study 2 using different majority and minority groups. To this end, we recruited White and Asian participants. Using race as our operationalization of minority and majority status also allows to more directly test the idea that in-group relevance leads to the consideration of structural representation when making diversity assessments. Specifically, because men in Study 2 were asked to evaluate diversity in terms of gender, this necessarily forced male participants to consider diversity with respect to *some* members of their racial in-group (i.e., women of the same race). As such, gender diversity may have been somewhat in-group relevant for male perceivers. We suspect this is the reason why men's perceptions of diversity were sensitive to women's structural representation (although

sensitivity to structural representation was considerably weaker than their sensitivity to numerical representation). In Study 3, we ask participants to evaluate diversity with respect to race. Since racial group membership, unlike gender, is not an identity that cuts across all other identities, we should be better able to isolate the effect of in-group relevance on the consideration of structural representation when making diversity assessments.

Moreover, the null effect of participant race found in Study 2 suggests that sensitivity to structural representation may not generalize across minority group identities. In other words, the fact that participant gender, but not participant race, was associated with the consideration of structural representation in assessing an organizations' level of diversity suggests that sensitivity to structural representation may only occur when perceivers are evaluating diversity with respect to an in-group. This is consistent with our argument that in-group relevance motivates individuals towards complex conceptions of diversity that most benefit the in-group. If we are correct in arguing that in-group relevance motivates individuals to define diversity in a complex manner, then we should find a null effect of gender on perceptions of racial diversity because racial diversity is likely considered an out-group issue for White women in our sample. As such, in Study 3 only individuals who identify with a minority racial group (i.e., Asian men and Asian women) should consider the structural representation of racial minorities when assessing the racial diversity of an organization.

Finally, we were also interested in exploring a potential consequence of perceiving diversity – namely, that the more diverse an organization is perceived to be, the less diversity-promoting policies like affirmative action are supported. If members of majority and minority groups define diversity differently, then members of such groups may withdraw support for affirmative under different conditions. Specifically, majority group members may withdraw

support for affirmative action when minority employees attain high numerical representation. Conversely, minority perceivers may withdraw support for affirmative only when both high numerical and high structural representation are attained.

### *Participants*

Two hundred and nine individuals (114 women, 95 men) completed an online experiment in exchange for a \$5 gift certificate to an online retailer. Participants were recruited from a primarily non-student participant database maintained by a private, West Coast University. Participant age range was 18 to 68 years ( $M = 30.12$ ,  $SD = 10.21$ ). Participant recruitment was limited to only self-identified White and Asian participants. This recruitment strategy yielded 82 Asian and 127 White participants.

### *Procedure*

The procedure used in Study 3 was very similar to that used in Study 2. Participants read the same instructions as in Study 2 except that references to “gender diversity” were replaced simply with more general references to “diversity.” Participants were randomly assigned to read 1 of 4 tables describing the numerical and structural representation of racial minority employees within the organization. The title of the table read as follows: “Number of Minority Employees (Black, Latino, and Asian combined) at Various Levels of Strathmore’s Corporate Hierarchy.”

Like in Study 2, the upper level of the organizational structure was described as including chief officers, the board of directors, and executive managers. The lower level of the organizational structure was described as including clerical, administrative, and maintenance workers. However, Study 3 simplified the tables by changing the way the information about minority representation was presented. First, instead of having 240 employees in the organization like in Study 2, Study 3 only had 100 employees. The end result was that we were able to convey

similar information to that provided in Study 2, but in more straightforward manner. Like in Study 2, participants responded to several items assessing their perceptions of diversity and then completed a demographic questionnaire. Finally, participants were provided with a written debriefing statement.

### *Independent variables*

*Numerical representation.* Participants were randomly assigned to read that the organization employed either a relatively low (14 out of 100 total employees) or a relatively high (28 out of 100 total employees) number of minority employees.

*Structural representation.* Participants who were randomly assigned to the low structural representation condition read that 14.3% of the minority employees were represented at the high level of the corporate hierarchy (2 out of 14 in the low numerical representation condition, 4 out of 28 in the high numerical representation condition). Participants in the high structural representation condition read that 42.9% of the minority employees were represented at the high level of the corporate hierarchy (6 out of 14 in the low numerical representation condition, 12 out of 28 in the high numerical representation condition).

### *Dependent variables*

*Perceived diversity.* Participants' perceptions of diversity were assessed using the following items: "Strathmore has a high level of diversity," "I do not consider Strathmore to be a diverse organization" (reverse scored), and "Strathmore has a low level of diversity" (reverse scored;  $\alpha = .86$ ).

*Diversity policy support.* To assess participants' affirmative action policy support, they were asked to respond to the following items on a 1 (strongly disagree) to 7 (strongly agree) scale: "Strathmore should implement policies that promote diversity," "Strathmore needs to

make an effort to improve its level of diversity,” “Improving diversity should not be a concern at Strathmore” (reverse scored), and “Improving diversity should not be a priority at Strathmore” (reverse scored;  $\alpha = .84$ ).

### *Results and Discussion*

*Perceived diversity.* Participant gender had no main or interactive effects when included in the analysis reported below, providing tacit support for the idea that consideration of structural representation occurs only for individuals for whom diversity is an in-group relevant issue. As such, we collapsed across this variable.

Below we report the results of a 2 (numerical representation: low vs. high) x 2 (structural representation: low vs. high) x 2 (participant race: White vs. Asian) analysis of variance (ANOVA) on perceptions of organizational diversity. This analysis uncovered two main effects, a pair of two-way interactions, and a significant three-way interaction.

The significant main effect of numerical representation revealed that the organization was perceived as being more diverse in the high numerical representation ( $M = 4.36$ ,  $SD = 1.32$ ) than in the low numerical representation condition ( $M = 3.15$ ,  $SD = 1.34$ ),  $F(1, 208) = 34.70$ ,  $p < .05$ ,  $\eta_p^2 = .15$ . There was also a significant main effect of structural representation, such that participants in the high structural representation condition ( $M = 3.88$ ,  $SD = 1.45$ ) perceived more diversity than participants in the low structural representation condition ( $M = 3.61$ ,  $SD = 1.47$ ),  $F(1, 208) = 4.04$ ,  $p < .05$ ,  $\eta_p^2 = .02$ . There was no main effect of participant race.

The interactive effects revealed a significant Numerical Representation x Participant Race interaction,  $F(1, 208) = 8.83$ ,  $p < .01$ ,  $\eta_p^2 = .04$ , and a significant Structural Representation x Participant Race interaction,  $F(1, 208) = 5.58$ ,  $p < .05$ ,  $\eta_p^2 = .03$ . However, these two-way effects were qualified by a significant three-way Structural Representation x Numerical

Representation x Participant Race interaction,  $F(1, 208) = 6.40, p < .05, \eta_p^2 = .03$ . A breakdown of this interaction revealed that it replicated the marginal three-way effect observed in Study 2. To illustrate the pattern of the interaction, we conducted separate 2 (numerical representation: low vs. high) x 2 (structural representation: low vs. high) ANOVAs on White and Asian participants' perceptions of diversity (see Figure 2).

The ANOVA on White participants uncovered only a significant main effect of numerical representation,  $F(1, 126) = 45.41, p < .01, \eta_p^2 = .27$ , such that participants in the high numerical representation condition perceived more diversity ( $M = 4.64, SD = 1.30$ ) than participants in the low numerical representation condition ( $M = 3.03, SD = 1.40$ ). Consistent with the idea that majority group members would tend not to consider structure in their assessments of diversity, neither the main effect of structural representation nor the two-way interaction attained significance.

In contrast, and in line with our hypothesis that minority group members would consider numerical *and* structural representation in their assessments of diversity, the ANOVA on Asian participants uncovered a significant two-way interaction,  $F(1, 81) = 6.44, p < .05, \eta_p^2 = .08$ , such that participants in the low numerical representation condition expressed similarly low levels of perceived diversity regardless of whether the minority employees were represented in the low ( $M = 3.24, SD = 1.13$ ) or the high ( $M = 3.38, SD = 1.41$ ) levels of the corporate structure,  $F(1, 78) < 1.0, ns$ . Participants in the high numerical representation condition, on the other hand, expressed significantly higher perceptions of diversity when the organization's minority employees were represented in the high ( $M = 4.57, SD = .94$ ) as opposed to the low ( $M = 3.11, SD = 1.03$ ) level of the corporate structure,  $F(1, 78) = 10.27, p < .001$ . A planned contrast in which the high number – high structure condition was compared with the other 3 conditions

verified that the high number – high structure condition evoked the highest perceived diversity among Asian participants,  $t(3, 78) = 4.19, p < .01$ .

*Policy support.* To assess participants' diversity policy support, we conducted a 2 (numerical representation: low vs. high) x 2 (structural representation: low vs. high) x 2 (ethnicity: White vs. Asian) ANOVA. This analysis uncovered a significant main effect of numerical representation such that policy support was higher in the low numerical representation ( $M = 4.56, SD = 1.37$ ) than in the high numerical representation condition ( $M = 4.04, SD = 1.20$ ),  $F(1, 206) = 6.67, p < .05, \eta_p^2 = .03$ . No main effect of structural representation or participant race was found. In addition, none of the two-way interactions were significant.

There was, however, a significant Structural Representation x Numerical Representation x Participant Race interaction,  $F(1, 206) = 3.75, p = .05, \eta_p^2 = .02$ . To better understand the pattern of this three-way effect, we conducted separate 2 (numerical representation: low vs. high) x 2 (structural representation: low vs. high) ANOVAs on White and Asian participants' diversity policy support. As described below, the results indicated that diversity policy support followed a pattern that mirrored the pattern of perceptions of diversity, such that higher perceptions of diversity corresponded to lower diversity support and vice versa (see Figure 4).

The ANOVA on White participants uncovered only a significant main effect of numerical representation,  $F(1, 125) = 8.46, p < .01, \eta_p^2 = .07$ , such that participants in the high numerical representation condition expressed lower support for diversity policies ( $M = 3.93, SD = 1.28$ ) than participants in the low numerical representation condition ( $M = 4.64, SD = 1.46$ ). Neither the main effect of structural representation nor the two-way interactions attained significance.

The ANOVA on Asian participants uncovered a significant two-way interaction,  $F(1, 80) = 5.86, p < .05, \eta_p^2 = .07$ , such that participants in the low numerical representation condition

expressed similarly low levels of policy support regardless of whether minority employees were represented in the low ( $M = 4.38, SD = 1.13$ ) or the high ( $M = 4.57, SD = 1.38$ ) levels of the organizational structure,  $F(1, 80) = .26, p > .05$ . Participants in the high numerical representation condition, on the other hand, expressed significantly lower policy support when the organization's minority employees were represented in the high ( $M = 3.74, SD = .79$ ) as opposed to the low ( $M = 4.75, SD = .92$ ) level of the organization's structure,  $F(1, 80) = 12.28, p < .01$ . A planned contrast in which the high number – high structure condition was compared to the other 3 conditions verified that the high number – high structure condition evoked the lowest policy support levels among Asian participants  $t(3, 125) = 2.90, p < .05$ .

*Mediation analysis.* To test the idea that the relationship between the three-way, Structural Representation x Numerical Representation x Participant Race interaction on policy support was mediated by perceptions of diversity, we conducted a mediation analysis in accordance with the procedure recommended by Baron and Kinney (1986). First, we regressed diversity policy support on the main effects, the two-way interactions, and the three-way interaction,  $B = 1.42, SE B = .74, \beta = .41, p = .05, R^2 = .08$ . Second, we regressed perceived diversity on the main effects, the two-way interactions, and the three-way interaction,  $B = -1.85, SE B = .73, \beta = -.49, p < .05, R^2 = .26$ . Third, we regressed diversity policy support on perceived diversity,  $B = -.53, SE B = .05, \beta = -.59, p < .01, R^2 = .59$ . Finally, we regressed diversity policy support on the main effects, the two-way interactions, and the three-way interaction while controlling for perceived diversity. This analysis found that perceived diversity did indeed mediate the three-way effect on diversity policy support, as the previously significant relationship between the three-way interaction and diversity policy support became non-



significant once perceived diversity was controlled,  $B = -.37$ ,  $SE B = .63$ ,  $\beta = .11$ ,  $p = .60$ . A Sobel test confirmed that the attenuation of this relationship was significant ( $z = 2.64$ ,  $p < .05$ ).

In sum, the results of Study 3 conceptually replicated and extended the results of Study 2. Specifically, Study 3 found that White participants' perceptions of diversity were primarily driven by minority employees' numerical representation. Asian participants, on the other hand, seemed to weigh both numerical and structural representation when assessing an organization's level of perceived diversity. These findings are consistent with the idea that individuals for whom diversity is in-group relevant define diversity in a way that most benefits the in-group – that is, in a relatively more complex manner that gives consideration to both the numerical and the structural representation of minorities when making assessments of organizational diversity.

Study 3 also suggests that perceptions of diversity are negatively related to diversity policy (i.e., affirmative action) support. Specifically, it appears that seeing an organization as diverse may signal to perceivers that it is acceptable to discontinue the use of such policies. However, since members of majority and minority groups tend to define diversity differently, support for affirmative action tends to be lower among majority group members when underrepresented employees are depicted as having high numerical representation; minority group members, on the other hand, tend to withdraw support for affirmative action only when underrepresented employees are depicted as having attained both high numerical *and* high structural representation.

#### Study 4

We argue that group-interest motivates individuals to define diversity in a way that most benefits the in-group. In Studies 2 and 3 we showed that minorities, relative to majorities, tend to define diversity more complexly as entailing both numerical and structural representation. If,

in fact, group-interest underpins minority group members' conceptions of diversity, then minority group members who are unidentified with their in-group (and thus are low in group-interest) should perceive diversity like majority group members – i.e., as primarily entailing the numerical representation of minority employees. As such, when it comes to defining diversity, identification with one's group may be a critical moderator of the diversity dimensions that minority perceivers account for when making assessments of diversity.

### *Participants*

Sixty-nine African-American participants (53 women, 16 men) completed an online experiment in exchange for a \$5 gift certificate to an online retailer. Participants were recruited from a primarily non-student participant database maintained at a large, public West Coast University. The age range for participants was 18 to 68 years ( $M = 33.17$ ,  $SD = 11.10$ ).

### *Procedure*

To measure group-interest, participants were asked to complete a racial identity centrality scale (Sellers et al., 1997). Next, participants were randomly assigned to read 1 of 4 tables describing the numerical and structural representation of Black employees within an organization. Participants were told that, due to organization's location in the Midwestern United States, the organization was composed primarily of Black and White employees. The title of the table read as follows: "Number of Black Employees at Various Levels of Strathmore's Corporate Hierarchy."

Participants then responded to several items assessing their perceptions of diversity and then completed a demographic questionnaire. Finally, participants were provided with a written debriefing statement.

*Independent variables*

*Racial identification.* Racial identification was assessed using Sellers and his colleagues' (1997) racial identity centrality scale. This scale is a measure of the extent to which a person defines himself or herself with regard to race. This scale has been used by previous research as an individual difference measure of group-interest (Lowery et al., 2006; Elizondo & Crosby, 2004). As such, the higher a person scores on this scale, the more group-interested he or she is thought to be ( $\alpha = .80$ ).

*Numerical representation.* Participants were randomly assigned to read that the organization employed either a relatively low (14 out of 100 total employees) or a relatively high (28 out of 100 total employees) number of Black employees.

*Structural representation.* Participants who were randomly assigned to the low structural representation condition read that 14.3% of the Black employees were represented at the high level of the corporate hierarchy (2 out of 14 in the low numerical representation condition, 4 out of 28 in the high numerical representation condition). Participants in the high structural representation condition read that 42.9% of the Black employees were represented at the high level of the corporate hierarchy (6 out of 14 in the low numerical representation condition, 12 out of 28 in the high numerical representation condition).

*Dependent variable*

*Perceived diversity.* Participants' perceptions of diversity were assessed using the same scale used in Studies 2 and 3 ( $\alpha = .86$ ).

*Results and Discussion*

Participant gender had no main or interactive effects when included in the analysis reported below. Like Study 3, this null effect is consistent with the idea that the consideration of

structural representation when making diversity assessments only when individuals are evaluation diversity with respect to the in-group. As such, we collapsed across this variable.

Since racial identification is a continuous variable, we used regression analysis in Study 4. Below we report the results of a 2 (racial identification: low = -1 SD below the mean, high = +1 SD above the mean) x 2 (numerical representation: low = 0, high = 1) x 2 (structural representation: low = 0, high = 1) regression analysis on perceptions of organizational diversity. This analysis uncovered significant main effects of numerical representation and racial identification, a significant Racial Identification x Numerical Representation interaction, and, more importantly, a significant three-way interaction (see Table 2).

To decompose the 3-way interaction, we conducted simple slope analyses in accordance with the procedures recommended by Aiken and West (1991). Specifically, we assessed the effect of structural representation at both the high and low numerical representation conditions and at high and low levels of racial identification (see Figure 1). In support of the idea that group-interested minorities (i.e., those high in racial identity) account for both structural and numerical representation when making diversity assessments, we found that the slope of structural representation was significantly different from zero only in the high numerical representation condition among participants high in racial identity,  $B = 1.37$ ,  $SE B = .62$ ,  $t(61) = 2.21$ ,  $p < .05$ . None of the other slopes for structural representation attained significance<sup>2</sup>. As such, Study 4 provides direct evidence for the idea that group-interest seems to motivate individuals to define diversity as entailing both structural and numerical representation. Individuals who lack group-interest, like majority group members in Studies 2 and 3, seem to define diversity more simply – that is, as primarily entailing the numerical representation of minority employees.

## General Discussion

We proposed that diversity can be defined as consisting of at least two distinct dimensions: 1) the *numerical representation* of underrepresented minorities in an organization and 2) the *structural representation* of underrepresented minorities in specific levels of the organization's hierarchy. Because the structural dimension may be the more difficult dimension of diversity for individuals to consider, only those for whom diversity is an in-group relevant issue may be motivated by group-interest to define diversity as entailing both numerical and structural representation. Across four studies we found evidence supporting this idea.

Specifically, Study 1 found that women and racial minorities were more associated with diversity than men and Whites. As such, Study 1 suggests that, in fact, diversity is more in-group relevant for minority than majority group members. Moreover, Studies 2 and 3 found that female and Asian participants – individuals for whom diversity is an in-group relevant issue – considered both numerical and structural representation when making their assessments of diversity. However, members of these groups did not *always* pay attention to structure; they only accounted for structure when they were assessing diversity with respect to their in-group (i.e., women assessing diversity with respect to gender and Asian participants assessing diversity with respect to race). Conversely, male and White participants, individuals for whom diversity is less in-group relevant, based their diversity assessments primarily on the numerical representation of minority employees.

Study 4 provided direct evidence for the idea that group-interest serves as motivation for minority group members to consider structural representation when making diversity assessments. Specifically, this experiment found that only African-Americans who were high in racial identification (i.e., highly group-interested individuals) considered the structural

representation of Black employees when making diversity assessments. Conversely, African-American participants who were low in racial identity (i.e., those who lack the group-interest motivation) based their diversity assessments primarily on numerical representation. As such, the reported experiments imply that individuals who are motivated to protect their in-group define diversity in a relatively complex manner – that is, as entailing both numerical and structural representation. Conversely, individuals for whom diversity is not in-group relevant or who are low in group-interest seem to define diversity more simply – that is, as primarily entailing the numerical representation of traditionally underrepresented minorities.

### *Social Implications*

The results of this paper may shed light on the ongoing debate over the continued use of gender- and race-conscious admissions and hiring plans. Study 3 suggests that majority group members may see diversity goals as having been achieved when a high numerical representation of underrepresented minorities has been attained. Minority group members, on the other hand, may see diversity goals as having been achieved only when both high numerical and high structural representation have been attained. This difference not only illustrates how more complex diversity conceptions can translate into desires to benefit the in-group; it may also provide an explanation for why opponents and proponents of affirmative action disagree over the continued use of such policies.

Opponents of affirmative action tend to be members of majority groups (Bell, Harrison, & McLaughlin, 1997; Harrison et al., 2006; Kinder & Sanders, 1996; Konrad & Hartmann, 2001; Kravitz & Platania, 1993; Tougas & Beaton, 1993). These individuals may see such policies as unnecessary because, as the present experiments suggest, they may be paying attention to the ever-increasing numerical representation of racial minorities and women in

previously homogenous contexts (Holzer & Neumark, 2006). On the other hand, affirmative action proponents, who tend to be members of minority groups, may be unwilling to withdraw support for affirmative action because they see that much progress remains to be made with respect to having minority group members attain structural representation in a variety of organizations (Borja, 2004; Dugger, 1992; Fernandez, 1998; Narasaki, 1995; Wang & Wu, 1996). In this manner, majority and minority group members' differential sensitivity to structural representation may account for why majority and minority group members continue to disagree over the continued use of affirmative action policies in the present-day (Bell et al., 1997; Bobo, 1998; Tuch & Hughes, 1996).

#### *Future Directions*

The argument advanced in this paper is that group-interest motivates minority group members to define diversity as entailing both numerical and structural representation. However, intriguing questions remain as to the factors that shape how majority group members define diversity. One possibility is that diversity perceptions are a legitimizing ideology that helps majority group members legitimize the structural status quo (Sidanius & Pratto, 1999). As such, majority group members might actually be motivated not to notice minorities' inequitable structural representation when making diversity assessments. In this manner, thoughts that the status quo is illegitimate might be mitigated. To test this hypothesis future research should explore if the consideration of structural representation by majority group members is moderated by individual differences in social dominance orientation.

It may also be that majority group members are motivated to not consider structural representation because considering this dimension of diversity may force them to realize that they belong to groups that tend to be overrepresented on this dimension. As such, an awareness

of structural representation may represent a threat to the ego of majority group members by forcing these individuals to realize that they are the beneficiaries of potentially undeserved group privilege (Lowery, Knowles, & Unzueta, 2007). In support of this idea, recent research suggests that the motivation to maintain a positive view of self motivates White Americans to conceive of racism as a concept devoid of institutional (i.e., structural) mechanisms (Unzueta & Lowery, 2008). This research further suggests that conceiving racism in institutional terms is positively related to White privilege awareness. As such, members of majority groups may avoid the consideration of structural representation when making diversity assessments in order to keep thoughts of privilege at bay. Future research should examine if the overlooking of structural representations is motivated by self-image concerns by exposing participants to a self-affirmation treatment prior to making diversity assessments (Cohen, Aronson, & Steele, 2000; Sherman & Cohen, 2006; Sherman, Nelson, & Steele, 2000).

Future research should also explore situations in which minority employees may be structurally and numerically represented but only in one branch of an organization. For example, would minority perceivers consider as diverse an organization that has all of its minority employees represented numerically and structurally, but only in the human resources department? And what about majority group members? Are their perceptions of diversity sensitive to this kind of segregation? Such a study might provide further insights into what structural representation means to minority and majority perceivers.

Finally, the present findings are consistent with research suggesting that minority group members are attuned to the status and evaluation of their subgroups. Specifically, research on identity safety (Purdie-Vaughns et al., 2008) and subgroup respect (Huo & Molina, 2006; Huo, Molina, Sawahata, & Deang, 2005) suggest that contexts in which minority group members feel



like they are valued by the group are conducive to improving the social and psychological outcomes of minority group members. Although many previous researchers have suggested that simply increasing the number of minorities in a particular context will make minorities feel more included and presumably reduce feelings of threat (e.g., Lord & Saenz, 1985; Sekaquaptewa & Thompson, 2003), the present data suggest that simply increasing the numerical representation of minority group members may be insufficient to convey to minorities that they are actually valued in the relevant context. This raises the possibility that the structural representation of minorities in an organization might covary with minorities' sense of identity safety and perceived subgroup respect in a given context.

### *Conclusion*

To our knowledge, very little previous research has examined the antecedents of perceived diversity. The reported studies provide evidence that group-interest affects the dimensions of diversity that individuals account for when making diversity assessments. Specifically, majority group members and minorities who are low in racial identity tend to overlook the structural representation of underrepresented minorities and instead primarily focus on minorities' numerical representation when making assessments of organizational diversity. Conversely, minority group members, in general, and those who are high in racial identification, in particular, seem to account for both the numerical and structural representation of underrepresented employees when assessing an organization's level of diversity. In this manner it seems that diversity is in the eye of the beholder.

## References

- Adams, G., Tormala, T. T., & O'Brien, L. T. (2006). The effect of self-affirmation on perceptions of racism. *Journal of Experimental Social Psychology, 42*, 616-626.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications, Inc.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bell, M. P., Harrison, D. A., & McLaughlin, M. E. (1997). Asian American attitudes toward affirmative action in employment. *Journal of Applied Behavioral Science, 33*, 356-377.
- Bobo, L. (1998). Race, interests, and beliefs about affirmative action. *American Behavioral Scientist, 41*, 985-1003.
- Bobo, L., & Kluegel, J. R. (1993). Opposition to race-targeting: Self-interest, stratification ideology, or racial attitudes? *American Sociological Review, 58*, 443-464.
- Borja, R. (2004, June 25, 2004). Breaking the glass ceiling: Asian-American workplace issues. *The Washington Post*.
- Bowen, W. G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Princeton, NJ: Princeton University Press.
- Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When beliefs yield to evidence: Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin, 26*, 1151-1164.

- DeBruin, D. W., Maynard, D. E., Mach, D., & Silver, J. S. (2003). Brief for amici curiae 65 leading American businesses in support of respondents.
- Dugger, C. W. (1992, February 29, 2008). U.S. study says Asian-Americans face widespread discrimination. *The New York Times*.
- Elizondo, E., & Crosby, F. J. (2004). Attitudes toward affirmative action as a function of the strength of ethnic identity among Latino college students. *Journal of Applied Social Psychology, 34*, 1773-1796.
- Fernandez, M. (1998). Asian Indian Americans in the Bay Area and the glass ceiling. *Sociological Perspectives, 41*, 119-149.
- Forman, T. A. (2004). Color-blind racism and racial indifference: The role of racial apathy in facilitating enduring inequalities. In M. Krysan & A. E. Lewis (Eds.), *The changing terrain of race and ethnicity* (pp. 43-66). New York: Russell Sage Foundation.
- Forman, T. A., & Lewis, A. E. (2006). Racial apathy and hurricane Katrina. *Du Bois Review, 3*, 175-202.
- Gilbert, D. T. (1998). Ordinary personology. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology, Vols. 1 and 2* (4th ed., pp. 89-150). New York: McGraw-Hill.
- Gurin, P., Nagda, B. A., & Lopez, G. E. (2004). The benefits of diversity in education for democratic citizenship. *Journal of Social Issues, 60*, 17-34.
- Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Summary and meta-analysis of 35 years of research. *Journal of Applied Psychology, 91*, 1013-1036.

- Hewstone, M. (1989). *Causal attribution: From cognitive processes to collective beliefs*. Oxford: Blackwell.
- Holzer, H. J., & Neumark, D. (2006). Affirmative action: What do we know? *Journal of Policy Analysis and Management*, 25, 463-490.
- Huo, Y. J., & Molina, L. E. (2006). Is pluralism a viable model of diversity? The benefits and limits of subgroup respect. *Group Processes and Intergroup Relations*, 9, 359 - 376.
- Huo, Y. J., Molina, L. E., Sawahata, R., & Deang, J. M. (2005). Leadership and the management of conflicts in diverse groups: Why acknowledging versus neglecting subgroup identity matters. *European Journal of Social Psychology*, 35, 237-254.
- Johnston, W. B., & Packer, A. E. (1987). *Workforce 2000: Work and workers for the 21st century*. Indianapolis, IN: Hudson Institute.
- Kinder, D. R., & Sanders, L. M. (1996). *Divided by color: Racial politics and democratic ideals*. Chicago, Ill: The University of Chicago Press.
- Klein, K. J., & Harrison, D. A. (2008). On the diversity of diversity: Tidy logic, messier realities. *Academy of Management Perspectives*, 21, 26-33.
- Kluegel, J. R., & Bobo, L. (1993). Dimensions of Whites' beliefs about the Black-White socio-economic gap. In P. M. Sniderman, P. E. Tetlock & E. G. Carmines (Eds.), *Prejudice, politics, and the American dilemma*. Stanford, CA: Stanford University Press.
- Konrad, A. M., & Hartmann, L. (2001). Gender differences in attitudes toward affirmative action programs in Australia: Effects of beliefs, interests, and attitudes toward women. *Sex Roles*, 45, 415-432.
- Kravitz, D. A., & Platania, J. (1993). Attitudes and beliefs about affirmative action: Effects of target and of respondent sex and ethnicity. *Journal of Applied Psychology*, 78, 928-938.

- Lopez, G. E., Gurin, P., & Nagda, B. A. (1998). Education and understanding structural causes for group inequalities. *Political Psychology, 19*, 305-329.
- Lord, C. G., & Saenz, D. S. (1985). Memory deficits and memory surfeits: Differential cognitive consequences of tokenism for tokens and observers. *Journal of Personality and Social Psychology, 49*, 918-926.
- Lowery, B. S., Knowles, E. D., & Unzueta, M. M. (2007). Framing inequity safely: Whites' motivated perceptions of racial privilege. *Personality and Social Psychology Bulletin, 33*, 1237-1250.
- Lowery, B. S., Unzueta, M. M., Knowles, E. D., & Goff, P. A. (2006). Concern for the in-group and opposition to affirmative action.
- Narasaki, K. K. (1995). "Separate but equal?" Discrimination and the need for affirmative action legislation. In *Perspective on Affirmative Action* (pp. 5-8). Los Angeles, CA: Asian Pacific American Public Policy Institute.
- O'Brien, L. T., Blodorn, A., Alsbrooks, A., Dube, R., Adams, G., & Nelson, J. C. (2008). Understanding White Americans' perceptions of racism in hurricane Katrina-related events: Unpublished manuscript, Tulane University.
- Phillips, K. W., & Lloyd, D. L. (2006). When surface and deep-level diversity collide: The effects on dissenting group members. *Organizational Behavior and Human Decision Processes, 99*, 143-160.
- Plaut, V. C. (2002). Cultural models of diversity in America: The psychology of difference and inclusion. In R. A. Shweder, M. Minow & H. R. Markus (Eds.), *Engaging cultural differences: The multicultural challenge in liberal democracies* (pp. 365-395). New York:: Russell Sage Foundation.

- Purdie-Vaughns, V., Steele, C. M., Davies, P. G., Ditlmann, R., & Crosby, J. R. (2008). Social identity contingencies : How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology*, *95*, 308-318.
- Richard, O. C. (2000). Racial diversity, business strategy, and firm performance: A resource-based view. *Academy of Management Journal*, *43*, 167-177.
- Ross, L. D. (1977). The intuitive psychology and its shortcomings. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 173-220). New York: Academic Press.
- Ross, L. D., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. Philadelphia: Temple University Press.
- Sekaquaptewa, D., & Thompson, M. (2003). Solo status, stereotype threat, and performance expectancies: Their effects on women's performance. *Journal of Experimental Social Psychology*, *39*, 68-74.
- Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology*, *73*, 805-815.
- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 38, pp. 183-242). San Diego, CA: Academic Press.
- Sherman, D. K., Nelson, L. D., & Steele, C. M. (2000). Do messages about health risks threaten the self? Increasing the acceptance of threatening health messages via self-affirmation. *Personality and Social Psychology Bulletin*, *26*, 1046-1058.

- Sidanius, J., Levin, S., van Laar, C., & Sears, D. O. (2008). *The diversity challenge: Social identity and intergroup relations on the college campus*. New York: Russell Sage Foundation.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.
- 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.
- Tougas, F., & Beaton, A. M. (1993). Affirmative action in the work place: For better or for worse. *Applied psychology: An international review*, 42, 253-264.
- Tuch, S. A., & Hughes, M. (1996). Whites' racial policy attitudes. *Social Science Quarterly*, 77, 723-745.
- Unzueta, M. M., & Lowery, B. S. (2008). Defining racism safely: The role of self-image maintenance on White Americans' conceptions of racism. *Journal of Experimental Social Psychology*, 44, 1491-1497.
- Wang, T. H., & Wu, F. H. (1996). Beyond the model minority myth. In G. E. Curry (Ed.), *The affirmative action debate*. Cambridge, MA: Perseus Books.

## Footnotes

<sup>1</sup> Company descriptions in Studies 2, 3, and 4 are loosely based on materials used by Lowery et al. (2006).

<sup>2</sup> The slope of structural representation was not significantly different from zero in the high numerical representation condition among participants who were low in racial identity,  $B = -.36$ ,  $SE B = .66$ ,  $t(61) = -.55$ ,  $p > .05$ . In the low numerical representation condition, the slope of structural representation was not significantly different from zero among participants who were low in racial identity,  $B = .62$ ,  $SE B = .50$ ,  $t(61) = 1.24$ ,  $p > .05$ , or high in racial identity,  $B = -.32$ ,  $SE B = .53$ ,  $t(61) = -.60$ ,  $p > .05$ .



Table 1

*Means and Standard Deviations of the Extent to Which Target Groups are Relevant to the Concept of Diversity, Separated by Participant Race*

		Target racial groups				
		Whites	Blacks	Latinos	Asians	
Participant race	White	<i>M</i>	2.99 <sub>a,x</sub>	5.69 <sub>b</sub>	5.69 <sub>b</sub>	5.13 <sub>c</sub>
		<i>SD</i>	(1.41)	(1.15)	(1.16)	(1.01)
	Black	<i>M</i>	2.10 <sub>a,z</sub>	6.25 <sub>b,x</sub>	6.00 <sub>b,x</sub>	4.65 <sub>c,x</sub>
		<i>SD</i>	(1.35)	(1.10)	(1.11)	(0.97)
	Latino	<i>M</i>	3.38 <sub>a,x</sub>	5.68 <sub>b</sub>	6.03 <sub>b</sub>	4.77 <sub>c,x</sub>
		<i>SD</i>	(1.33)	(1.08)	(1.09)	(0.96)
	Asian	<i>M</i>	3.28 <sub>a,x</sub>	5.19 <sub>b,y</sub>	5.28 <sub>b,y</sub>	5.56 <sub>b,y</sub>
		<i>SD</i>	(1.41)	(1.15)	(1.16)	(1.01)

Note: Across rows, means with different subscripts (a, b, c) are significantly different from one another ( $p < .05$ ). Within columns, means with different subscripts (x, y, z) are significantly different from one another.

Table 2

*Study 4 Results*

	B	S.E.	$\beta$	<i>t</i> -value	<i>p</i> -value
Constant	2.11	.27		7.92	.00
Structural Representation	.15	.38	.05	.38	.706
Numerical Representation	1.24	.37	.46	3.36	.001
Racial Identity	.45	.21	.38	2.26	.031
Structural Representation x Numerical Representation	.36	.55	.11	.65	.517
Racial Identity x Numerical Representation	-1.07	.33	-.52	-3.27	.002
Racial Identity x Structural Representation	-.42	.30	-.22	-1.39	.171
Structural Representation x Numerical Representation x Racial Identity	1.18	.54	.33	2.19	.032

Dependent Variable: Perceived Diversity

Figure 1. Study 2 perceived diversity means as a function of high and low structural and numerical representation conditions for female and male participants.

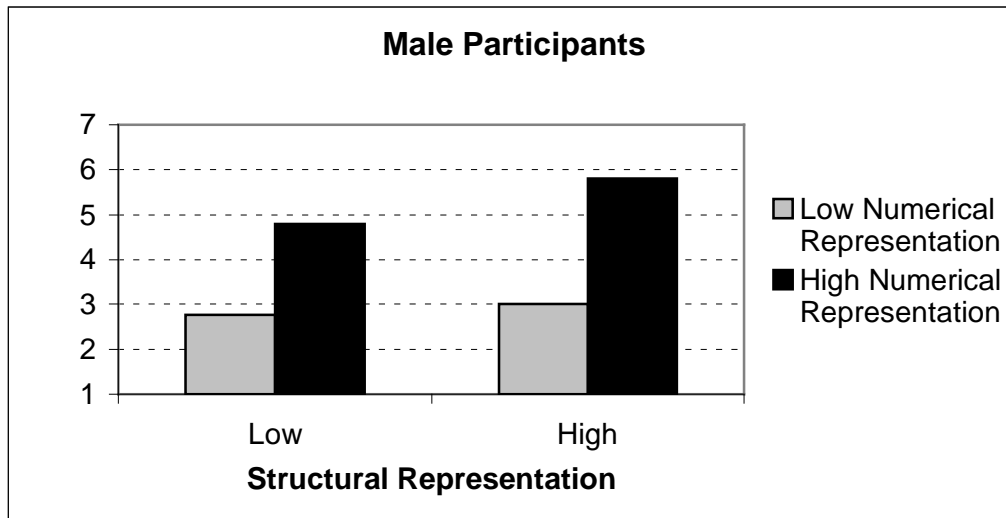
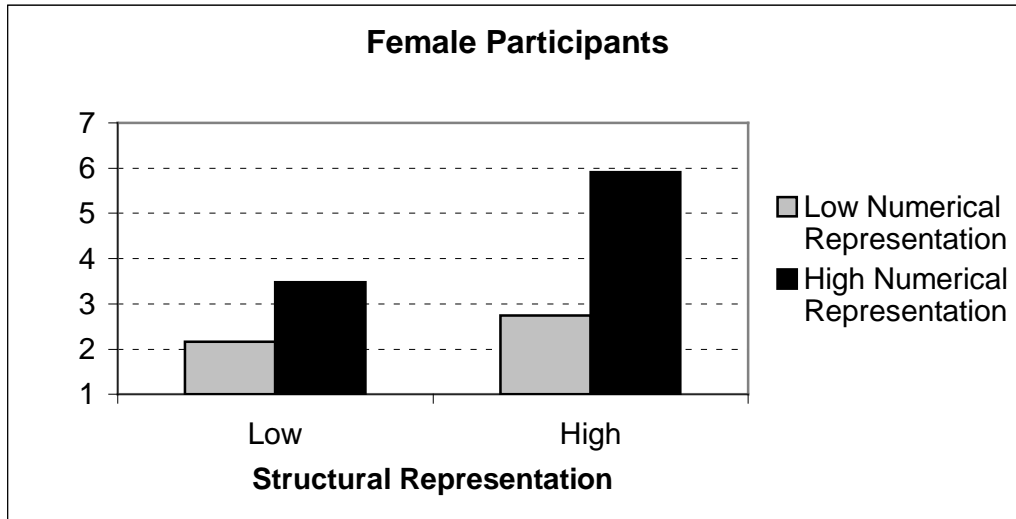


Figure 2. Study 3 perceived diversity means as a function of high and low structural and numerical representation conditions for Asian and White participants.

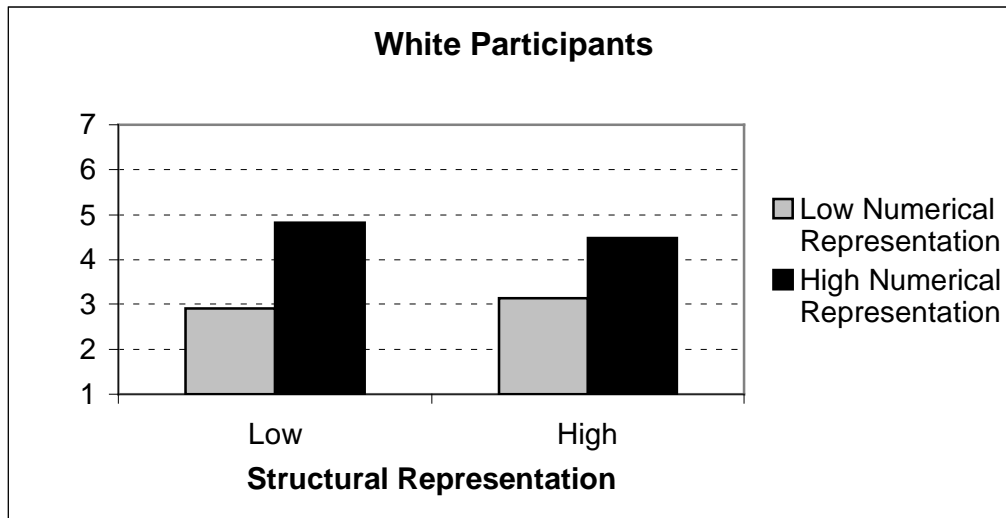
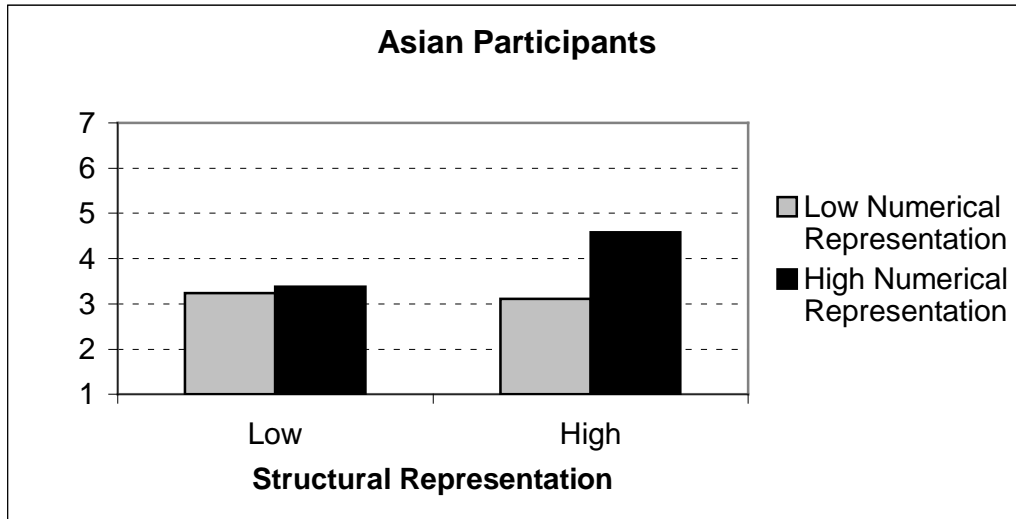


Figure 3. Study 3 affirmative action policy support as a function of high and low structural and numerical representation conditions for Asian and White participants.

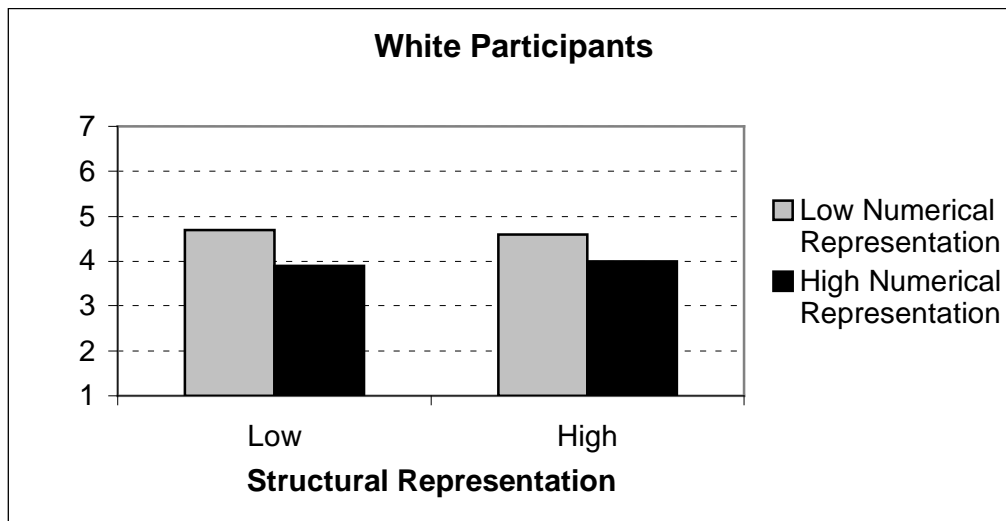
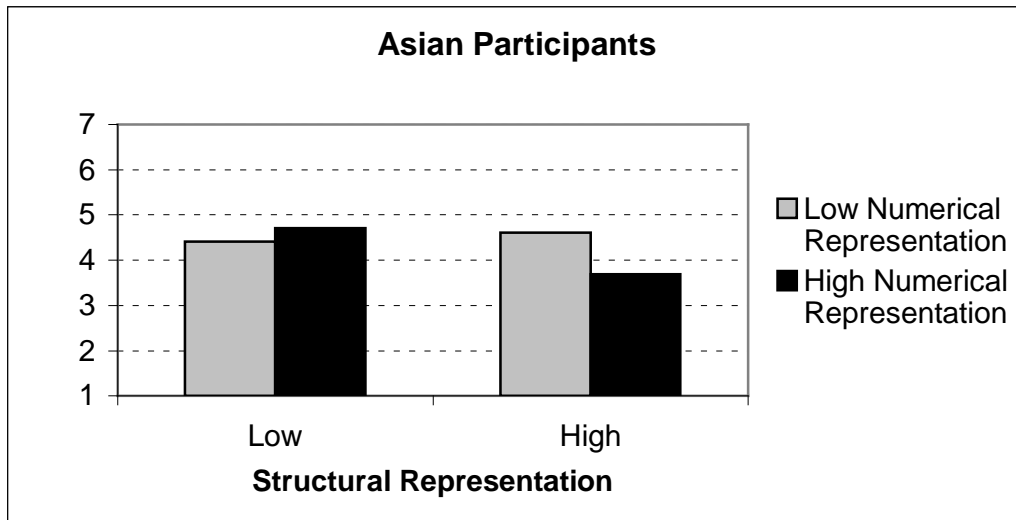


Figure 5. Study 4 predicted means of perceived diversity as a function of high and low structural and numerical representation conditions at high and low levels of racial identity

