



A Diversity Ideology Intervention: Multiculturalism Reduces the Racial Achievement Gap

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DIVERSITY IDEOLOGY INTERVENTION

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Abstract

Although colleges and universities across the U.S. frequently espouse the importance of diversity and inclusion, they often adopt a colorblind diversity ideology that avoids social group differences. Yet, research suggests that a multicultural diversity ideology that attends to social group differences has potential to benefit the academic achievement of underrepresented racial and ethnic minority (URM) students. In the current research, we tested whether representing a school's diversity ideology in terms of multiculturalism (vs. colorblindness) could reduce the racial achievement gap by improving URM students' academic achievement in college. Specifically, first-year college students ($N = 407$) read either a multicultural or colorblind diversity statement. URM students who read a multicultural (vs. colorblind) statement earned higher grade-point-averages (GPAs) one year later, thereby statistically eliminating the racial achievement gap. The current research is the first study to demonstrate the long-term and causal academic benefits of a multicultural ideology intervention for URM students.

Keywords: diversity, intervention, colorblind, multicultural, higher education

A Diversity Ideology Intervention: Multiculturalism Reduces the Racial Achievement Gap

In the United States, college achievement plays a consequential role in determining students' future success (Brand & Xie, 2010; Carnevale, Jayasundera, & Cheah, 2012). Yet, African American, Latino, and Native American students—or underrepresented racial minorities (URM) students—obtain lower grades, take longer to graduate, and drop out of college at higher rates than their White and Asian counterparts (Musu-Gillette et al., 2017). Although structural factors undoubtedly contribute to this racial achievement gap, how students make sense of or construe their experiences in college also plays a critical role (Paunesku et al., 2015; Walton & Cohen, 2007). For example, URM students often wonder whether they belong, which leads to poor academic performance (Rattan et al., 2018; Walton & Cohen, 2007).

Social psychologists have leveraged this understanding of the importance of construal to develop “wise” interventions aimed at closing the racial achievement gap (Stephens, Hamedani, & Destin, 2014; Walton & Wilson, 2018). Wise interventions do not focus on changing structural factors, but rather focus on shaping people's psychological experiences in ways that foster lasting change (Walton & Wilson, 2018). For example, one successful wise intervention changed the psychological experiences of URM students by teaching them that academic struggles are a normal and transient part of the college experience. URM students who participated in this social-belonging intervention learned a new way to make sense of their experiences in college, which resulted in better academic performance years later (Walton & Cohen, 2007).

In the current research, we leverage the wise intervention approach to test a novel intervention, namely, a multicultural ideology intervention. To do so, we draw upon the robust psychological literature on *diversity ideologies*, or beliefs on how best to approach and manage

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3 diversity (Markus, Steele, & Steele, 2000; Plaut, 2002). We theorize that representing a school's
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5 diversity ideology in terms of multiculturalism (vs. colorblindness) can reduce the racial
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7 achievement gap by improving URM students' academic achievement in college.
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10 **Diversity Ideologies**

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12 The two most prominent diversity ideologies in the United States are colorblindness and
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14 multiculturalism (Rattan & Ambady, 2013). The colorblind diversity ideology contends that
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16 social group differences,¹ such as those due to race or social class, should be avoided (Plaut,
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18 Thomas, Hurd, & Romano, 2018). Underlying this ideology is the assumption that if people
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20 simply *avoid* social group differences, they will no longer have the opportunity to act in a biased
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22 manner (Apfelbaum, Norton, & Sommers, 2012).
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27 Previous literature on colorblindness has operationalized avoiding social group
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29 differences in one of two ways: by emphasizing individuals' unique or personal identities (Plaut,
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31 2002; Schofield, 2007) or by emphasizing similarities across individuals (Purdie-Vaughns,
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33 Steele, Davies, Ditlmann, & Crosby, 2008). When emphasizing individuals' unique or personal
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35 identities, colorblindness asserts that people should be judged on the basis of individual
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37 achievement—without regard to social group differences (Ryan, Hunt, Weible, Peterson, &
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39 Casas, 2007). In contrast, when emphasizing similarities across individuals, colorblindness
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41 asserts that people share certain similarities in common and therefore should be treated equally—
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43 without regard to social group differences (Markus et al., 2000). Irrespective of the different
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45 operationalizations of colorblindness, the core tenet remains the same—social group differences
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47 should be *avoided* (Plaut et al., 2018).
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55 ¹ We use the term *social group differences* to refer to variation in the experiences, opportunities, or outcomes of
56 diverse social groups (e.g., race or social class).
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3 Multiculturalism offers an alternative approach to diversity, one that focuses on *attending*
4 to social group differences. The multicultural ideology argues that social group differences
5 matter and can be a source of strength (Plaut, 2010; Stevens, Plaut, & Sanchez-Burks, 2008).
6
7 Underlying this ideology is the assumption that people who are members of different social
8 groups vary in their experiences in their world and that it is therefore important to attend to and
9 value these experiences. In practice, multicultural initiatives can take a variety of forms ranging
10 from mentoring programs to “diversity days” that focus on attending to and celebrating the
11 experiences of underrepresented social groups (Stevens et al., 2008).
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Diversity Ideologies and Academic Achievement

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26 In the United States, colorblindness pervades higher education (Markus et al., 2000;
27 Pollock, 2004; Schofield, 2007). Yet, across various experimental lab and correlational survey
28 studies, research suggests that multiculturalism (compared to colorblindness) may be more
29 beneficial for the academic achievement of URM students (Plaut, 2010). For example,
30 multiculturalism (vs. colorblindness) leads URM students to perform better on cognitive tasks
31 (Holoien & Shelton, 2012) and math tests (Wilton, Good, Moss-Racusin, & Sanchez, 2015).
32
33 Additionally, multiculturalism (vs. colorblindness) is associated with more positive
34 psychological experiences, such as heightened engagement and reduced anxiety for URM
35 students (Plaut, Thomas, & Goren, 2009; Vorauer, Gagnon, & Sasaki, 2009). Importantly, these positive
36 psychological experiences are associated with an increased perception of fit in academic settings,
37 more positive educational beliefs, and ultimately greater academic achievement for URM
38 students (Chavous et al., 2003; Fryberg, Covarrubias, & Burack, 2013; Stephens et al., 2014).
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3 Theory and research suggest that the academic benefits of multiculturalism for URM
4 students emerge, in part, because multiculturalism attends to the importance of racial differences
5 in experiences that are often central to the identities of URM students (Sellers & Shelton, 2003).
6
7 Additionally, multiculturalism recognizes—and even celebrates—the varied experiences of
8 URM students in college (e.g., feeling different from others in college, having different ideas or
9 perspectives; Schofield, 2007). By contending that social group differences matter and can be a
10 source of strength, multiculturalism recognizes and appreciates URM students' varied
11 experiences in college (Plaut, 2010).
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Current Research

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23 Although research documents that multiculturalism (vs. colorblindness) can improve
24 outcomes *related* to URM students' academic achievement, research has yet to examine whether
25 multiculturalism (vs. colorblindness) can improve URM students' real-world academic
26 achievement, such as their end-of-year GPAs in college. Additionally, beyond short-term lab
27 studies, research has not examined whether multiculturalism can be translated into a wise
28 intervention (i.e. one focused on changing psychological experiences) that can foster long-term
29 improvements in academic achievement (Walton & Wilson, 2018). In the first intervention of its
30 kind, the present study tests whether multiculturalism (vs. colorblindness) can improve the end-
31 of-year GPAs of URM students in college.
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44 As outlined above, a multicultural ideology reflects and appreciates URM students'
45 experiences of feeling and being different than others. Accordingly, we hypothesize that
46 representing a school's diversity ideology in terms of multiculturalism (vs. colorblindness) will
47 improve URM students' academic achievement.² Additionally, we hypothesize, albeit in an
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55 ² As stated in our pre-registration, we hypothesized that representing a school's diversity ideology in terms of
56 multiculturalism (vs. colorblindness) could benefit not only URM students, but also first-generation college students
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3 exploratory manner, that such an intervention could improve URM students' psychological and
4 behavioral experiences (e.g., fit) in college. In contrast, given that attending to social group
5 differences is likely less relevant to the experiences of well-represented social groups (i.e. White
6 and Asian students in college; Schofield, 2007),³ we hypothesize that representing a school's
7 diversity ideology in terms of multiculturalism (vs. colorblindness) will not impact their
8 academic achievement, nor their psychological and behavioral experiences in college. All
9 hypotheses, both formal and exploratory, were pre-registered (http://bit.ly/OSF_Link1 and
10 http://bit.ly/OSF_Link2).

Method

Participants

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26 During the first few weeks of college, we sent an email to all URM first-year students
27 and a comparable number of White and Asian first-year students at a private, mid-size, selective
28 university. In the email, we asked students to take part in a "University Development Project."
29 As described in our pre-registration, we predetermined our sample size to provide 90% power to
30 detect a small effect size of $\eta^2 = .02$ at the standard .05 alpha error probability. We used G*Power
31 and the F test family and the ANOVA: Fixed Effects, omnibus, one-way test to conduct the
32 power analysis (Faul, Erdfelder, Lang, & Buchner, 2007). The power analysis indicated that we
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45 (i.e. who do not have parents with a 4-year college degree). We examined the effect of the diversity ideology
46 intervention on first-generation students' academic achievement while controlling for race and did not find a
47 significant effect. This could be because we were underpowered (i.e., with first-generation students as only 16% ($n =$
48 67) of the entire sample) or because first-generation students did not relate to the diversity messages, which are
49 typically associated with race or ethnicity (Plaut et al., 2018). When we combine URM and first-generation students
50 into one group of students who are disadvantaged in higher education, we did not find a significant condition x
51 disadvantaged group interaction, $p = .14$. We report full results in the Supplemental Materials.

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53 ³ We group White and Asian students together because we focus on reducing the racial achievement gap, and both
54 White and Asian students tend to achieve better academic outcomes than other racial groups (Hirschman & Wong,
55 1986; Kao & Thompson, 2003). Nevertheless, when we exclude Asian students from the analyses and focus on the
56 racial achievement gap between URM and White students, our results are equivalent (see Supplemental Materials).
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needed to obtain a final sample of 360 participants to reliably detect a small effect. However, we conducted a follow-up survey at the end of students' first year, and therefore increased our target sample size to 600 participants in order to account for the 60% retention rate that we have observed in prior interventions (e.g., Stephens et al., 2014).

A total of 565 students took part in our study. Twelve students could not be included in the analyses because of missing data for variables that were central to our analyses (i.e., race and end-of-year GPA). As described in our pre-registration, we predetermined that we would exclude participants who did not pay attention to the intervention manipulation (i.e. the diversity statement). We asked participants at the end of the study, "Did you pay attention to the content of the diversity statement you read." We excluded 146 participants who responded "No." Importantly, those excluded were both URM students ($n = 64$; 29% of total URM sample) and White and Asian students ($n = 82$, 25% of White and Asian sample). Participants were also distributed comparably between the multicultural condition ($n = 70$) and the colorblind condition ($n = 76$), $\chi^2(1) = .003$, $p = .96$. There was no interaction effect of URM students and condition on attention to the intervention manipulation, $\chi^2(1) = .32$, $p = .57$. The remaining sample included 407 participants, of which 156 were URMs and 251 were White and Asian.⁴ This was the sample that we used to examine the effect of the intervention on academic achievement.

We compared the results from the intervention to data from a campus-wide control group ($N = 1,317$), which included all first-year students who were in the same cohort as the intervention participants, but who did not participate in the intervention. This campus-wide control group made it possible to compare (1) end-of-year GPAs of URM participants in the

⁴ Compared to the population at the university, URM students were overrepresented in our sample. The 156 URM students represented 41% of URM students in the entire freshman class. The 251 White and Asian students represented 20% of White and Asian students in the entire freshman class.

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3 intervention conditions (i.e. the multicultural condition and the colorblind condition) to URM
4 nonparticipants and (2) White and Asian participants in the intervention conditions to White and
5 Asian nonparticipants. Among the nonparticipants, 11% of students' race and one student's
6 gender was missing. This left us with 1,221 nonparticipants ($n = 222$ URMs) that we could use to
7 compare the end-of-year GPAs to participants in the intervention conditions.
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Procedure

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17 **Intervention manipulation.** After consenting, participants were instructed to read and
18 evaluate a potential diversity statement for an incoming student guide, which served as our
19 manipulation of a school's diversity ideology. They were randomly assigned to read either a
20 multicultural diversity statement (multicultural condition; $n = 208$) or a colorblind diversity
21 statement (colorblind condition; $n = 199$). Notably, in both conditions, students learned that their
22 school valued and celebrated diversity and inclusion. To convey this message, participants were
23 told that the school was committed to a "diverse and equitable academic environment."
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33 Additionally, all students read that the university had a variety of resources that focused on
34 creating a more inclusive campus such as "The Campus Inclusion and Community group" and
35 "Student Enrichment Services."
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The key difference between the two conditions was that the multicultural statement emphasized the value of diversity and inclusion by *attending* to social group differences, whereas the colorblind statement emphasized the value of diversity and inclusion by *avoiding* social group differences (i.e. by either emphasizing individuals' unique or personal identities or by emphasizing similarities across individuals; Plaut, 2010). For example, in the multicultural condition, participants read, "It is our responsibility to leverage our differences as strengths to ensure that we create a diverse, equitable, and inclusive campus" and "only by learning about

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3 people with different backgrounds and viewpoints can we challenge our assumptions, test our
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5 ideas, and broaden our understanding of the world.” In contrast, the colorblind diversity
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7 statement emphasized both similarities across individuals and individuals’ unique or personal
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9 identities. Participants in the colorblind condition read “It is our responsibility to leverage our
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11 similarities as strengths to ensure that we create a diverse, equitable, and inclusive campus” and
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13 “only by learning about the unique perspectives and qualities of each and every individual
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15 community member can we challenge our assumptions, test our ideas, and broaden our
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17 understanding of the world.” See Supplementary Materials for the diversity statements.

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21 **Time 1 survey.** Immediately after reading the diversity statement, participants were
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23 asked to complete a *saying-is-believing* exercise, in which they wrote down the main message
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25 from the diversity statement and described how diversity could benefit the school community.
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27 The purpose of this activity was to encourage students to internalize the ideas communicated in
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29 the diversity statement (Stephens et al., 2014; Yeager & Walton, 2011). Next, participants were
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31 asked to complete survey items assessing two outcomes. First, we evaluated participants’
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33 reactions to the diversity statements (i.e. a manipulation check and perceived authenticity of the
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35 diversity statement). Second, we measured participants’ anticipated psychological and behavioral
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37 experiences (i.e. anticipated experiences) in their first year at college.

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42 Among the 407 participants who were exposed to the intervention manipulation, 75% of
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44 participants ($N = 303$) completed the entire Time 1 survey (multicultural condition: $n = 160$;
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46 colorblind condition: $n = 143$). This left us with 303 participants that we could use to examine
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48 participants’ reaction to the diversity statement and their anticipated college experiences. Among
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50 the 303 participants, 126 were URM participants (multicultural condition: 63, colorblind
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52 condition: 60 were in the colorblind condition). Based on a comparable intervention examining
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3 similar measures (Cohen's $d = .43$, Stephens, Hamedani & Destin, 2014), this sample was
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5 moderately powered (i.e., 69% power) to examine the effect of the intervention on URM
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7 participants' reaction to the diversity statement and anticipated college experiences.
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10 **Time 2 survey.** At the end of the first year in college, participants who completed the
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12 Time 1 Survey were invited to complete a second survey (Time 2). This survey asked them to
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14 report their actual college experiences during their past year, rather than their anticipated college
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16 experiences (as was the case in the Time 1 survey). Among the 206 participants who completed
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18 this survey, only 79 were URM students. This sample of 79 URM students was highly under-
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20 powered (i.e., 47% power) to examine the effect of the intervention condition (multicultural vs.
21
22 colorblind) on college experiences for URM participants. We therefore report these measures
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24 and results in the Supplementary Materials.
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Measures

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30 **Academic performance.** The university registrar provided the official end-of-year GPAs
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32 of all first-year students.
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Time 1 survey: Reactions to the diversity statement.

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37 **Manipulation check.** Participants completed a manipulation check to assess whether the
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39 diversity statement effectively represented a school's diversity ideology in terms of
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41 multiculturalism or colorblindness. Participants reported on two items that asked them to assess
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43 the extent to which the diversity statement emphasized the following: "Recognizing and valuing
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45 differences" and "Recognizing and valuing similarities" on a scale from 1 (*not at all*) to 7 (*very*
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47 *much*).
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51 **Perceived authenticity of diversity statement.** We designed the multicultural and
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53 colorblind diversity statements such that they would both convey that the university genuinely
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3 appreciated and valued diversity. Yet, research finds that when organizations promote
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5 colorblindness, URM individuals often question the authenticity of organizations' commitment
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7 to diversity (Purdie-Vaughns et al., 2008). In other words, URM individuals often interpret colorblindness
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9 as a lack of genuine commitment to diversity and inclusion. Therefore, in the current study, we
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11 sought to ensure that any benefits observed in the multicultural versus colorblind condition were
12
13 not due to differences in perceived authenticity of the diversity statements. Participants reported
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15 on two items the extent to which they perceived the diversity statement as authentic on scale
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17 from 1 (*strongly disagree*) to 7 (*strongly agree*). The items were "The diversity statement
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19 seemed authentic" and "The diversity statement showed that the [university] cares about
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21 promoting diversity" ($\alpha = .84$).
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27 **Time 1 survey: Anticipated college experiences.** Participants were asked to complete
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29 survey items adapted from previous wise interventions related to their anticipated experiences in
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31 their first year at college (Stephens et al., 2014; Walton & Cohen, 2007). We included these
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33 measures to examine whether representing a school's diversity ideology in terms of
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35 multiculturalism (vs. colorblindness) could improve outcomes in addition to URM students'
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37 academic achievement.
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41 Participants reported on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) their
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43 anticipated *social fit* (e.g., "I feel part of the college community at [the University]"); *learner*
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45 *empowerment* (e.g., "I can do all of the work in class if I don't give up"); *appreciation of*
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47 *difference* (e.g., "There are different ways to be successful at [the University]"); *social identity*
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49 *threat* (e.g., "I expect students at my college to make unfair assumptions about me based on my
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51 background"); *bridging differences* (e.g., "In college, I hope to have the opportunity to educate
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53 others about my background, culture, and identity"); *intergroup comfort* (e.g., participants
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3 indicated how comfortable they would be to interact with someone “from a different social class
4 background than you”); and *help-seeking* (e.g. participants indicated the number of hours per
5 month they would “email a professor to ask a question”). For a full list of items in the Time 1
6 survey, see Supplemental Materials.
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11 Results

12 Analysis Strategy

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15 We preregistered our data analysis plan on OSF. Unless otherwise noted, we examined
16 the effect of the intervention using a 2 (race: URM vs. White and Asian) x 2 (intervention
17 condition: multicultural vs. colorblind) analysis of covariance (ANCOVA). In these ANCOVAs,
18 to increase the chance that any effects resulted from the intervention, rather than pre-existing
19 skills and demographic differences, we controlled for participants’ SAT scores, family income
20 (not low SES = 0; low SES = 1), generation status (continuing-generation = 0; first-generation =
21 1) and gender (male = 0; female = 1). Results are largely equivalent without covariates (see
22 Supplementary Materials).
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35 We obtained participants’ academic and demographic information both from the
36 university registrar and from the Time 1 survey. For the objective measures such as SAT scores,
37 end-of-year GPA, and family income (i.e. Pell grant status) we used data from the university
38 registrar in the analyses because we reasoned that these data would be more accurate than
39 students’ retrospective self-reports. However, for participants’ current social identities (i.e.,
40 gender, race, and generation-status), we used participants’ self-report data from the Time 1
41 survey in the analyses. For any missing social identity data, we used information from the
42 university registrar.
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53 Time 1 Survey: Reactions to the Diversity Statement

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3 **Manipulation check.** Demonstrating that the multicultural statement effectively
4 conveyed that the university attended to social group differences in college more than the
5 colorblind statement, results indicated a main effect of condition, $F(1, 295) = 30.22, p < .001, \eta^2$
6 = .09. Participants in the multicultural condition reported that the diversity statement recognized
7 and valued social group *differences* significantly more ($M = 6.16, SD = 0.98$) than those in the
8 colorblind condition ($M = 5.39, SD = 1.41$). There was no significant main effect of race, $F(1,$
9 $295) = 0.32, p = .57$, nor an interaction, $F(1, 295) = 0.88, p = .35$.

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19 Next, we confirmed that the colorblind statement effectively conveyed that the university
20 avoided social group differences and instead focused on similarities more than the multicultural
21 statement. Results indicated a main effect of condition, $F(1, 295) = 46.10, p < .001, \eta^2 = .14$,
22 such that participants in the colorblind condition reported that the diversity statement recognized
23 and valued *similarities* significantly more ($M = 5.34, SD = 1.32$) than those in the multicultural
24 condition ($M = 4.11, SD = 1.68$). There was no main effect of race, $F(1, 295) = 1.54, p = .22$, nor
25 an interaction effect, $F(1, 295) = 0.02, p = .90$.

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35 **Perceived authenticity of diversity statement.** We examined participants' perceptions
36 of the authenticity of the diversity statements. Supporting the integrity of our manipulation,
37 results indicated no significant main effect of condition, $F(1, 295) = 0.52, p = .47$, no main effect
38 of race, $F(1, 295) = 1.47, p = .23$, nor an interaction, $F(1, 295) = 0.04, p = .84$. Results suggest
39 that URM participants perceived the two different diversity statements to be comparably
40 authentic, and there was no difference in perceived authenticity between URM and White and
41 Asian participants. Additionally, results for academic performance do not differ when controlling
42 for perceived authenticity of the diversity statements (see Supplemental Materials). Taken
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3 together, it is unlikely that differences in perceived authenticity of the diversity statements are
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5 influencing our results.
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Academic Performance

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10 First, we examined our central hypothesis that representing a schools' diversity ideology
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12 in terms of multiculturalism (vs. colorblindness) could reduce the racial achievement gap by
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14 improving URM students' academic achievement in college. Results supported our prediction.
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16 There was a significant main effect of race, $F(1, 399) = 9.90, p = .002, \eta^2 = .02$, and a
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18 marginally significant effect of intervention condition, $F(1, 399) = 2.75, p = .10, \eta^2 = .007$ on
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20 end-of-year GPA. These main effects were qualified by the predicted race x intervention
21
22 condition interaction, $F(1, 399) = 4.23, p = .04, \eta^2 = .01$. As shown in Figure 1, whereas a gap of
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24 .36 grade points emerged between URM participants and White and Asian participants in the
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26 colorblind condition, $F(1, 399) = 13.47, p < .001, \eta^2 = .03$, their GPAs did not differ
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28 significantly in the multicultural condition, $F(1, 399) = 1.22, p = .27$. Moreover, the
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30 achievement gap in the multicultural condition was 47% smaller than in the colorblind condition.
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32 Further supporting our hypotheses, results indicated that URM participants in the multicultural
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34 condition had higher GPAs than URM participants in the colorblind condition, $F(1, 399) = 5.59,$
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36 $p = .02, \eta^2 = .01$. Additional exploratory analyses revealed that these differences could not be
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38 explained by variation in students' course selection between conditions (i.e. difficulty of courses;
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40 see Supplemental Materials).
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47 Next, we examined how URM participants' in the two intervention conditions
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49 (multiculturalism and colorblindness) compared to the campus wide control condition (i.e.,
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51 nonparticipants, or students who did not participate in the intervention). We conducted a 2 (race:
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53 URM vs. White and Asian) x 3 (intervention condition: multicultural vs. colorblind vs. campus-
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wide control) analysis of covariance (ANCOVA). See Table 1 for results of all contrasts in the ANCOVA.

Table 1
Univariate Analysis of Covariances Results for Grade Point Average (GPA)

<i>Variable</i>	<i>F</i>
Intervention condition	1.5
Race	32.34***
Intervention x Race	2.53 ⁺
<i>Raw means and Standard Deviations</i>	
<i>Mean (SD)</i>	
URM	
Multicultural (1)	3.37 _a (.40)
Colorblind (2)	3.20 _b (.49)
Campus-Wide Control (3)	3.26 _{a, b} (.49)
White and Asian	
Multicultural (4)	3.54 _{a, c} (.40)
Colorblind (5)	3.56 _{a, c} (.36)
Campus-Wide Control (6)	3.56 _c (.36)

Note. Within each column, means that have different subscripts differ significantly ($p < .05$) based on post hoc tests. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

We found a significant a main effect of race, $F(1, 1618) = 32.34, p < .001, \eta^2 = .02$, and no main effect of intervention condition, $F(2, 1618) = 2.75, p = .10, \eta^2 = .007$. These main effects were qualified by a marginal race x intervention condition interaction, $F(2, 1618) = 2.53, p = .08, \eta^2 = .003$. We decomposed this interaction and found that the GPA of URM students significantly differed across conditions, $F(1, 1618) = 3.19, p = .04, \eta^2 = .004$. Suggesting that the multicultural condition may have improved students' academic outcomes beyond what URM students experience in the absence of a diversity statement, URM participants in the multicultural condition earned marginally higher GPAs than URM nonparticipants in the campus-wide control

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group, $p = .07$, 95% CI [-0.01, 0.19]. Moreover, URM participants in the colorblind condition did not differ from URM nonparticipants in the campus-wide control group, $p = .23$, 95% CI [-0.16, 0.04]. This finding suggests that the colorblind diversity statement may be similar to the messages that students typically encounter in their university environments. In contrast to URM participants, and consistent with our hypotheses, the intervention conditions did not affect White and Asian participants' GPAs $F(2, 1618) = 0.110$, $p = .89$, $\eta^2 = .000$.

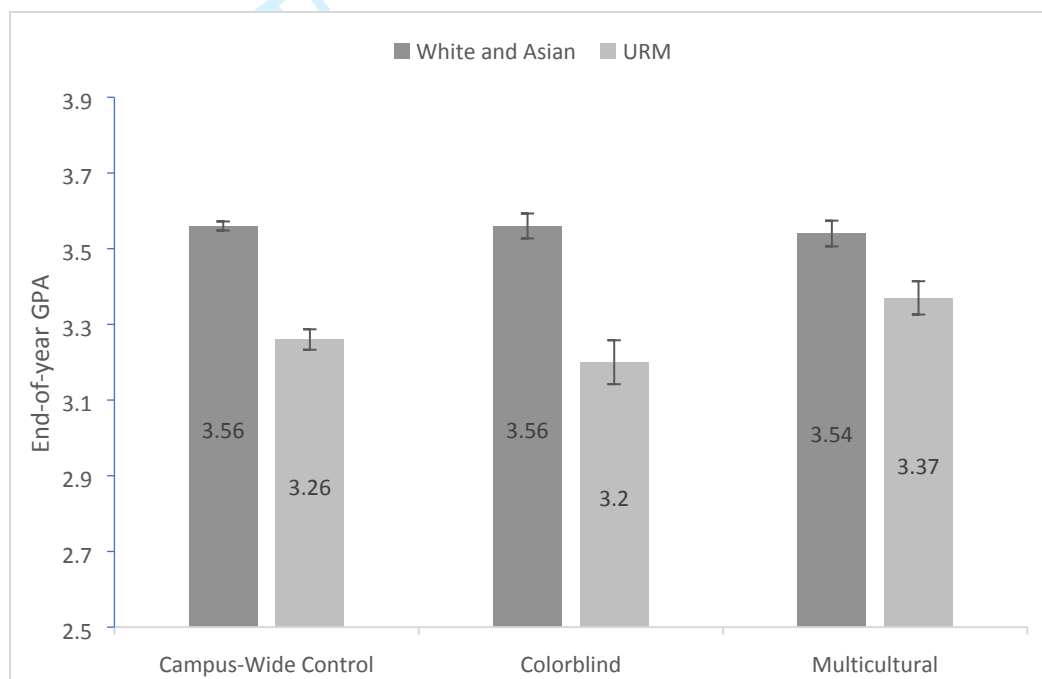


Figure 1. Raw means are presented for ease of interpretation. Mean end-of-year GPA as a function of race and condition. Error bars show standard errors of the mean.

Time 1 Survey: Anticipated College Experiences

To evaluate the effect of representing a school's diversity ideology in terms of multicultural (vs. colorblindness) on anticipated college experiences, we conducted a 2 (race: URM vs. White and Asian) x 2 (intervention condition: multicultural vs. colorblind) multivariate analysis of covariance (MANCOVA), with the same covariates as our GPA analysis. Consistent

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3 with previous research, the MANCOVA indicated a marginally significant main effect of race, F
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5 $(7, 289) = 1.80, p = .09, \eta^2 = .04$, such that URM participants tended to indicate worse
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7 anticipated college experiences than White and Asian participants. Follow-up univariate analyses
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9 revealed that URM participants indicated marginally higher levels of social identity threat and
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11 indicated lower levels of the university appreciating differences compared to White and Asian
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13 participants, $F(1, 302) = 3.65, p = .06$ and $F(1, 302) = 6.83, p = .01$, respectively. There were
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15 no other marginal or significant differences for race. Additionally, results indicated no significant
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17 main effect of condition on anticipated college experiences, $F(7, 289) = 1.27, p = .26$. Finally,
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19 the MANCOVA indicated a marginally significant race x condition interaction, $F(7, 289) =$
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21 $1.87, p = .07, \eta^2 = .04$. However, follow up univariate analyses indicated no significant
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23 interactions for any of the individual measures or any marginal differences for URM students
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25 between conditions.
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General Discussion

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33 In the current research, we developed and tested a novel multicultural diversity ideology
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35 intervention, which demonstrated important consequences for the long-term academic
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37 achievement of underrepresented racial and ethnic minority college students. During the first few
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39 weeks of college, reading a diversity statement that emphasized the value of diversity by
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41 *attending* to, rather than *avoiding*, social group differences led URM students to earn higher end-
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43 of-year GPAs, thereby statistically eliminating the racial achievement gap
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48 The present research contributes to the growing literature on wise interventions that aim
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50 to shape students' psychological experiences (e.g., Yeager & Walton, 2011). This literature often
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52 focuses on emphasizing shared experiences, affirming the self, or changing students' mindsets
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54 about the nature of ability (Blackwell, Trzesniewski, & Dweck, 2007; Cohen & Sherman, 2014;
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3 Walton & Cohen, 2007). The current research is the first to demonstrate that representing a
4 school's diversity ideology in terms of multiculturalism (vs. colorblindness) can improve URM
5 students' academic achievement in college.
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10 The present research also advances prior literature regarding the psychological and
11 behavioral benefits of multiculturalism for racial and ethnic minorities (Plaut, 2010). Previous
12 research demonstrates that multiculturalism is associated with positive outcomes *related to*
13 academic achievement (Holoien & Shelton, 2012; Plaut et al., 2009; Wilton et al., 2015). The
14 current research extends these findings by demonstrating that multiculturalism can causally
15 improve the long-term (and real-world) academic achievement of URM college students. An
16 academic benefit such as this may have significant implications for URM students' success after
17 college (Carnevale, Jayasundera, & Cheah, 2012; Lareau & Weininger, 2003).
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Limitations and Future Directions

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30 In an exploratory manner, we hypothesized that the academic benefits of multiculturalism
31 could be partially explained by improvements in URM students' experiences in college. We did
32 not find evidence that this was the case. One explanation for our null findings could be that our
33 power was reduced (Power = .41 with $\eta^2 = .01$ and Power: = .70 with $\eta^2 = .02$) because far
34 fewer participants ($n = 303$) completed these survey measures relative to those exposed to the
35 manipulation ($n = 407$). Alternatively, it is possible that other mechanisms were the pathways
36 through which the intervention influenced students' achievement. For example, it is possible that
37 the multicultural condition increased URM students' participation in diversity-related events on
38 campus, which have been shown to improve academic achievement (Brannon, Markus, &
39 Taylor, 2015; Denson, 2009). Future research should identify the psychological and behavioral
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3 mechanisms that explain why the multicultural diversity ideology improves URM students'
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5 academic achievement.
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8 Future research should also test the effectiveness of this intervention in different contexts.
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10 If schools do not have programming or resources related to diversity and inclusion, or if they
11
12 lack significant numbers of underrepresented racial and ethnic minorities, students would be
13
14 unlikely to perceive a multicultural diversity statement as authentic or meaningful. In such a
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16 context, it is unlikely that the current intervention would be beneficial for reducing the racial
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18 achievement (Apfelbaum, Stephens, & Reagans, 2016; Purdie-Vaughns et al., 2008; Yeager &
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20 Walton, 2011).
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Conclusion

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26 Though colleges and universities across the U.S. frequently espouse the importance of
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28 diversity and inclusion, they often adopt a colorblind ideology that avoids social group
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30 differences (Schofield, 2007). The present research suggests that it is not enough for schools to
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32 merely promote diversity and inclusion; the specific *diversity ideology* matters. The current
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34 research demonstrates that representing a school's diversity ideology in terms of
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36 multiculturalism (vs. colorblindness) is one powerful way to improve the academic achievement
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38 of underrepresented racial and ethnic minority students. Indeed, attending to, rather than
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40 avoiding, social group differences can ultimately help to reduce the racial achievement gap.
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