When an organization is described as being “diverse,” what exactly does this mean? At a very basic level, this probably refers to the fact that the organization in question employs a noticeable number of traditionally underrepresented minorities. But beyond this basic (and imprecise) statement, little else is known about the factors that influence perceptions of organizational diversity. Even though past research has uncovered evidence of the potentially beneficial aspects of maintaining diverse organizational environments (Gurin, Nagda, & Lopez, 2004; Kochan et al., 2003; Phillips & Lloyd, 2006), the question of what characteristics lay perceivers pay attention to in determining whether an organization can be considered diverse has remained largely unexplored.

A common thread across these research approaches is that they use predetermined conceptions of interethnic ideologies as either independent (e.g., colorblindness or multiculturalism primes) or dependent (e.g., scales assessing endorsement of interethnic ideologies) variables. Very little research, to our knowledge, has explored the possibility that perceivers subjectively construe interethnic ideologies in ways that satisfy particular psychological motivations (for an exception, see Knowles, Lowery, Hogan, & Chow, 2009).

We address this possibility by examining how the total number of traditionally underrepresented minorities and their distribution throughout an organization’s hierarchy affect perceptions of an organization’s level of diversity. Moreover, we examine if members of majority and minority groups define diversity differently. We suspect that this might be the case because diversity may be perceived as having asymmetric consequences for majority and minority groups; specifically, individuals may believe that diversity is associated with increased opportunities for minority group members and decreased opportunities for members of majority groups.

Differences in the assumed impact of diversity on individuals’ in-groups may motivate majority and minority group members to define diversity in ways that respectively maximize the perceived benefit or minimize the perceived harm to the
in-group. Before further developing this argument, we first describe the two dimensions of diversity on which we focus throughout this article: numerical and hierarchical representation.

We propose that diversity can be defined as consisting of at least two distinct dimensions of diversity: (a) the numerical representation of underrepresented minorities in an organization and (b) the hierarchical representation of underrepresented minorities at specific levels of the organization’s hierarchy. These dimensions are by no means exhaustive, but they are two dimensions typically considered in diversity underutilization analyses (Krieger, 2007).

Numerical representation refers to the percentage of traditionally underrepresented minorities (e.g., racial minorities) in a particular organization. For example, an organization that employs 28 minority employees would be considered more diverse than an organization that employs 14 minority employees because the organization with 28 minority employees has a larger number of minority group members (assuming that both organizations employ the same total number of employees). Numerical representation is a commonly used method for defining diversity in both the popular press (e.g., “Best Colleges 2009,” 2008) and the social science literature (e.g., Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008).

Kanter (1977) wrote extensively about the importance of understanding the effects of numerical representation on the behavior of women and racial minorities in organizations in which they are underrepresented. Specifically, Kanter suggested that many negative attributes ascribed to women and racial minorities may result not from differences inherent to their group membership but rather from “the effects of relative numbers . . . . that stem from particular numerical distributions of categories of people” (p. 208). More contemporary work on the effects of numerical representation has manipulated the actual or anticipated number of racial minorities in various kinds of settings and has shown that as the numerical representation of racial minorities decreases, the worse racial minority participants tend to perform (Sekaquaptewa & Thompson, 2002) and the less attracted they are to such settings (Cohen, Aronson, & Steele, 2000).

Hierarchical representation, on the other hand, refers not to how many minorities an organization employs but rather to where in the organization’s structure such individuals are represented. Hierarchical representation can be thought of as a proxy measure of a group’s access to status and power within an organization (Cox, 1993). 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 its 28 minority employees in management positions, whereas Organization B employs only 4 minority managers. If diversity were being assessed with hierarchical representation in mind, then Organization A would be considered more diverse than Organization B because Organization A has more minorities in the upper, more powerful levels of the organizational structure. 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.

Unlike numerical representation, hierarchical representation is closely linked to access to power and influence for groups possessing this type of representation (see Cox, 1993). And even though there may be situations in which racial minorities possess power in numbers, high numerical representation alone does not guarantee access to organizational power. Examples of situations in which racial minorities have high levels of numerical representation but lack access to power via hierarchical representation include the antebellum South (Donald, Baker, & Holt, 2001) and professional sports leagues such as the National Basketball Association, in which a majority of players are Black, whereas a majority of coaches and team owners are White (Rhoden, 2006). Both of these examples are characterized by a high number of racial minorities who lack commensurate representation in the upper, more powerful levels of the social or organizational hierarchy. Given these dimensions of diversity, how, then, might the extent to which an individual is concerned about protecting his or her in-group affect the consideration given to each dimension when assessing an organization’s level of diversity?

Definitions of Diversity and Concern for the In-Group

Classic work on social identity theory suggests that people derive a sense of self-worth from groups to which they belong (Tajfel & Turner, 1979). Consequently, individuals tend to develop attitudes and behave in ways that serve the interests of social groups with which they identify (Bobo, 1998; Tuch & Hughes, 1996). For example, past work has shown that African Americans tend to support affirmative action more strongly than White Americans (Bobo, 1998; Kinder & Sanders, 1996) and that Latinos and Asian Americans tend to have more favorable attitudes toward immigration relative to Whites and African Americans (Sears, Citrin, Cheleden, & Van Laar, 1999). These patterns are consistent with the idea that individuals hold attitudes and preferences that benefit the in-group.

In addition, work by Sellers, Rowley, Chavous, Shelton, and Smith (1997) has shown that African Americans’ racial identity centrality, or the extent to which individuals normatively define themselves with respect to race, correlates positively with behaviors and attitudes indicative of a concern for the in-group. Specifically, racial identity centrality is positively related to enrollment in Black studies courses and social interaction with other Blacks. Racial identity centrality also correlates positively with racial regard, that is, the degree to which individuals feel positively toward the racial in-group, and with nationalist tendencies, that is, the extent
to which individuals emphasize the importance and uniqueness of belonging to the racial in-group (for a review, see Sellers, Smith, Shelton, Rowley, & Chavous, 1998).

Other work has more directly linked racial identity centrality to in-group concern. For example, studies measuring minorities’ racial identity centrality have found that support for affirmative action tends to be stronger among highly identified Latinos (Elizondo & Crosby, 2004) and African Americans (Schmermund, Sellers, Mueller, & Crosby, 2001). More recently, research on Whites’ racial identity centrality has shown that opposition to affirmative action increases the more Whites consider race to be central to their sense of self (Lowery, Unzueta, Knowles, & Goff, 2006). In sum, a person’s level of racial identity centrality has been shown to predict attitudes consistent with a desire to protect the interests of the in-group.

In the context of perceived diversity, a concern for the in-group may affect which dimensions of diversity perceivers consider and thus how they define diversity. Specifically, because diversity tends to be associated with minorities and minority interests more so than with majority groups and majority interests (Stevens, Plaut, & Sanchez-Burks, 2008; Unzueta & Binning, 2010), a concern for the in-group might compel minority and majority group members to perceive diversity in systematically different ways that benefit their respective in-groups.

**Minority Definitions of Diversity**

Minority perceivers may be motivated by a concern for the in-group to define diversity in a manner that maximizes the benefits of diversity for the in-group. As such, to be considered diverse, an organization may need to be seen by minority perceivers as not only employing a large number of minority employees (i.e., having high numerical representation) but also providing members of the minority in-group with access to power in the organization. Given that power in organizations is closely associated with having hierarchical representation (Cox, 1993; Kanter, 1977), a definition of diversity that maximizes diversity’s benefits to the minority in-group is a specific definition that entails minorities’ access to both numerical and hierarchical representation. An organizational context characterized by high numerical and hierarchical representation may communicate to minority perceivers that their in-group is not only included in the organization but also afforded status and power in the organization (see Huo, Binning, & Molina, 2010).

Other combinations of numerical and hierarchical representation may not yield perceptions of diversity for members of minority racial groups. Specifically, high representation on the numerical dimension coupled with low representation on the hierarchical dimension may signal to minority perceivers that they have access to the organization at an entry level but not that they will ascend the ranks into the upper levels of the organizational hierarchy. High representation on the hierarchical dimension without representation on the numerical dimension may suggest to minority perceivers that only a chosen few minority group members ascended or were hired into the upper ranks and that entry into the organization may not be possible. Finally, low minority representation on both the numerical and hierarchical dimensions may suggest that access to the organization at all levels is blocked.

**Majority Definitions of Diversity**

Majority group members, on the other hand, may be motivated by a concern for the in-group to define diversity in ways that allow them to perceive diversity in a wide range of contexts that vary in minorities’ numerical and hierarchical representations. Such a broad conception of diversity may benefit the majority group by facilitating the perception that diversity exists in many contexts, thus minimizing the compunction to support diversity-promoting policies, such as affirmative action, that may potentially hurt the in-group. In this way, the perceived harm of pursuing diversity to the majority group (e.g., opportunities redirected toward underrepresented group members) may be minimized. As such, majority group members may define diversity broadly such that they consider an organization to be diverse if minority employees within that organization are represented in high numbers, are found in the upper levels of the organization’s hierarchy, or both.

To summarize, we suggest that majority and minority group members may have opposing interests when it comes to defining diversity. Because diversity may be perceived as increasing opportunities for minorities, minority group members may define diversity in a way that will maximize diversity’s benefits for the in-group. To this end, minority group members may define diversity in a specific manner that entails both numerical and hierarchical representation. On the other hand, because diversity may be assumed to decrease opportunities for the majority group, majority group members may define diversity in a way that will minimize harm to their in-group, that is, in a broad manner that entails minorities’ numerical and/or hierarchical representation. In short, the desire to protect the in-group may motivate minority and majority racial group members to define diversity in group-serving ways.

**Overview of Studies**

Across four studies, we manipulate the numerical and hierarchical representations of minority group members within a purportedly real organization. Majority and minority perceivers are then asked to assess how diverse they perceive the organization to be. Study 1 examines White and Asian American participants’ perceptions of racial diversity. Studies 2–4 directly explore the role of in-group concern by assessing Black and White participants’ diversity perceptions as a function of racial identity centrality (Sellers et al., 1997), an
individual difference measure previously used to assess concern for the in-group (Elizondo & Crosby, 2004; Lowery et al., 2006; Schmermund et al., 2001). If a concern for the in-group underpins majority and minority definitions of diversity, then we should find that specific and broad definitions of diversity are found among highly identified members of minority and majority racial groups, respectively.

**Study 1**

Study 1 assessed if racial majority and minority group members define diversity differently. To this end, we recruited White (majority) and Asian American (minority) participants to evaluate an organization’s level of racial diversity.

**Method**

**Participants.** In exchange for a $5 gift certificate to Amazon.com, 209 individuals (114 women, 95 men) completed an online experiment. Participants were recruited from a primarily nonstudent participant database maintained by a private West Coast university. Participant age range was 18–68 years ($M = 30.12, SD = 10.21$). Participant recruitment was limited to only self-identified, monoracial White and Asian American participants. This recruitment strategy yielded 82 Asian American and 127 White participants.

**Procedure.** This study was described as a survey of company impressions. Participants read a description of a purportedly real organization. Participants were randomly assigned to read one of four tables describing the numerical and hierarchical representation of minority employees within the organization. The title of each table read as follows: “Number of Minority Employees (Black, Latino, and Asian Combined) 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. Participants where then asked to respond to several items assessing their perceptions of diversity and to complete 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.

**Hierarchical representation.** Participants who were randomly assigned to the low hierarchical 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 hierarchical 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 Variable**

**Perceived Diversity.** Participants’ perceptions of diversity were assessed using the following three 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; $M = 3.75, SD = 1.46; \alpha = .86$). Responses were made using a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

**Results**

Participant gender had no main or interactive effects. Therefore we collapsed across this variable. We report the results of a 2 (numerical representation: low vs. high) × 2 (hierarchical representation: low vs. high) × 2 (participant race: White vs. Asian American) 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 condition ($M = 4.36, SD = 1.25$) than in the low numerical representation condition ($M = 3.17, SD = 1.34$), $F(1, 208) = 34.70, p <.001, \eta_p^2 = .15$. There was also a significant main effect of hierarchical representation such that participants in the high hierarchical representation condition perceived more diversity ($M = 3.86, SD = 1.42$) than participants in the low hierarchical representation condition ($M = 3.64, SD = 1.41$), $F(1, 208) = 4.04, p = .046, \eta_p^2 = .01$. There was no main effect of participant race, $F(1, 208) = 2.16, p = .143$.

The analysis revealed a significant Numerical Representation × Participant Race interaction, $F(1, 208) = 8.83, p = .003, \eta_p^2 = .04$, and a significant Hierarchical Representation × Participant Race interaction, $F(1, 208) = 5.58, p = .019, \eta_p^2 = .03$. However, these two-way effects were qualified by a significant three-way Hierarchical Representation × Numerical Representation × Participant Race interaction, $F(1, 208) = 6.40, p = .012, \eta_p^2 = .03$. To illustrate the pattern of the interaction, we conducted separate 2 (numerical representation: low vs. high) × 2 (hierarchical representation: low vs. high) ANOVAs on White and Asian American participants’ perceptions of diversity (see Figure 1).

The ANOVA on White participants uncovered only a significant main effect of numerical representation, $F(1, 126) = 45.41, p < .001, \eta_p^2 = .27$, such that participants
in the high numerical representation condition perceived more diversity ($M = 4.60, SD = 1.23$) than participants in the low numerical representation condition ($M = 3.04, SD = 1.39$). Neither the main effect of hierarchical representation nor the two-way interaction attained significance.

In contrast, the ANOVA on Asian American participants uncovered a significant two-way interaction, $F(1, 81) = 6.44, p = .013, \eta^2 = .08$. Tukey post hoc comparisons indicate that participants in the high numerical representation condition expressed similarly low levels of perceived diversity regardless of whether the minority employees were represented in the low ($M = 3.27, SD = 1.11$) or high levels of the corporate hierarchy ($M = 3.41, SD = 1.44, 95\% CI = -1.03, 0.74$), $p = .98$. 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 ($M = 4.53, SD = 0.87$) as opposed to the low level of the corporate hierarchy ($M = 3.23, SD = 1.03, 95\% CI = 0.27, 2.31$), $p = .008$. A contrast analysis in which the high numerical + high hierarchical representation condition was compared with the other three conditions verified that this condition evoked the highest perceived diversity among Asian American participants, $t(78) = 3.88, p < .001$.

### Discussion

Study 1 provides support for the idea that minority and majority group members define diversity differently. Specifically, Study 1 provides evidence that Asian American participants consider both numerical and hierarchical representation when assessing an organization’s level of perceived diversity. These findings are consistent with the idea that minority group members may define diversity in a specific manner that entails both numerical and hierarchical representation.

Recall our argument that such a specific definition of diversity is rooted in the motivation to conceive diversity in a manner that benefits the in-group. To more directly test this idea, in Study 2, we assessed minority perceivers’ racial identity centrality, an individual difference measure previously used to assess concern for the in-group (Elizondo & Crosby, 2004; Lowery et al., 2006; Schmermund et al., 2001), and tested whether specific definitions of diversity are found only among minority group members high in racial identity centrality.

Study 1 also suggests that White participants’ perceptions of diversity were primarily influenced by minority employees’ numerical representation. This main effect may suggest that Whites’ definitions of diversity may not be broad, as argued in the introduction, but rather relatively simple in that their conceptions of diversity may consist of only minorities’ numerical representations. Consistent with this possibility, recent research has suggested that Whites tend to feel excluded from multicultural initiatives (Stevens et al., 2008) and that they do not associate their racial group with the concept of diversity (Unzueta & Binning, 2010). Given the lack of in-group relevance that diversity seems to have for members of the majority racial group, Whites may conceive of diversity in relatively simple terms and, for this reason, may define diversity as primarily entailing numerical representation. Alternatively, it may be that broad definitions of diversity are found only among Whites who are particularly motivated to protect the in-group. If this is the case, then evidence for a broad definition of diversity may have been concealed in Study 1 by the fact that we did not parse the data according to an individual difference of concern for the in-group. We assess this possibility in Study 4.

### Study 2

We suggest that a concern for the in-group motivates individuals to define diversity in ways that benefit the in-group. To this end, Study 1 suggests that minority group members, relative to majority group members, define diversity in a specific manner that entails both numerical and hierarchical representation. If a concern for the in-group actually underpins minority group members’ definitions of diversity, then only individuals who are highly identified with their racial in-group should perceive diversity in a specific manner that entails both numerical and hierarchical representation.

### Method

**Participants.** In exchange for a S5 gift certificate to Amazon.com, 69 Black participants (53 women, 16 men) completed an online experiment. Participants were recruited from a primarily nonstudent participant database maintained at a large, public West Coast university. Recruitment was limited to only self-identified, monoracial African Americans. The age range for participants was 18–68 years ($M = 33.17, SD = 11.10$).

**Procedure.** To assess concern for the in-group, participants were asked to complete a racial identity centrality scale (Sellars, et al., 1997). Next, participants were randomly assigned to read one of four tables describing the numerical
and hierarchical representation of Black employees within an organization. Participants were told that because of the organization’s location in the Midwestern United States, the organization was composed primarily of Black and White employees. We limited the organization’s racial composition to Black and White employees to more directly draw attention to the in-group for Black participants. The title of each 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 completed a demographic questionnaire. Finally, participants were provided with a written debriefing statement.

Independent Variables

Racial identity centrality. Racial identification was assessed using a slightly modified version of Sellers and colleagues’ (1997) racial identity centrality scale. Sample items include the following: “In general, my race is an important part of my self-image,” “I have a strong attachment to others of my race,” “My race is not a major factor in my social relationships” (reverse scored; \( M = 4.32, SD = 1.13, \alpha = .80 \)).

Numerical representation. Numerical representation was manipulated like in Study 1 except that general references to minority employees were replaced with specific references to Black employees.

Hierarchical representation. Hierarchical representation was also manipulated like in Study 1. References to minority employees were replaced with reference to Black employees.

Dependent Variable: Perceived Diversity

Participants’ perceptions of diversity were assessed using the same three-item scale used in Study 1 \( (M = 2.84, SD = 1.36, \alpha = .86) \).

Results

Participant gender had no main or interactive effects when included in the analysis. We therefore collapsed this variable. Because racial identification is a continuous variable, we used regression to analyze these data. Thus, we regressed perceived diversity on numerical representation \( (low = 0, high = 1) \), hierarchical representation \( (low = 0, high = 1) \), racial identification \( (\text{a continuous variable that was centered at its mean}) \), and the interaction terms among these variables using the procedures outlined by Aiken and West (1991). This regression analysis uncovered significant main effects of numerical representation and racial identification, a significant Racial Identification \( \times \) Numerical Representation interaction, and, more importantly, a significant three-way interaction (see Table 1).

To decompose the three-way interaction, we conducted simple slope analyses in accordance with Aiken and West (1991). Specifically, we assessed the effect of hierarchical representation at both the high and low numerical representation conditions and at high \((+1 SD)\) and low \((-1 SD)\) levels of racial identification (see Figure 2). These analyses found that the slope of hierarchical representation was significantly different from zero only in the high numerical representation condition among participants high in racial identity, \( B = 1.37, SE B = 0.62, t(61) = 2.21, p < .05 \).

None of the other slopes for hierarchical representation attained significance. Specifically, the slope of hierarchical representation was not significantly different from zero in the high numerical representation condition among participants who were low in racial identity, \( B = -0.36, SE B = 0.66, t(61) = -0.55, p > .05 \).

In the low numerical representation condition, the slope of hierarchical representation was not significantly different from zero among participants who were low in racial identity, \( B = 0.62, SE B = 0.50, t(61) = 1.24, p > .05 \), or high in racial identity, \( B = -0.32, SE B = 0.53, t(61) = -0.60, p > .05 \).

Discussion

Study 2 found that among African Americans who identify strongly with their racial group, there is a significant effect of hierarchical representation in the high numerical representation condition. This finding suggests that minorities who are particularly concerned about their racial in-group (i.e., those high in racial identity) define diversity in a specific manner that consists of both hierarchical and numerical representation. On the other hand, African Americans who

**Table 1. Study 2 Results for African American Participants Assessing Perceived Diversity of a Primarily Black and White Organization**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.36</td>
<td>0.19</td>
<td></td>
<td>17.36</td>
<td>.00</td>
</tr>
<tr>
<td>Hierarchical representation</td>
<td>0.70</td>
<td>0.28</td>
<td>.25</td>
<td>2.49</td>
<td>.01</td>
</tr>
<tr>
<td>Numerical representation</td>
<td>1.06</td>
<td>0.28</td>
<td>.38</td>
<td>3.73</td>
<td>.00</td>
</tr>
<tr>
<td>Racial identity</td>
<td>0.05</td>
<td>0.14</td>
<td>.05</td>
<td>0.37</td>
<td>.71</td>
</tr>
<tr>
<td>Hierarchical representation ( \times ) Numerical representation</td>
<td>-0.38</td>
<td>0.40</td>
<td>-.12</td>
<td>-0.95</td>
<td>.35</td>
</tr>
<tr>
<td>Racial Identity ( \times ) Numerical representation</td>
<td>0.36</td>
<td>0.22</td>
<td>.24</td>
<td>1.67</td>
<td>.10</td>
</tr>
<tr>
<td>Racial Identity ( \times ) Hierarchical Representation</td>
<td>0.18</td>
<td>0.21</td>
<td>.13</td>
<td>0.88</td>
<td>.38</td>
</tr>
<tr>
<td>Hierarchical representation ( \times ) Numerical representation ( \times ) Racial Identity</td>
<td>-0.85</td>
<td>0.30</td>
<td>-.43</td>
<td>-2.89</td>
<td>.00</td>
</tr>
</tbody>
</table>

Dependent variable is perceived diversity.
lack group interest define diversity in a relatively simple manner composed primarily of minority employees’ numerical representation. This latter finding could be interpreted as suggesting that low-identified minority group members define diversity in a relatively simple manner possibly because they are attempting to define diversity in a way that benefits majority group members. Alternatively, it could also be that this relatively simple definition of diversity is rooted in the fact that for low-identified African Americans, diversity is a concept irrelevant to them because they do not psychologically identify with African Americans as a group, a group strongly associated with the concept of diversity (Unzueta & Binning, 2010).

In sum, the specific definition of diversity (i.e., high numerical and high hierarchical representation) was found only among highly identified African Americans. This finding is consistent with the idea that a concern for the in-group underpins such a definition of diversity among racial minority group members.

**Study 3**

Even though past research has characterized racial identity centrality as reflecting a concern for one’s in-group (Elizondo & Crosby, 2004; Lowery et al., 2006; Schermund et al., 2001), it is possible that racial identity centrality captures other related psychological tendencies. For example, it might be that highly racially identified minorities are particularly concerned about the treatment of all racial minority groups. As such, racial identity centrality may be capturing not a concern for the in-group but rather a motivation to increase overall levels of social equality. Consistent with this possibility, past work has found that racial identification among minority respondents correlates negatively with social dominance orientation—an individual difference measure of people’s desire for social inequality (Sidanius, Pratto, & Rabinowitz, 1994).

To address the possibility that racial identity centrality may not be capturing a concern for the in-group per se but rather a general concern for the equitable treatment of all racial minority groups, in Study 3, we exposed Black participants to information about an organization composed of Asian Americans and Whites. This study allowed us to assess if specific diversity perceptions that entail numerical and hierarchical representation emerge as a function of racial identity centrality only when the racial in-group is represented within those dimensions. If a concern for the in-group really underpins diversity perceptions, then racial identity centrality should not lead to specific diversity perceptions in this study because there is no in-group to potentially benefit via these diversity perceptions. In other words, if the representation of Asian Americans within the numerical and hierarchical dimensions does not lead to diversity perceptions as a function of racial identity centrality for Black perceivers, then this would provide evidence that specific diversity perceptions emerge only when the in-group stands to benefit from such a construal.

**Method**

**Participants.** In exchange for a $5 gift certificate to Amazon.com, 92 Black participants (70 women, 22 men) completed an online experiment. Participants were recruited from a primarily nonstudent participant database maintained at a large, public West Coast university. Recruitment was limited to only self-identified, monoracial African Americans. The age range for participants was 18–62 years ($M = 34.02$, $SD = 9.94$).

**Procedure.** As in Study 2, participants were asked to complete a racial identity centrality scale (Sellers et al., 1997). Next, participants were randomly assigned to read one of four tables describing the numerical and hierarchical representation of Asian American employees within an organization. Participants were informed that because of the organization’s location on the West Coast of the United States, the organization was composed primarily of Asian American and White employees. The title of each table read as follows: “Number of Asian Employees at Various Levels of Strathmore’s Corporate Hierarchy.”

![Figure 2. Study 2 predicted means of perceived diversity as a function of high and low hierarchical and numerical representation conditions at high and low levels of racial identity among the African American sample](https://example.com/figure2.png)
Participants then responded to several items assessing their perceptions of diversity and completed a demographic questionnaire. Finally, participants were provided with a written debriefing statement.

**Independent Variables**

*Racial identity centrality.* Racial identification was assessed using the same scale used in Study 1 ($M = 4.32$, $SD = 1.10$, $\alpha = .75$).

*Numerical representation.* Numerical representation was manipulated like in Study 2 except that references to Black employees were changed to Asian employees.

*Hierarchical representation.* Hierarchical representation was also manipulated like in Study 2. References to Black employees were changed to Asian employees.

**Dependent Variable**

*Perceived Diversity.* Participants’ perceptions of diversity were assessed using the same three-item scale used in Studies 1 and 2 ($M = 2.98$, $SD = 1.54$, $\alpha = .85$).

**Results**

Participant gender had no main or interactive effects when included in the analysis; thus, we collapsed across this variable. As in Study 2, we regressed perceived diversity on numerical representation ($low = 0$, $high = 1$), hierarchical representation ($low = 0$, $high = 1$), racial identification (a continuous variable that was centered for this analysis), and the interactions between these variables. This regression analysis uncovered no significant main or interactive effects (see Table 2).

**Discussion**

Study 3 suggests that racial identity centrality captures a concern for the in-group and not a general concern for the equitable treatment of all racial minority groups. Because specific diversity perceptions did not emerge when Black perceivers assessed the diversity of an organization composed of Asian Americans and Whites, this study provides evidence consistent with the idea that specific diversity perceptions emerge only when the in-group stands to benefit from such a conception of diversity. Even though failure to reject the null hypothesis does not allow us to retain the null hypothesis, this study nonetheless demonstrates that racial identity centrality does not always lead to the emergence of specific diversity construals for minority perceivers. As such, Study 3 is consistent with the idea that diversity defined as numerical and hierarchical representation is rooted in minority perceivers’ concern for their respective in-group.

**Table 2. Study 3 Results for African American Participants Assessing Perceived Diversity of a Primarily Asian American and White Organization**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.32</td>
<td>0.47</td>
<td></td>
<td>7.03</td>
<td>.00</td>
</tr>
<tr>
<td>Hierarchical representation</td>
<td>−0.46</td>
<td>0.56</td>
<td>−0.15</td>
<td>−0.82</td>
<td>.41</td>
</tr>
<tr>
<td>Numerical representation</td>
<td>−0.08</td>
<td>0.58</td>
<td>−0.03</td>
<td>−0.14</td>
<td>.89</td>
</tr>
<tr>
<td>Racial identity</td>
<td>0.16</td>
<td>0.61</td>
<td>0.11</td>
<td>0.26</td>
<td>.80</td>
</tr>
<tr>
<td>Hierarchical Representation $\times$ Numerical Representation</td>
<td>0.02</td>
<td>0.73</td>
<td>0.01</td>
<td>0.03</td>
<td>.97</td>
</tr>
<tr>
<td>Racial Identity $\times$ Numerical Representation</td>
<td>−0.38</td>
<td>0.66</td>
<td>−0.20</td>
<td>−0.57</td>
<td>.57</td>
</tr>
<tr>
<td>Racial Identity $\times$ Hierarchical Representation</td>
<td>−0.42</td>
<td>0.67</td>
<td>−0.22</td>
<td>−0.62</td>
<td>.54</td>
</tr>
<tr>
<td>Hierarchical Representation $\times$ Numerical Representation</td>
<td>0.41</td>
<td>0.78</td>
<td>0.14</td>
<td>0.52</td>
<td>.60</td>
</tr>
<tr>
<td>Racial Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable is perceived diversity.

**Study 4**

In Study 4, we assessed the role of in-group concern on Whites’ diversity perceptions. Recent research suggests that Whites’ racial identity centrality predicts opposition to affirmative action policies that are believed to have particularly negative consequences for Whites as a group (Lowery et al., 2006). Given this, in Study 4, we measured White racial identity centrality to test the idea that broad definitions of diversity may be characteristic of only Whites who are particularly motivated to protect the racial in-group.

**Method**

*Participants.* In exchange for a $5 gift certificate to Amazon.com, 163 White participants (120 women, 43 men) completed an online experiment. Participants were recruited from a primarily nonstudent participant database maintained at a large, public West Coast university. Recruitment for this study was limited to only self-identified, monoracial Whites. The age range for participants was 18–70 years ($M = 36.68$, $SD = 11.82$).

*Procedure.* To measure group interest, participants were first asked to complete a racial identity centrality scale (Sellers et al., 1997). Next, participants were randomly assigned to read one of four tables describing the numerical and hierarchical representation of Black employees within an organization. As in Study 2, participants were informed that the organization was composed primarily of Black and White employees.

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

Racial identification. Racial identification was assessed using the slightly modified version of Sellers and colleagues’ (1997) racial identity centrality scale used in Studies 2 and 3 ($M = 3.47$, $SD = 1.46$, $\alpha = .89$).

Numerical representation. Numerical representation was manipulated like in Study 2.

Hierarchical representation. Hierarchical representation was also manipulated like in Study 2.

Dependent Variable: Perceived Diversity

Participants’ perceptions of diversity were assessed using the same three-item scale used in Studies 1–3 ($M = 4.16$, $SD = 1.41$, $\alpha = .86$).

Results

Participant gender had no main or interactive effects when included in the analysis, and as such, we collapsed across this variable. We regressed perceptions of diversity on numerical representation ($low = 0$, $high = 1$), hierarchical representation ($low = 0$, $high = 1$), racial identification (a continuous variable that was centered for this analysis), and the interactions between these variables. This regression analysis uncovered significant main effects of numerical representation and racial identification, a significant Racial Identification $\times$ Numerical Representation interaction, and, more importantly, a significant three-way interaction (see Table 3).

To decompose the three-way interaction, we conducted simple slope analyses in accordance with Aiken and West (1991). Specifically, we assessed the effect of hierarchical representation at both the high and low numerical representation conditions and at the high and low levels of racial identification (i.e., $+1$ SD from the mean; see Figure 3).

These analyses reveal an effect of hierarchical representation in the low numerical representation condition among participants high in racial identity, $B = 0.95$, $SE = 0.41$, $\beta = .34$, $t(159) = 2.31$, $p < .05$. When hierarchical representation is high, highly identified Whites perceive relatively high levels of diversity regardless of minorities’ numerical representation, as evidenced by the fact that the simple slope for hierarchical representation is not significantly different from zero in the high numerical representation condition, $B = −0.59$, $SE = 0.39$, $\beta = −0.21$, $t(159) = −1.53$, $p > .05$.

In addition, we found that the slope of hierarchical representation is significantly different from zero in the high numerical representation condition among White participants low in racial identity, $B = 1.24$, $SE = 0.43$, $\beta = .44$, $t(159) = 2.91$, $p < .01$. Conversely, the simple slope of hierarchical representation in the low numerical representation condition among participants who are low in racial identity is not significantly different from zero, $B = 0.46$, $SE = 0.38$, $\beta = .16$, $t(159) = 1.19$, $p > .05$.

![Figure 3. Study 4 predicted means of perceived diversity as a function of high and low hierarchical and numerical representation conditions at high and low levels of racial identity among the White American sample](psp.sagepub.com)
Discussion

Study 4 suggests that Whites high in racial identity centrality define diversity broadly, as the only condition that evokes low perceptions of diversity is the condition in which both numerical and hierarchical representation are low. This pattern of findings is consistent with the idea that highly group-interested Whites may define diversity in a broad manner—one that uses whatever diversity dimension contains high minority representation—to consider an organization as being diverse. In other words, when hierarchical representation is low, then high numerical representation seems to suffice for group-interested Whites to label an organization as being diverse; when numerical representation is low, then high hierarchical representation suffices to label an organization as being diverse. And of course, when both numerical and hierarchical representation are high, both these dimensions suffice to consider an organization as being diverse. Thus, this study suggests that Whites who are particularly concerned about protecting the in-group may define diversity in a broad manner that entails whichever diversity dimension contains relatively high minority representation.

Study 4 also suggests that Whites low in racial identification tend to define diversity as entailing both high numerical and high hierarchical representation. This finding, which parallels the pattern of data found among Asian American participants in Study 1 and highly identified Black participants in Study 2, suggests that defining diversity broadly may be characteristic of only highly identified members of the majority group. Whites low in group interest appear to define diversity in a specific manner that may potentially maximize the benefits of diversity for members of minority groups.

General Discussion

We proposed that diversity could be defined as consisting of at least two distinct dimensions: (a) the numerical representation of underrepresented minorities in an organization and (b) the hierarchical representation of underrepresented minorities at specific levels of the organization’s structure. Moreover, we proposed that majority and minority group members have asymmetric interests when it comes to perceiving diversity, and for this reason, they may define diversity in ways beneficial to their respective in-groups. Specifically, minority group members may define diversity in a specific manner that entails high representation on both the numerical and hierarchical dimensions. Majority group members, on the other hand, may define diversity in a broad manner that entails high representation on either the numerical or hierarchical dimension (or both).

Four studies provided support for these ideas. Study 1 found that Asian American participants consider both minorities’ numerical and hierarchical representations when making their assessments of diversity. Conversely, White participants define diversity as entailing only minorities’ numerical representation. Moreover, Studies 2–4 provided evidence for the idea that a concern for the in-group motivates majority and minority group members to define diversity differently. Study 2 found that only African Americans high in racial identity centrality consider an organization to be diverse when both numerical and hierarchical representation are high. This finding is consistent with the idea that racial minorities who are particularly concerned about the interests of the in-group define diversity in a specific manner that limits the conditions under which an organization can be considered diverse.

Study 3 provided evidence that racial identity centrality actually captures a concern for the in-group and not a general concern for the fair treatment of all racial minority groups. Because specific diversity perceptions did not emerge when Black perceivers assessed the diversity of an organization composed of Asian Americans and Whites, this study suggested that specific diversity perceptions emerge only when the in-group is directly involved. As such, Study 3 suggests that diversity defined as numerical and hierarchical representation (as seen in Studies 1, and 2) is a phenomenon rooted in a concern for the in-group.

Finally, Study 4 found that highly identified Whites define diversity broadly, as the only instance in which these individuals report perceiving low levels of diversity is when both numerical and hierarchical representation are depicted as low. Stated another way, Whites who are particularly concerned about the interests of the in-group tend to see an organization as diverse so long as either (or both) numerical or hierarchical representation is high. This implies that Whites motivated to protect the in-group define diversity in an expansive manner that may allow these individuals to perceive diversity in a wide range of contexts.

Interestingly, Whites low in the motivation to protect the in-group define diversity like Asian American participants in Study 1 and highly identified African Americans in Study 2—that is, as entailing both numerical and hierarchical representation. In addition, low-identified African Americans in Study 2 define diversity like Whites in Study 1—that is, without consideration of the hierarchical dimension. These findings are suggestive of the idea, to be explored in future research, that low-identified group members define diversity in ways consistent with the interests of out-groups. Such a tendency among low-identified group members might bear connections to ideas in social dominance theory (Sidanius & Pratto, 1999), which suggests that both dominant and subordinate groups are composed of individuals who actively work in the interests of out-groups.

Diversity Policy Implications

The results of this article also shed light on the ongoing debate over race-conscious admissions and hiring plans. Specifically, Studies 1 and 4 suggest that majority group members see diversity as having been achieved when either
(or both) numerical or hierarchical representation of underrepresented minorities has been attained. Minority group members, on the other hand, see diversity as having been achieved only when both numerical and hierarchical representation have been attained. This difference may provide an explanation for why opponents and proponents of affirmative action disagree over the continued use of such policies. Specifically, opponents of affirmative action, who tend to belong to majority groups (Kinder & Sanders, 1996; Kravitz & Platania, 1993), may see such policies as unnecessary because, as the present studies suggest, the opponents may be paying attention to either increasing numerical representations of racial minorities (Holzer & Neumark, 2006) or notable examples of minorities attaining high levels of hierarchical representation (see Kaiser, Drury, Spalding, Cheryan, & O’Brien, 2009). 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 both hierarchical and numerical representation (Borja, 2004; Dugger, 1992; Fernandez, 1998). In this manner, majority and minority group members’ differing definitions of diversity may explain why disagreement persists over the continued use of race-conscious policies (Bobo, 1998; Tuch & Hughes, 1996).

**Future Directions**

The argument advanced in this article is that a concern for the in-group motivates minority and majority group members to define diversity in ways beneficial to their respective in-groups. Although we found evidence for the role of in-group concern in affecting diversity perceptions, it may be that there are multiple determinants of diversity perception that were not tested in this article.

For example, future research should explore if racial identity centrality predicts individuals’ willingness to pay attention to the demographic composition of an organization. It could be that the specific cognitive mechanism that links a concern for the in-group to diversity perceptions is the amount of attention paid to demographic details. As such, highly identified individuals may process demographic information more systematically than individuals low in identification. To assess this possibility, future studies may consider measuring the amount of time spent examining demographic information as a function of racial identity centrality. Alternatively, future research may also consider using cognitive load manipulations to test if such manipulations moderate the effects reported in Studies 1–4 (e.g., Van Knippenberg, Dijksterhuis, & Vermeulen, 1999). These various approaches could help determine if attention to demographic detail mediates the link between racial identity centrality and diversity perceptions.

The findings presented in this article 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, Sawahata, & Deang, 2005) suggested that contexts in which minority group members feel valued are conducive to improving the social and psychological outcomes of minority group members. To this end, various researchers have suggested that by increasing the number of racial minorities in particular contexts, minority group members may feel more included and be less susceptible to stereotype threat (e.g., Sekaquaptewa & Thompson, 2003). The data presented in this article 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 given context. Accordingly, it might be that the hierarchical representation of minorities in an organization covaries with minorities’ sense of identity safety and perceived subgroup respect.

Finally, future research should also be conducted to explore perceivers’ sensitivity to other diversity dimensions. For example, would minority perceivers consider as diverse an organization that has all its minority employees represented numerically and hierarchically, but only in one branch of the organization (e.g., the human resources department)? And what about majority group members? Are their perceptions of diversity sensitive to this kind of segregation? In addition, could an organization led by a minority CEO be seen as diverse, even if the organization lacked numerical and hierarchical representation of minorities in the lower levels of the organizational hierarchy? Moreover, future research should examine if the present effects generalize to situations in which men and women are evaluating an organization’s gender diversity. An exploration of these questions may provide further insight into individuals’ subjective conceptions of diversity.

**Conclusion**

Whereas minorities might perceive Whites’ diversification goals as incomplete, Whites might see minority demands for more diversity as overreaching. This may occur because the concept of diversity means systematically different things to members of minority and majority racial groups. This finding underscores how important it is for ongoing debates about diversity to strive for clarity regarding what constitutes diversity in specific contexts. It may be that a mutually understood definition of diversity is the first step in having diversity live up to its potential benefits.

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