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Does Socioeconomic Diversity Make a Difference? Examining the Effects of Racial and Socioeconomic Diversity on the Campus Climate for Diversity

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This article considers whether the socioeconomic diversity of the undergraduate student body and experiences with cross-class interaction (CCI) are significantly related to cross-racial interaction (CRI) and engagement with curricular/co-curricular diversity (CCD) activities. Individual students who reported higher levels of CCI had significantly higher levels of CRI and CCD. While the socioeconomic diversity of the student body had no direct effect on student involvement in CCD activities or CRI, it had an indirect effect on these activities via CCI. In other words, a socioeconomically diverse institution is associated with more frequent interactions across class lines, which is associated both with more frequent interactions across race and

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greater involvement in CCD activities. Findings indicate that both socioeconomic and racial diversity are essential to promoting a positive campus racial climate and that racial and socioeconomic diversity, while interrelated, are not interchangeable. Implications for the campus climate for diversity are discussed.

KEYWORDS: affirmative action, campus climate, racial diversity, social class, socioeconomic diversity

Many students live in racially homogeneous communities prior to college and attend similarly homogeneous high schools (Orfield, 2009). Thus, college plays a unique role in exposing students to new ideas and perspectives through engagement in a racially diverse student body (Gurin, Dey, Gurin, & Hurtado, 2004). Racially diverse institutions of higher education have the potential to weaken the “cycle of segregation” that permeates society, being a rare opportunity for students to engage across racial/ethnic lines (Sáenz, 2010). Accordingly, universities have invested substantial resources in promoting positive, sustained interracial contact via initiatives such as diversity-related programming and curriculum (Engberg, 2004). The rationale for supporting such initiatives is that it is insufficient to bring together a racially diverse class; universities must also promote engagement across racial/ethnic lines in order to yield the educational benefits associated with diversity (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998; Milem, Chang, & Antonio, 2005). These benefits include leadership skills, commitment to civic engagement, interracial friendship, and bias reduction (Bowman, 2011; Denson, 2009; Jayakumar, 2008; Park, 2012).

Writ large, university environments set the stage for engagement with racial diversity through means such as “structural diversity” (the racial composition of the student body), curricular diversity (incorporating racial diversity into the academic curriculum), and interactional diversity (promoting student interaction across race inside and outside of the classroom; Gurin, Dey, Hurtado, & Gurin, 2002; Hurtado et al., 1998). All of these mechanisms are directly related to race in one way or another, with the possible exception of interactional diversity, which includes efforts to unite students of different races around common goals that may or may not explicitly address race, such as community service or cooperative learning (Cabrera, Crissman, Bernal, Nora, & Pascarella, 2002; Gurin & Nagda, 2006).

However, are race-related mechanisms the only way to yield the outcomes paramount to promoting racial diversity? Are there other structural conditions of the university or student interactions with different types of diversity, not necessarily race-based, that are linked to racial-diversity-based outcomes and the campus climate for diversity? In this study, we are interested in seeing whether a “different type of diversity”—diversity related to social class—is related to student engagement with the outcomes of

curricular/co-curricular diversity (CCD) and cross-racial interaction (CRI). Accordingly, we examine two forms of socioeconomic diversity in this study to address the following questions: First, does the structural socioeconomic diversity (SSD) of the student body have a measurable impact on student engagement with CCD and CRI? We use the term *SSD* to describe the socioeconomic heterogeneity of the student body. Second, is cross-class interaction (CCI; interacting with peers of different economic backgrounds) associated with higher levels of CCD and CRI? Third, does the SSD of the student body have an indirect impact via CCI on student engagement with CCD and CRI? Last, could there be a possible interaction effect between race and class on student engagement with CCD and CRI?

These questions are essential to address due to the lack of knowledge regarding how social class potentially influences the campus climate for diversity. In their extensive review of research on campus climate, Hurtado, Griffin, Arellano, and Cuellar (2008) note,

Importantly, today's campuses are more committed to investigating a wider spectrum of diversity issues that involve multiple communities and the intersectionality of social identities. . . . Future efforts to assess diversity, equity, and climate must be more inclusive of difference that extends beyond race and ethnicity. (p. 217)

By studying socioeconomic diversity and interactions across social class, we respond to their challenge by studying a construct of diversity that is in some aspects distinct from race, while also considering its potential relationship to, and interaction with, racial diversity and racial diversity-related outcomes.

Further research is also necessary because some have argued that other forms of diversity (i.e., socioeconomic) can actually replace racial diversity to produce comparable educational benefits. For instance, Roger Clegg, president and general counsel of the Center for Equal Opportunity, an organization that opposes race-conscious admissions, stated,

I would much prefer that [admissions] preferences be based on socioeconomic status rather than race. The educational benefits that supposedly flow from a diverse student body are rooted in differences in perspectives and experiences—not in skin color per se. Weighing socioeconomic status would provide such diversity to a similar degree as race, and without the ugliness, divisiveness, and myriad other costs of racial discrimination. (Clegg, 2009)

In this quote, Clegg makes a provocative claim that has yet to be empirically examined. While some studies have examined whether class preferences can produce racial diversity similar to that produced by race-conscious admissions policies (Bernal, Cabrera, & Terenzini, 2000; Cancian, 1998; Long, 2007; Long & Tienda, 2008), no studies to date have examined the effects

of socioeconomic diversity on students *over time*, beyond the point of entry. Thus, we know little about whether the benefits associated with racial diversity can come from maximizing socioeconomic diversity. In this article, we respond to Clegg's claim by examining whether two forms of socioeconomic diversity—the socioeconomic heterogeneity of a student body and students' interactions across socioeconomic lines—are significantly related to two critical educational outcomes.

Background

We begin our review by discussing research on the two dependent variables of the study: CCD and CRI. We then address the role of social class in higher education and the relationship between race and class in college admissions and students' peer groups. Based on past research on how social class influences the racial composition of peer groups, we propose that attending a more socioeconomically diverse institution and engaging in CCI may be linked to higher levels of CCD and CRI.

Curricular/Co-curricular Diversity: Diversity Inside and Outside of the Classroom

Both CCD and CRI are fundamental components of the *behavioral dimension* of the campus racial climate. The campus racial climate framework (Hurtado et al., 1998; Hurtado et al., 2008) includes four key interrelated components that influence the campus racial climate: the behavioral dimension (intraracial and intergroup relations, as well as the activities that support such interactions), the psychological component (students' perceptions of the campus racial climate), the institution's legacy of historical inclusion or exclusion, and structural diversity (the racial composition of the student body). While structural diversity generally garners the most attention as an indicator of diversity, it is a necessary but insufficient condition for healthy CRI (Chang, 1999; Chang, Denson, Sáenz, & Misa, 2006; Pike & Kuh, 2006).

As related to the behavioral dimension of climate, CCD activities create opportunities for CRI via engagement inside or outside of the classroom. In the classroom setting, the curriculum is a powerful venue for students to dialogue about diversity (Gurin et al., 2002), and multiple studies have linked taking ethnic studies courses or courses that incorporate material related to diversity with enhanced commitments to promoting racial understanding, reducing one's prejudice, and promoting social justice (Engberg, 2004; Zuniga, Williams, & Berger, 2005). Besides exposing students to the histories and lived experiences of communities of color, having students discuss issues in racially diverse settings where multiple perspectives are offered enhances critical and active thinking (Antonio et al., 2004; Gurin et al., 2002).

CCD-related activities that occur outside of the classroom are also associated with mainly positive outcomes. Studies examining diversity-related

workshops have largely found favorable effects (Engberg, 2004). Another type of diversity-related activity is participation in racial/ethnic student organizations. These organizations foster a positive sense of self for students; they also play a vital social support role (Museus, 2008). Students of color in particular may need to spend time in racially homogeneous “safe spaces” to “refuel” before spending additional time with peers of other races, meaning that ethnic student organizations can play a role in supporting CRI (Park, 2011). Intergroup dialogue methods can also be used inside or outside of the classroom setting; such dialogues are heralded for fostering the communication and conflict resolution skills that are critical to a diverse democracy (Gurin & Nagda, 2006).

Cross-Racial Interaction: The Roles of College Environments

As Allport (1954) explained in his work on prejudice reduction, simply assembling a racially diverse group of people does not automatically lead to positive outcomes. Throwing people together of different backgrounds without fostering positive engagement can lead to hostile and guarded interactions. Institutions of higher education can be alienating environments for students of color, who are generally less satisfied with campus diversity (Park, 2009). They also tend to have a lower sense of belonging on campus (Johnson et al., 2007). Such a sense of belonging is critical to persistence and a healthy campus racial climate (Hausmann, Schofield, & Woods, 2007; Hurtado & Carter, 1997), further underscoring the importance of fostering positive engagement across racial/ethnic lines.

Thus, universities seek to promote a healthy campus racial climate via CRI through means such as socializing, eating together, studying together, and dating across race. Such activities are linked to enhanced civic interest, learning from another racial/ethnic group, and other positive outcomes (Chang, Astin, & Kim, 2004; Espenshade & Radford, 2009; Gurin et al., 2002). CRI is enabled by the structural diversity of the institution, a necessary but insufficient condition for positive CRI to occur (Chang et al., 2004; Hurtado et al., 2008; Sáenz, 2010). Simply put, without the availability of racially diverse peers, interactions across race are literally impossible (Blau & Schwartz, 1984). However, students’ experiences with CRI are also influenced by a myriad of other factors.

Cross-Racial Interaction: The Role of Precollege Interactions

Precollege interactions with diverse peers and precollege dispositions for CCD engagement also influence CRI (Hall, Cabrera, & Milem, 2011; Locks, Hurtado, Bowman, & Oseguera, 2008; Milem, Umbach, & Liang, 2004). Multiple studies have found that the demographic conditions of a student’s high school are related to CRI. In Hall et al.’s (2011) analysis of a mid-Atlantic university, the structural diversity of the student’s high school was

directly and positively related to the student's precollege interaction with diverse peers, which in turn was both directly and indirectly linked to CRI during college. Locks et al. (2008) found that having a higher proportion of Whites in precollege environments was negatively related to positive CRI for White students. Proportion of Whites in the precollege environment was also negatively related to predisposition for CCD for both White students and students of color.

Sáenz (2010) examined predictors of CRI for White students who grew up in predominantly White versus predominantly minority environments, as well as students of color who grew up in predominantly White versus predominantly minority environments due to the intense racial and socioeconomic segregation within U.S. schools (Frankenberg, Lee, & Orfield, 2003; Massey, Charles, Lundy, & Fischer, 2003). White students from predominantly White high schools had the lowest rate of positive CRI during college. Sáenz's findings do not indicate much of a relationship, if any, between socioeconomic status (SES) and CRI, even when disaggregating by students' precollege environment. Neither family socioeconomic level nor attending a public high school was a significant predictor of CRI for any group. Family SES was a positive predictor of CRI for the aggregate sample before structural diversity and the students' college experiences were controlled for; it was nonsignificant in the final model.

However, previous studies have found that SES does play a role in students' precollege and college experiences with diversity due to its influence on students' neighborhoods and K–12 environments. Looking at second-year college students, Milem et al. (2004) found that White affluent students were less likely to interact across race, in part because family income had a direct negative effect on students' diversity engagement prior to college. White students from more affluent families also came from more homogeneous precollege environments (a composite of neighborhood, school, and peer group composition), which was indirectly and negatively linked with CRI. While their study provides valuable insight into the role of SES in shaping college diversity experiences, it examined SES as a trait held by individuals as opposed to part of the institutional campus environment, leaving unanswered questions about whether the socioeconomic composition of the student body has any relationship to CRI. What happens to students once they actually come to college with not only different racial backgrounds but also different socioeconomic backgrounds, and how do these backgrounds affect the institutional climate for diversity?

Social Class, College Admissions, and the Campus Racial Climate

To inform our understanding of this question, we begin this section with a brief overview of how social class shapes society and higher education. We discuss the relationship between race and class in the college admissions

process in order to show how race and class are related, but not interchangeable, concepts. We then address how the two attributes influence students' peer groups and experiences during college.

Simply put, our society is stratified not only by race but also by class. The "Two Americas" that John Edwards repeatedly evoked during the 2004 presidential campaign and the "We are the 99 Percent" rallying call of the Occupy Wall Street protests aptly capture the increasing class divides in the country. The top quarter of the country's earners hold 84% of the country's wealth (Norton & Ariely, 2011). These divides extend to K–12 education and the ensuing college application process (McDonough, 1997; Park & Eagan, 2011). Just as the educational pipeline is divided by race, it is also deeply divided by social class (Bastedo & Jaquette, 2009; Carnevale & Rose, 2003; Reardon, Yun, & Kurlaender, 2006). Despite committing substantial resources to financial aid, most selective and highly selective institutions of higher education have difficulty recruiting and retaining lower-income students: 70% of students at the most highly selective institutions came from families who ranked in the top quartile of family income, a trend that has shifted little since 1982 (Bastedo & Jaquette, 2009). Only 5% of students from the most elite institutions came from students in the bottom socioeconomic quartile, but students from the same income quartile made up 43% of those who never attended college (Bastedo & Jaquette, 2009). The percentage of low-income students at 25 of the 30 top-ranked universities actually dropped between 2004 and 2007, ironically, the time frame in which many of these same institutions revised their financial aid policies to attract more low-income students (*Journal of Blacks in Higher Education*, 2009).

Race and class are not interchangeable, but they intersect in numerous ways. In 2008, the median income for Black and Latino/a families (\$39,879 and \$40,466, respectively) in America trailed behind the national household median of \$61,521 (U.S. Census Bureau, 2009). Racial gaps persist in regard to wealth accumulation, which includes metrics such as savings, inheritances, home ownership, and stock options (Gittleman & Wolff, 2000). Noting that Black and Latino/a families are disproportionately more likely to be lower income, some have argued in favor of replacing race-conscious admissions policies with class-based affirmative action (Kahlenberg, 1996). They contend that the current race-conscious policies disproportionately benefit affluent and upper-middle-class Black and Latino/a families, leaving behind students who would benefit from a class preference. As the logic goes, class-based affirmative action would not result in racially homogeneous student bodies because lower-income Black and Latino/a students would be admitted via class preference.

However, simulations of admissions data indicate that class-based affirmative action would result in substantially lower levels of racial diversity (Bernal et al., 2000; Cancian, 1998; Espenshade & Radford, 2009). While race and class are highly correlated, they are not interchangeable (Linn &

Welner, 2007). Furthermore, the absolute number of White students who would benefit from class preferences exceeds the absolute number of Black and Latino/a students who benefit, meaning that such preferences on their own would likely not result in racially diverse student bodies. Nonetheless, precollege environments are generally stratified along both race and class. Orfield and Lee (2005) found that the average high school with only 0% to 10% of its students in poverty is made up of 82% White students, while the average high school with 50% to 100% of its students in poverty is only 33% White.

Understanding some of the similarities and differences between race and class in college admissions contextualizes how racial and socioeconomic diversity might independently or collectively affect student experiences with racial diversity. Independently, social class affects factors such as students' self-concept and sense of identity (Aries, 2008), sense of belonging (Ostrove & Long, 2007), access to financial aid (Titus, 2006), and educational aspirations (Walpole, 2008). Intersections between social class and other pertinent identities (e.g., race, gender) uniquely affect students' experiences during college (Strayhorn, 2010). Several previous studies have examined how an individual student's SES is related to engagement with racial diversity, including but not limited to CRI (Goodman, 2009). Findings include SES as a negative predictor of openness to diversity but a positive predictor of self-confidence (Chang et al., 2006) and viewing engagement in social action as important (Hurtado, Engberg, Ponjuan, & Landreman, 2002). Bowman (2009) found that students from lower- and middle-income families experienced the greatest cognitive growth from taking diversity courses. As noted, SES was a nonsignificant predictor of positive CRI across racial/ethnic groups in one study (Sáenz, 2010) but a positive predictor for Black students in another (Sáenz, Ngai, & Hurtado, 2007). In most of these studies, SES was operationalized as a combination of family income and parental education, although some studies only examine income.

SES also appears to affect the racial composition of students' peer groups and other experiences with racial diversity. Affluent students' friendship groups tend to be both racially *and* socioeconomically homogeneous (Aries, 2008; Espenshade & Radford, 2009). Aries's (2008) single-institution study of Black and White low-income and affluent students and Espenshade and Radford's (2009) study of 9,000 students at selective institutions both found that affluent White students were by and large more likely to have friendship groups made up of other affluent White students, while lower-income White and Black students had the most racially diverse friendship groups in Aries's (2008) study. Espenshade and Radford (2009) found that students from more affluent families were 44 percentage points more likely to interact with same-race peers than to interact across race. Low-income students were only 12 percentage points more likely to interact with same-race peers than peers of other races. Overall, as social class

increased, students were less likely to interact across race. However, once race, structural diversity, and college experiences were controlled for, social class was not a significant predictor of CRI.

Additional multivariate analyses by Espenshade and Radford (2009) illuminate how social class affects race-related social relations. Overall, students were significantly more likely to date at least one White student if they self-identified as upper or upper-middle class, and they were more likely to live with a Black student after their first year of college if they self-identified as lower class. Having upper-class status lowered the likelihood of having a close friendship with an Asian American student or socializing often with Hispanic students. Notably, while there were clear examples where social class had a significant, direct effect on students' cross-racial relational patterns, there were also numerous cases where social class was nonsignificant. Espenshade and Radford's (2009) study provides preliminary support for the idea that social class affects students' interactions and relationships with peers of different races. Still, given the mixed findings, additional research clarifying the relationship between race and class in the college environment is needed.

All of the aforementioned studies look at class and/or SES as a trait of the individual, rather than part of an institutional-level environment. More recent diversity studies emphasize the importance of examining institutional environments (e.g., Chang et al., 2006; Denson & Chang, 2009) as the benefits of diversity extend to institutional contexts as well. For example, while a student's own level of CRI has a more powerful and direct effect on their development, students also benefit uniquely from just being enrolled in an institution that sustains positive race relations *regardless* of their own personal level of CRI (Chang et al., 2006). We add to the diversity literature by examining SSD as an element of the institutional environment for diversity. To be more specific, is there something about the overall socioeconomic composition of the student body that either directly or indirectly relates to students' experiences with racial diversity? Is CCI at the student level associated with the outcomes of CCD and CRI, given previous findings that individuals' social class is related to the racial composition of their friendship groups and patterns of CRI? And finally, could there be a possible interaction effect between race and class on student experiences with racial diversity on college campuses?

Conceptual Framework

In this study, we break ground by addressing two manifestations of SES that has not been addressed in the literature as a potential influence on racial diversity outcomes: CCI and SSD. In this section, we explain how we conceptualize SSD and CCI in relation to the campus racial climate framework developed by Hurtado et al. (1998). As noted earlier, the campus racial climate framework includes four interrelated components that influence the

campus climate for diversity: structural diversity, the behavioral dimension, the psychological component, and the historical legacy of inclusion/exclusion (Hurtado et al., 1998; Hurtado et al., 2008). We suggest that both SSD and CCI exert some influence on at least two of the four components of the campus racial climate: structural (racial) diversity and the behavioral dimension of climate.

We propose that SSD and CCI play roles in “priming” structural racial diversity, enabling higher levels of CRI and CCD and thus enhancing the behavioral dimension of the campus racial climate. Structural racial diversity is a necessary but insufficient condition for CRI and, to some extent, CCD. It is crucial because without the availability of racially diverse peers, interactions across race are literally impossible (Blau & Schwartz, 1984; Park, in press). Structural diversity in higher education institutions counteracts the natural trend of homophily where, simply put, “likes attract likes” or “similarity breeds connection” (McPherson, Smith-Lovin, & Cook, 2001). Race is the single most influential determinant of homophily, meaning that individuals are more likely to associate along racial lines than any other characteristic. Tellingly, in 2004, only 15% of U.S. adults had a friend of another race with whom they discussed important matters (McPherson, Smith-Lovin, & Brashears, 2006). Structural racial diversity within a relatively contained environment like a university campus helps counteract individuals’ propensity for homophily because there are fewer opportunities to engage solely with same-race peers and greater opportunities to interact with peers of other races (Chang et al., 2004).

Several studies have found that, regardless of race, lower-income students are more likely to have interactions and friendships with peers of other races than their higher-income counterparts (Aries, 2008; Espenshade & Radford, 2009). These same studies have found that affluent Whites are more likely to associate with not only other Whites, but other affluent Whites. Why are racial boundaries more porous for lower-income Whites, while they seem more pronounced for more affluent Whites? White students from lower socioeconomic backgrounds overall are more likely to have attended racially diverse high schools (Orfield & Lee, 2005), an experience associated with higher rates of positive CRI during college (Hall et al., 2011; Locks et al., 2008; Milem et al., 2004; Sáenz, 2010). Conversely, White students from predominantly White precollege environments have lower levels of CRI during college (Locks et al., 2008; Sáenz, 2010), and affluent high schools are much more likely to be predominantly White than schools with greater socioeconomic diversity and/or higher concentrations of poverty (Orfield & Lee, 2005).

These studies suggest that race is not the sole demographic influence on interracial interaction in the university context. At many institutions, due to a lack of both racial and socioeconomic diversity, affluent White students have ample opportunities to associate primarily with other affluent

White students. Affluent students (and affluent White students in particular) are overrepresented in selective and highly selective institutions of higher education (Bastedo & Jaquette, 2009). They have easier entry into subcultures of the university that include higher proportions of other affluent Whites, such as Greek life, which is associated with lower engagement with racial diversity (Park, 2012; Sáenz, 2010). Arguably, these sorts of associations reinforce racial divisions on campus because students are not just primarily socializing along racial lines, but racial *and* socioeconomic lines.

When social relations are divided along not just racial, but racial *and* socioeconomic lines, race is acting as a “consolidated characteristic.” The term describes how race is highly correlated with other social categories that influence patterns of social relations, such as social class, education, and religion (Blau, 1977; Blau & Schwartz, 1984). Accordingly, race is the strongest predictor of homophily (McPherson et al., 2006), and homophily is bolstered when race functions as a consolidated characteristic, that is, when divisions are not just based on race but race and other characteristics such as class or religion (Kim, 2006). When campuses lack socioeconomic diversity, not only is there a consolidation of race and the characteristics that tend to accompany it, there exists a consolidation of privilege—both racial and socioeconomic. Those with more privilege (affluent Whites) are able to consolidate that privilege by socializing more with other Whites; those with less privilege (lower-income Whites and students of color, both of whom tend to be underrepresented populations) have fewer options to surround themselves with peers who share both their racial and socioeconomic background, making them more likely to cross racial divides.

We propose that when an institution has more socioeconomic *and* racial diversity, it challenges the consolidation of privilege on campus, contributing to a more equitable campus environment with higher levels of CRI and CCD. This dynamic is potentially enabled through three processes. First, due to pervasive educational and residential segregation (Orfield & Lee, 2005), many selective institutions have relatively low proportions of White students who have significant precollege exposure to racial diversity. Hence, an institution with greater socioeconomic diversity potentially has a higher rate of CRI because its White students are more likely to have precollege experiences with racial diversity. Second, in an institution with a more socioeconomically diverse student body, there is potentially less socioeconomic privilege to consolidate solely along racial lines; that is, there are fewer opportunities for affluent Whites to socialize only with other affluent Whites, which may weaken racial boundaries on campus. Third, having greater racial *and* socioeconomic diversity will lead to greater relative equal status between students, which will facilitate

intergroup contact. Healthy contact between minority and majority groups is contingent on institutional support, the pursuit of common goals, and relative equal status (Allport, 1954). Previous studies have generally assumed that universities fulfill these conditions because students of different races share a status that is more equitable than, for example, the differentiation in status between a student and professor (e.g., Aries, 2008). However, relative equal status is threatened in institutions that lack racial diversity due to the likelihood that students of color will experience marginalization due to their minoritized status (Park, in press). Similarly, a lack of socioeconomic diversity may also exacerbate the gap in status between students who are not only of divergent races, but divergent socioeconomic backgrounds (i.e., when the majority population is not only White, but overwhelmingly White and affluent). Conversely, socioeconomic diversity may facilitate relative equal status among students, which would be conducive to CRI and CCD.

The Present Study

Thus, we hypothesize that campuses with greater SSD and CCI will have higher levels of CRI and CCD. We do not propose that SSD and structural racial diversity (SRD) are interchangeable, but that SSD and CCI complement and prime a racially diverse campus to be more conducive to engagement across racial boundaries, which in turn positively affects the behavioral dimension of the campus racial climate. In this article, we test our ideas by examining the *direct effects* of both SRD (percentage students of color) and SSD, as well as CCI, on the outcomes of CCD and CRI. We also examine whether there are any *interaction effects* between race and class on the outcomes of CRI and CCD, as well as whether there are any *indirect effects* of SRD and SSD via CCI on these outcomes. Thus, the present study sought to answer the following research questions:

1. Are there *main effects* for structural diversity and diversity experiences on the outcomes?
 - a. Is there a main effect for SSD and SRD on CRI and CCD?
 - b. Is there a main effect for CCI on CRI and CCD?
 - c. Is there a main effect for CCD on CRI and vice versa?
2. Are there any *interaction effects* between race and class on the outcomes?
 - a. Is there an interaction effect between SSD and SRD on CRI and CCD?
 - b. Is there an interaction effect between CCI and CRI on CCD?
3. Are there any *indirect effects* of SSD and SRD via CCI on the outcomes?
 - a. Does CCI mediate the relationships between SSD and CRI and CCD?
 - b. Does CCI mediate the relationships between SRD and CRI and CCD?

Method

Data Source

We utilized data from the Cooperative Institutional Research Program (CIRP) at the Higher Education Research Institute at the University of California, Los Angeles. We used the 2003 Student Information Form (SIF) and the 2007 College Student Survey (CSS). In fall 2003, the SIF was administered to full-time, first-year entering students to gather background information and precollege experiences. In spring 2007, the CSS was administered to the same students at the end of their fourth year of college and asked them about their college experiences over the past 4 years.

The initial sample consisted of 15,231 students nested within 102 institutions. All variables were examined for accuracy of data entry, plausible value ranges, and missing values. We excluded students who had missing data on gender (5 students) and those who had missing data on race (156 students). We also excluded students from institutions who had missing data for selectivity (81 students) and students from institutions with fewer than 20 respondents (95 students). We then replaced missing data for all the continuous variables via the expectation maximization method, which obtains maximum likelihood estimates for missing data (Allison, 2002). Thus, the final sample consisted of 14,894 students at 88 institutions. Of the 88 institutions, 7 (8%) were public institutions and 81 (92%) were private institutions. Of the 14,894 students, 5,820 (39%) were male and 9,074 (61%) were female. In terms of race/ethnicity, 12,179 (82%) were White, 501 (3%) were African American, 141 (1%) were American Indian, 779 (5%) were Latino/a, 932 (6%) were Asian American, and 362 (2%) reported their race/ethnicity as "other."

Dependent Variables

This study focused on two outcomes: CCD and CRI. *CCD* was represented by three items that asked students whether they had participated in the following activities since entering college (0 = no, 1 = yes): taken an ethnic studies course, attended a racial/cultural awareness workshop, or participated in an ethnic/racial student organization. As described below, *CCD* was examined using a Rasch model, and Cronbach's alpha is not an appropriate measure of internal consistency reliability for dichotomous Rasch outcomes (Hamon & Mesbah, 2002; Martinková & Zvára, 2007). Instead, the person separation index is often used to determine reliability (Bond & Fox, 2007); the value of this index was .59 in the current study. *CRI* was created via items that asked about the extent to which participants had interacted with students from each of the following groups: White/Caucasian, African American/Black, American Indian/Alaska Native, Asian American/Asian/Pacific Islander, and Hispanic/Latino. For all participants, we created

an average score to represent the frequency with which they interacted with students from all racial groups excluding their own (1 = *never* to 5 = *very often*). Because the items used to compute CRI differ depending upon students' own race, the internal consistency reliability cannot be computed for the entire sample. For example, CRI for White students is computed from interactions with Blacks, Latinos, Asians, and American Indians; the Cronbach's alpha for these items among White students (who constitute the majority of the sample) is .67.

Institution-Level Predictors

Institutional socioeconomic diversity was computed using the percentage of students receiving any financial aid (i.e., federal, state/local, or institutional grant aid), which was obtained from the National Center for Education Statistics Integrated Postsecondary Education Data System enrollment figures. This variable was recoded into an inverted U-shaped variable called *structural socioeconomic diversity* (SSD) to reflect heterogeneity and maximum opportunity for interclass contact. On one end of the continuum, institutions with 0% or 100% of students receiving aid were recoded to 0 to reflect no socioeconomic diversity. On the other end, institutions with 50% of students receiving aid were recoded to 10 to reflect high socioeconomic diversity.¹

SRD was represented by the percentage of undergraduate students of color within the institution (i.e., the combined representation of Asian Americans, African Americans, American Indians, and Latino/as). While this specific measure has been used in a variety of studies (e.g., Chang et al., 2006; Sáenz, 2010), some scholars have argued for the use of a diversity density index that considers the representation of several racial groups separately, which better approximates the likelihood of interacting with different racial/ethnic groups (Moody, 2001). However, to protect the anonymity of participating institutions, the data set we received did not contain the percentage of students for each racial/ethnic group, so it was not possible to use the diversity density index.²

Institutional selectivity (as defined by average SAT score or converted ACT score) was included not only because it has been identified as a positive predictor of CRIs in previous research (Chang et al., 2004), but also because it is very highly correlated with a measure of students' average SES. Thus, adding this variable helps isolate the independent effects of socioeconomic diversity (as measured via SSD) versus SES level (as measured via institutional selectivity).

Individual-Level Predictors

We anticipated that some (if not all) of the impact of SSD would be explained via students' direct engagement with socioeconomic diversity. Therefore, CCI, which indicated how often participants interacted with

“students from a different economic background” (1 = *never* to 5 = *very often*), was included as a key student-level predictor. Longitudinal research has established a reciprocal relationship between interpersonal diversity interactions and diversity coursework (Bowman, 2012; Nelson Laird, Engberg, & Hurtado, 2005), so CCD was used as a predictor when CRI was the outcome measure and vice versa.

To disentangle the effects of institutional- versus individual-level social class, we computed a composite measure of student SES; specifically, we z scored mother’s education, father’s education, and family income and then computed the average of these three variables. We also included several control variables that had been identified as significant predictors in previous research (Chang et al., 2004; Sáenz, 2010; Sáenz et al., 2007); these were gender (1 = *male*, 2 = *female*), race/ethnicity (dichotomous variables were used to represent students who were African American/Black, American Indian/Alaska Native, Asian American/Asian/Native Hawaiian/Pacific Islander, Mexican American/Chicano/Puerto Rican/Other Latino, and those who marked “other”, with White/Caucasian as the reference group), and CRI during high school (1 = *not at all* to 3 = *frequently*). Although it has not been examined in the previous literature, we also predicted that a liberal political orientation (1 = *far right* to 5 = *far left*) would be positively associated with engagement in diversity experiences (particularly CCD) and that students who worked full-time while in college (1 = *no*, 2 = *yes*) may have less time and therefore lower engagement with campus diversity. Finally, we were interested in whether the effects of racial and socioeconomic diversity interacted to bolster student outcomes. Thus, we created an interaction term for institutional diversity (SSD \times SRD) and one for student engagement with diversity (CCI \times CRI). See the appendix for descriptive statistics of continuous independent variables.

Analytic Approach

We utilized hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002) to examine the institution-level effects of racial and socioeconomic diversity on student engagement in CCD and CRI. Prior to running analyses (and to computing interaction terms), we standardized all continuous variables and mean centered all dichotomous variables. This reduces multicollinearity and simplifies the interpretation of the coefficients, such that the unstandardized coefficients for predicting continuous outcomes are analogous to standardized coefficients (Cohen, Cohen, West, & Aiken, 2003). We first modeled a fully unconditional model (i.e., with no predictors) to compute the intraclass correlations, which assess the proportion of variance in each outcome that is due to between-institution differences.

We then modeled a series of three conditional models that included both student-level and institution-level predictors. All predictors were grand-mean

centered; thus, the intercept (β_{0j}) represents the expected value for a student whose values on the student-level predictors are equal to the grand mean for the entire sample. For all three models, SSD, SRD, and institutional selectivity were included. In addition, Model 1 included all the student-level predictors except for the diversity predictors (CCI, CCD, and CRI) or the interaction terms at either level. Model 2 contained the same variables, plus CCI and either CCD or CRI (depending on the outcome variable). Model 3 added the student- and institution-level interaction terms.

We carefully considered how to treat CCD as an outcome variable. Given its limited range (0–3), it seemed inappropriate to model CCD as continuous. One could argue that this is an ordinal outcome, since each value represents a greater level of CCD engagement. However, it is unusual to combine several dichotomous variables into a single, ordinal variable. The 0–3 value for CCD could also be viewed as a “count” of the number of different CCD activities (which would make Poisson models appropriate), but this outcome denotes only whether or not students engaged in several activities, not the total number of times that they did so. Ultimately, we decided that the best approach was to use dichotomous Rasch models, which are employed to examine several dichotomous indicators that measure the same construct (Bond & Fox, 2007; Fischer & Molenaar, 1995). These models are often used to examine performance on psychological or educational tests, in which certain items are more difficult and/or contain more advanced content than others. Others have used these models to explore criminal behavior; in this domain, the least frequent behaviors are interpreted as being the most severe (Raudenbush, Johnson, & Sampson, 2003). Within the current study, membership in a racial/ethnic student organization was the least common activity (and was therefore interpreted as indicating the strongest engagement with CCD), and taking an ethnic studies course was the most common (and therefore represented the weakest level of engagement).

Preliminary analyses showed that CCD is a unidimensional construct, and students who engaged in only one CCD activity were much more likely to have taken an ethnic studies course than to have participated in a racial/cultural awareness workshop or racial/ethnic student organization (this “ordering” of items’ “successes” is a key feature of Rasch models). However, further analyses indicated that the assumption of local independence was not completely met because the ordering of CCD activities was less pronounced for students of color than for White students. We therefore conducted preliminary analyses that combined the CCD items into a single index and modeled this variable as an ordinal and as a count outcome. The substantive findings were identical to those for the Rasch models, so this issue did not appear to be a concern.

Finally, to further explore the nature of the relationship between institutional diversity and student diversity experiences, a multilevel path analysis

was conducted. This analysis modeled CCI as a mediator of the link between institutional characteristics (SSD and SRD) and the two primary outcomes (CRI and CCD). We chose to use a multilevel path analysis instead of a structural equation modeling (SEM) analysis for several reasons: (a) almost all of the variables involved observed values, so one of the main benefits of SEM (modeling latent traits and adjusting for attenuation) would not be available; (b) most of the outcomes could not be appropriately treated as continuous, including CCI (which is ordinal) and CCD (which involves several dichotomous items); and (c) the use of a multilevel Rasch model to predict CCD employs a within-student level that does not exist for analyses predicting CRI and CCI, and the inclusion of this “extra” level would be virtually impossible within a single SEM. To avoid committing Type I errors as a result of the large sample size, we used a conservative cutoff for establishing statistical significance for all analyses ($p < .01$).

Limitations

An inherent limitation of the study is our use of secondary data. The CIRP/CSS surveys are designed to measure the multifaceted nature of students' college experiences. There were multiple items regarding student engagement with diversity activities (three items) and interracial contact (five items), and only one item related specifically to experiences with CCI. At the institutional level, we used a fairly basic measure of socioeconomic diversity (SSD), which can only begin to capture the complex concept of socioeconomic diversity. Thus, these measures may not be as reliable as they ideally could be. In terms of the analysis, because the outcomes used different scales (e.g., ordinal versus continuous) and therefore different analyses (e.g., multilevel ordinal models versus multilevel continuous models), the magnitude of the overall indirect effects and total effects could not be computed for the multilevel path analysis. The magnitude of the relationships observed across different analyses (e.g., predicting CCI vs. CCD) also cannot be compared directly because a particular effect that is examined using a multilevel Rasch model tends to yield a much smaller coefficient (i.e., closer to zero) than when using either a multilevel ordinal model or multilevel continuous model. Finally, our sample is limited to 4-year institutions, and in particular, 4-year private institutions. On one hand, it enables us to focus on institutions that are more likely to be affected by race-conscious admissions policies. Still, readers should remember that the sample is not representative of all college-going students. Despite these limitations, this study makes a key contribution as one of the first studies to measure any sort of socioeconomic diversity at an institutional level. As an initial exploration of socioeconomic diversity, it will yield insights to inform future studies.

Results

The Fully Unconditional Model

We computed intraclass correlations (ICCs), which assess the proportion of variance in each outcome that is due to between-institution differences (Raudenbush & Bryk, 2002). An ICC greater than 5% signals that a nontrivial proportion of the variance occurs across institutions, and, thus, the use of HLM is appropriate (Heck & Thomas, 2008; Porter, 2006). The ICC for CRI was 14.8%, and it was 9.1% for CCD activities (if CCD was modeled as a single variable with values ranging from 0 to 3).

The Conditional Models

For both dependent variables, the patterns of effects are quite similar across the three models. Therefore, the findings for all models predicting the same outcome will be discussed simultaneously, while also noting the instances in which the results vary across models.

Cross-racial interaction. At the institutional level, SRD is a significant positive predictor of CRI, which means that students who attend more racially diverse institutions tend to experience higher levels of CRI (see Table 1). In contrast, the effects of SSD, institutional selectivity, and the interaction between SSD and SRD are all nonsignificant. At the student level, CCI and CCD are both significant, positive predictors of CRI. In other words, interacting with socioeconomically diverse peers and participating in more CCD activities are both associated with more frequent interactions with racially diverse peers. This relationship with CRI is notably stronger for CCI than for CCD. In addition, high school CRI and working full-time during college are both positively related to college CRI. So those students who interacted more frequently with racially diverse peers in high school and those who worked full-time during college tend to interact more frequently with diverse peers in college. African Americans/Blacks, American Indians/Alaska Natives, Mexican Americans/Chicanos/Puerto Ricans/Other Latinos, and students from other races are all more likely to interact with racially diverse peers than are Whites. Asian Americans/Asians/Native Hawaiians/Pacific Islanders have significantly higher CRI than Whites in Model 1, but this effect becomes nonsignificant in Models 2 and 3. In Model 1, women have higher CRI than men and student-level SES is negatively associated with CRI, but these patterns also disappear in Models 2 and 3. Political liberalism had no effect on college CRI in all three models. Even for student-level predictors that are statistically significant across all models, the effects generally become smaller when CCI and CCD are added in Model 2.

Curricular/co-curricular diversity. Institutional selectivity is consistently and positively related to engagement in CCD activities, whereas SSD, SRD, and the interaction between the two are nonsignificant (see Table 2). Both

Table 1
**Unstandardized Coefficients for Hierarchical Linear Models
 Predicting Cross-Racial Interaction (CRI)**

Predictor	Model 1	Model 2	Model 3
Intercept	-.054 (.027)	-.029 (.025)	-.030 (.024)
Structural socioeconomic diversity (SSD)	.022 (.033)	-.002 (.028)	.011 (.029)
Structural racial diversity (SRD)	.155*** (.031)	.145*** (.030)	.178*** (.023)
Institutional selectivity	.030 (.033)	-.010 (.030)	-.015 (.030)
SSD × SRD			.041 (.030)
Female	.079*** (.017)	.035 (.016)	.035 (.016)
African American/Black	.455*** (.051)	.305*** (.042)	.307*** (.043)
American Indian/Alaska Native	.680*** (.068)	.617*** (.060)	.617*** (.060)
Asian American/Asian/Native Hawaiian/Pacific Islander	.191** (.056)	.137 (.057)	.137 (.057)
Mexican American/Chicano/Puerto Rican/Other Latino	.313*** (.043)	.230*** (.039)	.230*** (.039)
Other race/ethnicity	.203*** (.045)	.128* (.041)	.127* (.041)
Student socioeconomic status	-.029* (.009)	-.002 (.008)	-.002 (.008)
Political liberalism	.018 (.009)	-.007 (.008)	-.007 (.008)
High school cross-racial interaction	.170*** (.009)	.115*** (.007)	.115*** (.007)
Worked full-time during college	.199*** (.028)	.155*** (.027)	.155*** (.026)
Cross-class interaction (CCI)		.330*** (.010)	.330*** (.010)
Curricular/co-curricular diversity (CCD)		.130*** (.009)	.130*** (.009)

Note. Standard errors are in parentheses.

* $p < .01$. ** $p < .001$. *** $p < .0001$.

student-level diversity interactions (CCI and CRI) are positively related to CCD. The interaction between CCI and CRI is also a positive, significant predictor, which means that the positive effect of CRI is greater at higher levels of CCI. In addition, female students tend to have greater engagement with CCD than male students, and all minority racial/ethnic groups (except for American Indians/Alaska Natives) have higher levels of CCD than Whites. Political liberalism, high school CRI, and working full-time during college are all positively associated with CCD, whereas student SES is negatively related to CRI. Thus students who are more politically liberal, those who interacted more frequently across race in high school, and those who worked full-time in college are all more likely to participate in CCD activities in college. Students from higher socioeconomic backgrounds, however, are less likely to participate in these diversity-related activities.

Multilevel Path Analysis

SSD and SRD are both positive, significant predictors of CCI, and CCI is, in turn, positively associated with both CCD and CRI (see Figure 1). CCD and

Table 2
 Unstandardized Coefficients for Multilevel Rasch Models
 Predicting Curricular/Co-curricular Diversity (CCD)

Predictor	Model 1	Model 2	Model 3
Intercept	.337*** (.009)	.339*** (.009)	.339*** (.009)
Structural socioeconomic diversity (SSD)	.001 (.011)	-.001 (.011)	-.001 (.011)
Structural racial diversity (SRD)	-.003 (.007)	-.011 (.007)	-.011 (.007)
Institutional selectivity	.042*** (.011)	.040** (.011)	.040** (.011)
SSD × SRD			-.000 (.010)
Female	.053*** (.005)	.048*** (.005)	.048*** (.005)
African American/Black	.301*** (.014)	.277*** (.013)	.277*** (.013)
American Indian/Alaska Native	.058 (.025)	.022 (.025)	.022 (.025)
Asian American/Asian/Native Hawaiian/Pacific Islander	.213*** (.010)	.205*** (.010)	.206*** (.010)
Mexican American/Chicano/Puerto Rican/Other Latino	.167*** (.011)	.150*** (.011)	.151*** (.011)
Other race/ethnicity	.120*** (.016)	.109*** (.015)	.109*** (.015)
Student socioeconomic status	-.012*** (.003)	-.009** (.003)	-.009** (.003)
Political liberalism	.028*** (.003)	.026*** (.003)	.026*** (.003)
High school cross-racial interaction	.030*** (.003)	.019*** (.003)	.019*** (.003)
Worked full-time during college	.047*** (.008)	.036*** (.008)	.035*** (.008)
Cross-class interaction (CCI)		.016*** (.003)	.018*** (.003)
Cross-racial interaction (CRI)		.051*** (.003)	.050*** (.003)
CCI × CRI			.006* (.002)

Note. Standard errors are in parentheses.

* $p < .01$. ** $p < .001$. *** $p < .0001$.

CRI are also significantly and positively related to each other. SRD is positively associated with CRI, but SRD does not have a significant direct effect on CCD, and the direct paths from SSD to CCD and CRI are both nonsignificant. However, each of the structural diversity variables is *indirectly* related to the two primary outcomes. For example, SSD is positively associated with CRI through two sets of significant paths: one through CCI only (SSD → CCI → CRI) and another through CCI and CCD (SSD → CCI → CCD → CRI). Unfortunately, as mentioned in the limitations, because the outcomes used different scales and therefore different analyses, the magnitude of the overall indirect effects and total effects could not be computed.

Discussion

In this study, we contribute to the debate on whether there are benefits associated with socioeconomic diversity in the ways that there are with racial diversity. This study addresses whether two manifestations of socioeconomic

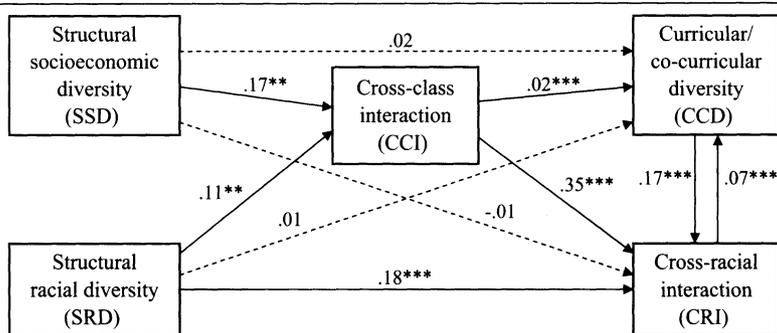


Figure 1. Multilevel path analysis of structural diversity and student experiences.

Note. Unstandardized coefficients are reported for analyses predicting cross-class interaction (multilevel ordinal logit model), curricular/co-curricular diversity (multilevel Rasch model), and cross-race interaction (multilevel continuous model). Dotted lines represent nonsignificant paths.

** $p < .01$. *** $p < .001$.

diversity—SSD and CCI—when tested simultaneously with SRD, have a measurable impact on student engagement in CCD and CRI experiences, both of which have been linked with numerous favorable outcomes. Previous research has provided preliminary evidence that intersections between SES and racial diversity affect CRI (Aries, 2008; Espenshade & Radford, 2009; Milem et al., 2004), but no study to date has examined the effects of racial diversity *in conjunction with* socioeconomic diversity at the institutional, aggregated level.

This article breaks ground by empirically testing whether there are benefits associated with the socioeconomic diversity of the student body, as well as interacting with students of a different social class, a phenomenon entirely under examined in the higher education literature. Our findings from the path analysis show that while the socioeconomic diversity (SSD) of the student body has no *direct* effect on student involvement in CCD activities or CRI, it does have an *indirect* effect on these activities via CCI. In other words, a socioeconomically diverse institution is associated with more frequent interactions across class lines, which in turn is associated with higher levels of CRI and CCD. Our findings also show that a racially/ethnically diverse institution is associated both *directly* and *indirectly* (through CCI) with more frequent interactions across race and higher levels of involvement in CCD activities. The findings related to SSD and CCI are entirely novel and illustrate how there are benefits associated with socioeconomic diversity that exist independently of those attributed to racial diversity. Importantly, our institution-level findings highlight how institutions with higher levels of

both racial *and* socioeconomic diversity (via CCI) contribute uniquely to student engagement in diversity-related activities and CRI.

We also examined the effects of various student-level engagement in diversity activities as well. In terms of engagement with diversity-related activities, both CCD and CRI were reciprocally related to each other, a finding consistent with prior research (Bowman, 2012; Nelson Laird et al., 2005). That is, students who reported engaging with CCD activities reported interacting more frequently with racially diverse peers. Similarly, students with higher levels of CRI were also more likely to engage in CCD activities. In addition, students who engaged in CRI in high school were also more likely to engage in these diversity-related activities in college as well, echoing previous findings on the influence of precollege dispositions to diversity-related engagement (Hall et al., 2011; Locks et al., 2008). It is important to note that the benefits associated with forms of socioeconomic diversity persist even when precollege diversity experiences and dispositions for CRI are held constant.

While the potential impact of socioeconomic and racial diversity constitutes the main focus of this study, the findings for the control variables should also be noted briefly. Working full-time during college is associated with greater CRI and CCD. Although heavy work obligations would likely diminish the amount of time students spend on campus, the workplace constitutes an important context in which students may interact across race, which could account for the positive effect on CRI. Moreover, work commitments generally require a continuous investment of time, which may lead to higher levels of CRI, while the types of activities measured in the CCD index may not necessarily involve a great deal of time (racial/ethnic awareness workshops and membership in a student organization). Political liberalism is also positively related to CCD, which is consistent with the view that liberal attitudes are associated with a greater interest in difference and inequality (Kluegel, 1990).

Another novel contribution to the literature is our findings regarding the intersection between race and class. Specifically, we examined the interaction between having a socioeconomically diverse *and* racially diverse institution (institution-level interaction effect), as well as the interaction between CCI *and* CRI (student-level interaction effect). At the institution level, we found no interaction effect between having a socioeconomically diverse and racially diverse institution on either outcome of interacting across race or engagement in diversity-related activities. We did, however, find a significant interaction effect between CCI and CRI. To be specific, the positive effect of CRI on participation in diversity-related activities is even greater at higher levels of CCI. Thus, there appears to be a multiplicative effect of interacting across race *and* class on student engagement in diversity-related activities.

This finding and others provide support for our proposal that socioeconomic diversity primes the behavioral dimension of the campus racial

climate by enabling higher levels of CRI. Overall, our findings support our proposed framework that SSD and CCI are associated (either directly or indirectly) with higher levels of CCD and CRI. Students' actual experiences with socioeconomic diversity—their interaction with peers of different economic backgrounds—are positively related to both CCD and CRI. Earlier we introduced the idea that campuses with greater socioeconomic diversity would encourage greater engagement with racial diversity by disrupting the consolidation of privilege along both racial and socioeconomic lines. Our findings on the positive relationship between CCI and the outcomes of CRI and CCD suggest that there is something about student engagement with socioeconomic diversity that is conducive to engagement with racial diversity-related outcomes.

In our conceptual framework, we proposed that socioeconomic diversity enhances the campus racial climate via mechanisms such as having more White students with greater precollege exposure to diversity. An additional interpretation of our findings is that campuses with greater socioeconomic diversity *and* greater structural (racial) diversity have a more equitable environment for CRI and diversity engagement. Allport (1954), whose work undergirds much of the rationale for healthy intergroup relations in the collegiate setting, posits that positive interaction between minority and majority groups is contingent on relative equal status, institutional support, and the pursuit of common goals. Our work offers evidence that social relations between races are more fluid when campuses have greater levels of interaction across social classes, likely because students are more likely to hold relative equal status in such settings. Also, a socioeconomically diverse student body sets the stage for more frequent interactions across class lines, which, in turn, encourages more frequent engagement with diversity-related activities, inside and outside of the classroom.

More research, both qualitative and quantitative, is needed to further enrich our understanding of how and why socioeconomic diversity enhances racial diversity-related outcomes. Interestingly, in a previous study, we did not find a significant association between SSD and the outcomes of teamwork, leadership, and critical thinking (Park & Denson, 2010). Due to the lack of an available variable, we were not able to control for CCI in that study; thus, additional research is needed to understand if and how CCI is associated with these outcomes, as well as other outcomes pertinent to student development and campus diversity. However, it may be that socioeconomic diversity does not independently produce benefits associated with more complex thinking and cooperation in the way that racial diversity does (Gurin et al., 2002) and that the value of socioeconomic diversity lies primarily in how it may facilitate racial diversity-related outcomes. Further research is needed to explore this question. Future research also should test additional versions of SSD. Additional research, both qualitative and quantitative, is warranted to verify the logic behind our framework for

why CCI facilitates higher engagement with CCD and CRI, as well as the conditions that may support CCI, for instance, whether CCI is influenced by the demographic socioeconomic and/or racial composition of a student body or not.

Future research should also strive to create more valid and reliable measures of CCD and CCI. Just as there are more reliable measures developed to assess and measure CRI, there are surely a number of alternative ways to measure and operationalize CCD and CCI that address the limitations of the measures used in this study. In particular, future studies should attempt to create multiple-item, continuous measures of these constructs to directly capture the variety of ways in which students engage in CCD activities on campus, and the quantity and quality of student interaction across social class. Future studies should also examine a broad range of institutional types to include community colleges and more public institutions as well as historically Black colleges and universities and Hispanic-serving institutions. Only by examining a broader range of institutions can we truly understand the complex relationships between racial and socioeconomic diversity on campus and how they jointly influence the campus climate for diversity.

Conclusion and Implications

Overall, this article provides compelling evidence that engagement with racial diversity—both CCD and CRI—is influenced not just by explicitly racial dimensions of diversity, but also by various forms of socioeconomic diversity. It is the first to examine whether the socioeconomic heterogeneity of the student body and students' interactions across social class are linked with racial diversity-related outcomes. Unlike previous studies that controlled for SES only as an individual-level trait, we also controlled for the socioeconomic heterogeneity of the student body, represented by the diversity of financial aid status, as a part of the institutional environment for diversity, as well as the individual level of CCI at the institutions. We found that students who engaged in higher levels of CCI were significantly more likely to experience both CCD activities and CRI. We also found that SSD and SRD both had indirect effects, via CCI, on CCD activities and CRI.

There are three key implications from our study. First, while the findings indicate that higher levels of CCI on a campus positively predict CRI and that SSD is positively related to CRI via CCI, having socioeconomic diversity is *not* a replacement for a racially diverse student body. Simply put, neither form of institutional-level or student-level socioeconomic diversity (SSD or CCI) subsumed or negated the effect associated with having a higher percentage of students of color in the student body on CRI. Rather, forms of socioeconomic diversity add distinctly and uniquely to student experiences with diversity and the behavioral dimension of the campus racial climate.

While racial and socioeconomic diversity are interrelated, they are not interchangeable concepts. Other studies have concluded that class-based affirmative action does not yield the same amount of racial diversity as race-conscious admissions policies (Cancian, 1998; Espenshade & Radford, 2009). However, our study is the first to examine whether student engagement with socioeconomic diversity during college yields educational benefits related to racial diversity. Our findings indicate that merely increasing socioeconomic diversity via CCI or SSD is not an adequate replacement for the benefits associated with racial diversity; all are needed to yield the optimum benefits. The findings of this article do not support Clegg's (2009) proposition that the educational benefits of diversity could come from only maximizing socioeconomic diversity. Our findings confirm the importance of recruiting and retaining student bodies that are both racially and socioeconomically diverse, and not one at the exclusion of the other.

Second, our article has significant implications for research on the campus racial climate. Specifically, it provides both theoretical grounding and empirical support for the role that forms of socioeconomic diversity play in facilitating CRI and engagement with diversity activities. Our findings show how socioeconomic diversity can support a more fluid and equitable environment for engagement with racial diversity, indicating that such engagement is influenced not only by race, but also race and class acting in tandem. Thus, our work contributes a more nuanced understanding of the forces influencing the behavioral dimension of the campus racial climate.

Last, if colleges are interested in maximizing educational benefits associated with diversity, they ought to spur student engagement around the issue of socioeconomic diversity, as well as dialogue around the intersection between race and class in our society. Such engagement—recognizing that class matters—is likely pertinent toward creating a sense of belonging among low-income students. Campus educators also need to be cognizant of how intersections between race and class shape the overall campus climate for diversity, including student engagement with racial diversity. Institutions need to thoughtfully consider how they can be welcoming and supportive environments that spur student learning and engagement across multiple forms of diversity. Finally, in order to better support both racial and socioeconomic diversity, selective and highly selective colleges need to increase efforts and dedicate additional resources toward recruiting, admitting, and supporting greater numbers of academically talented low-income students of all races and ethnicities. This action is critical, given the underrepresentation of low-income students in selective institutions, and institutions need to be more aggressive about attracting and retaining these students. To do otherwise is a threat to social mobility in our increasingly stratified society, as well as a waste of great talent and potential. Furthermore, as this study shows, socioeconomic diversity plays a pertinent role in supporting the overall campus racial climate, contributing to a more

Appendix

Descriptive Statistics of Continuous Variables

Variable	Min	Max	M	SD
Institution-level variables (N = 88 institutions)				
Structural socioeconomic diversity (SSD)	0.00	10.00	3.77	3.39
Structural racial diversity (SRD)	1.29	76.75	16.68	12.57
Institutional selectivity	899.00	1425.00	1140.66	112.53
Student-level variables (N = 14,894 students)				
Father's education (1 = <i>grammar school</i> to 8 = <i>graduate degrees</i>)	1.00	8.00	6.07	1.87
Mother's education (1 = <i>grammar school</i> to 8 = <i>graduate degrees</i>)	1.00	8.00	5.79	1.75
Parental income (1 = <i>less than \$10,000</i> to 15 = <i>\$250,000 or more</i>)	1.00	13.00	9.64	2.70
Political liberalism (1 = <i>far right</i> to 5 = <i>far left</i>)	1.00	5.00	3.03	0.79
High school CRI (1 = <i>not at all</i> to 3 = <i>frequently</i>)	1.00	3.26	2.67	0.51
Cross-class interaction (CCI; 1 = <i>never</i> to 5 = <i>very often</i>)	1.00	5.00	4.03	0.98
Curricular/co-curricular diversity (CCD): average of 3 items about whether or not they have taken an ethnic studies course, attended a racial/cultural awareness workshop, and participated in an ethnic/racial student organization (1 = <i>no</i> , 2 = <i>yes</i>)	0.99	2.00	1.38	0.33
Cross-racial interaction (CRI): average of 4 items about how often they socialized with someone from each of the following groups excluding their own: White/Caucasian, African American/Black, American Indian/Alaska Native, Asian/Asian American/Pacific Islander, and Hispanic/Latino (1 = <i>never</i> to 5 = <i>very often</i>)	1.00	5.02	2.98	0.79

fluid and equitable campus environment and complementing (but not replacing) racial diversity.

Notes

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¹We tested various iterations of the structural socioeconomic diversity (SSD) variable, with differing "peaks" at 40%, 50%, 60%, 70%, and 80%. We then correlated each of these different inverted U-shaped variables with cross-class interaction (CCI) to examine which one was associated with the most CCI. The correlations showed that a peak for institutions with 50% of students receiving aid was associated with the most frequent interactions across class.

²To determine whether the type of structural diversity used would substantively affect the results, additional analyses were conducted on two large-scale data sets for which the proportion of each racial group was known: the National Longitudinal Survey of Freshmen (NLSF) and the Wabash National Study of Liberal Arts Education (WNS). These correlations were extremely high when minority-serving institutions were excluded. Specifically, if the single historically Black institution was removed from the NLSF, then the correlation between the proportion of students of color and the diversity density index was .96. Similarly, after excluding the two historically Black institutions and the Hispanic-serving institution from the WNS, the correlation between these two measures is .93. In this study, only three institutions had a majority of students of color (i.e., 54%, 64%, and 77%), and fewer than 1% of students in the sample attended these institutions. Thus, it is reasonable to assume here that the proportion of students of color is a very good proxy for the diversity density index.

References

- Allison, P. D. (2002). *Missing data*. Thousand Oaks, CA: Sage.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science, 15*(8), 507–510.
- Aries, E. (2008). *Race and class matters at an elite college*. Philadelphia, PA: Temple University Press.
- Bastedo, M., & Jaquette, O. (2009, November). *Institutional stratification and the fit hypothesis: Longitudinal shifts in student access*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Vancouver, Canada.
- Bernal, E. M., Cabrera, A. F., & Terenzini, P. T. (2000). The relationship between race and SES status: Implications for institutional research and admissions policies. *Removing Vestiges, 3*, 6–13.
- Blau, P. M. (1977). *Inequality and heterogeneity*. New York, NY: Free Press.
- Blau, P. M., & Schwartz, J. E. (1984). *Crosscutting social circles: Testing a macrosocial theory of intergroup relations*. Orlando, FL: Academic Press.
- Bond, T. G., & Fox, C. M. (2007). *Applying the Rasch model: Fundamental measurement in the human sciences* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Bowman, N. A. (2009). College diversity courses and cognitive development among students from privileged and marginalized groups. *Journal of Diversity in Higher Education, 2*, 182–194.

- Bowman, N. A. (2011). Promoting participation in a diverse democracy: A meta-analysis of college diversity experiences and civic engagement. *Review of Educational Research*, 81, 29–68.
- Bowman, N. A. (2012). Promoting sustained engagement with diversity: The reciprocal relationships between informal and formal college diversity experiences. *Review of Higher Education*, 36, 1–24.
- Cabrera, A. F., Crissman, J. L., Bernal, E. M., Nora, A., P. T., & Pascarella, E. T. (2002). Collaborative learning: Its impact on college students' development and diversity. *Journal of College Student Development*, 43(2), 20–34.
- Cancian, M. (1998). Race-based versus class-based affirmative action in college admissions. *Journal of Policy Analysis and Management*, 17(1), 94–105.
- Carnevale, A. P., & Rose, S. J. (2003). *SES status, race/ethnicity, and selective college admissions*. New York, NY: Century Foundation.
- Chang, M. J. (1999). Does racial diversity matter? The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40(4), 283–301.
- Chang, M. J., Astin, A. W., & Kim, D. (2004). Cross-racial interaction among undergraduates: Some causes and consequences. *Research in Higher Education*, 45, 527–551.
- Chang, M. J., Denson, N., Sáenz, V., & Misa, K. (2006). The educational benefits of sustaining cross-racial interaction among undergraduates. *Journal of Higher Education*, 77, 430–455.
- Clegg, R. (2009, December 16). Reactions: Is it time for class-based affirmative action? *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Reactions-Is-It-Time-for/62615/>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Denson, N. (2009). Do curricular and co-curricular diversity activities influence racial bias? A meta-analysis. *Review of Educational Research*, 79(2), 805–838.
- Denson, N., & Chang, M. J. (2009). Diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46, 322–353.
- Engberg, M. (2004). Improving intergroup relations in higher education: A critical examination of the influence of educational interventions on racial bias. *Review of Educational Research*, 74(4), 473–524.
- Espenshade, T. J., & Radford, A. W. (2009). *No longer separate, not yet equal: Race and class in elite college admission and campus life*. Princeton, NJ: Princeton University Press.
- Fischer, G. H., & Molenaar, I. W. (1995). *Rasch models: Foundations, recent developments, and applications*. New York, NY: Springer-Verlag.
- Frankenberg, E., Lee, C., & Orfield, G. (2003). *A multiracial society with segregated schools: Are we losing the dream?* Cambridge, MA: Harvard University, Civil Rights Project.
- Gittleman, M., & Wolff, E. N. (2000). *Racial wealth disparities: Is the gap closing?* (Levy Economics Institute Working Paper 311). Retrieved from <http://ssrn.com/abstract=243769>
- Goodman, K. (2009, November). *Does diversity impact all students equally? A critical quantitative analysis of the effects of diversity, race, and class on first-year students' need for cognition*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Vancouver, Canada.

- Gurin, P., Dey, E., Gurin, G., & Hurtado, S. (2004). The educational value of diversity. In P. Gurin, J. Lehman, & E. Lewis (Eds.), *Defending diversity: Affirmative action at the University of Michigan* (pp. 97–188). Ann Arbor: University of Michigan Press.
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity in higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330–366.
- Gurin, P., & Nagda, B. A. (2006). Getting to the what, how, and why of diversity on campus. *Educational Researcher*, 35(1), 20–24.
- Hall, W. D., Cabrera, A. F., & Milem, J. F. (2011). A tale of two groups: Differences between minority students and non-minority students in their predispositions to and engagement with diverse peers at a predominantly White institution. *Research in Higher Education*, 52, 420–439.
- Hamon, A., & Mesbah, M. (2002). Questionnaire reliability under the Rasch model. In M. Mesbah, B. F. Cole, & M. L. T. Lee (Eds.), *Statistical methods for quality of life studies: Design, measurement, and analysis* (pp. 155–168). Boston, MA: Birkhauser.
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education*, 48, 803–839.
- Heck, R. H., & Thomas, S. L. (2008). *An introduction to multilevel modeling techniques* (2nd ed.). New York, NY: Routledge.
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70(4), 324–345.
- Hurtado, S., Engberg, M. E., Ponjuan, L., & Landreman, L. (2002). Students' precollege preparation for participation in a diverse democracy. *Research in Higher Education*, 43, 163–186.
- Hurtado, S., Griffin, K. A., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education*, 1, 204–221.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21(3), 279–302.
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78(4), 615–651.
- Johnson, D. R., Soldner, M., Leonard, J. B., Alvarez, P., Inkelas, K. K., Rowan-Kenyon, H., & Longerbeam, S. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Personnel*, 48(5), 525–542.
- Journal of Blacks in Higher Education. (2009). Disappointing progress in enrollments of low-income students at America's most selective colleges and universities. *Journal of Blacks in Higher Education*. Retrieved from http://www.jbhe.com/features/61_lowincome.html
- Kahlenberg, R. D. (1996). *The remedy: Class, race, and affirmative action*. New York, NY: Basic Books.
- Kim, R. (2006). *God's whiz kids: Korean American evangelicals on campus*. New York, NY: New York University Press.
- Kluegel, J. R. (1990). Trends in Whites' explanations of the Black-White gap in socioeconomic status, 1977–1989. *American Sociological Review*, 55, 512–25.

- Linn, R. L., & Welner, K. G. (2007). *Race-conscious policies for assigning students to schools: Social science research and the Supreme Court cases*. Washington, DC: National Academy of Education.
- Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transitions to college. *Review of Higher Education, 31*(3), 257–285.
- Long, M. (2007). Affirmative action and its alternatives in public universities: What do we know? *Public Administration Review, 67*(1), 311–325.
- Long, M., & Tienda, M. (2008). Winners and losers: Changes in Texas university admissions post-Hopwood. *Educational Evaluation and Policy Analysis, 30*(3), 255–280.
- Martinková, P., & Zvára, K. (2007). Reliability in the Rasch model. *Kybernetika, 43*, 315–326.
- Massey, D. S., Charles, C. Z., Lundy, G. F., & Fischer, M. J. (2003). *The source of the river: The social origins of freshmen at America's selective colleges and universities*. Princeton, NJ: Princeton University Press.
- McDonough, P. M. (1997). *Choosing colleges*. Albany: State University of New York Press.
- McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review, 71*, 352–375.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*, 415–444.
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A research-based perspective*. Washington, DC: Association of American Colleges and Universities.
- Milem, J. F., Umbach, P. D., & Liang, C. T. H. (2004). Exploring the perpetuation hypothesis: The role of colleges and universities in desegregating society. *Journal of College Student Development, 45*(6), 688–700.
- Moody, J. (2001). Race, school integration, and friendship segregation in America. *American Journal of Sociology, 107*(3), 679–716.
- Museus, S. D. (2008). Understanding the role of ethnic student organizations in facilitating cultural adjustment and membership among African American and Asian American college students. *Journal of College Student Development, 59*(6), 568–586.
- Nelson Laird, T. F., Engberg, M. E., & Hurtado, S. (2005). Modeling accentuation effects: Enrolling in a diversity course and the importance of social action engagement. *Journal of Higher Education, 76*(4), 448–476.
- Norton, M. I., & Ariely, D. (2011). Building a better America—One wealth quintile at a time. *Perspectives on Psychological Science, 6*(1), 9–12.
- Orfield, G. (2009). *Reviving the dream of an integrated society: A 21st century challenge*. Los Angeles, CA: Civil Rights Project/Proyecto Derechos Civiles.
- Orfield, G., & Lee, C. (2005). *Why segregation matters: Poverty and educational inequality*. Cambridge, MA: Harvard University, Civil Rights Project.
- Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *Review of Higher Education, 30*(4), 363–389.
- Park, J. J. (2009). Taking race into account: Charting student attitudes towards affirmative action. *Research in Higher Education, 50*(7), 670–690.
- Park, J. J. (2011). “I needed to get out of my Korean bubble”: An ethnographic account of Korean American collegians juggling diversity in a religious context. *Anthropology & Education Quarterly, 42*(3), 193–212.

- Park, J. J. (2012). When race and religion collide: The effect of religion on interracial friendship in college. *Journal of Diversity in Higher Education*, 5(1), 8–21.
- Park, J. J. (in press). *When diversity drops: Race, religion, and affirmative action in higher education*. New Brunswick, NJ: Rutgers University Press.
- Park, J. J., & Denson, N. (2010, Fall). Does socioeconomic diversity make a difference? Examining the effects of racial and socioeconomic diversity on college student outcomes. Paper presented at the annual conference of the Association for the Study of Higher Education, Indianapolis, IN.
- Park, J. J., & Eagan, M. K. (2011). Who goes early? A multi-level analysis of enrollment via early action and early decision admissions. *Teachers College Record*, 113(11), 2345–2373.
- Pike, G. R., & Kuh, G. D. (2006). Relationships among structural diversity, informal peer interactions and perceptions of the campus environment. *Review of Higher Education*, 29, 425–450.
- Porter, S. R. (2006). Institutional structures and student engagement. *Research in Higher Education*, 47(5), 521–558.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Raudenbush, S. W., Johnson, C., & Sampson, R. J. (2003). A multivariate, multilevel Rasch model for self-reported criminal behavior. *Sociological Methodology*, 33(1), 169–211.
- Reardon, S. F., Yun, J. T., & Kurlaender, M. (2006). Implications of income-based school assignment policies for racial school segregation. *Educational Evaluation and Policy Analysis*, 28(1), 49–75.
- Sáenz, V. (2010). Breaking the segregation cycle: Examining students' precollege racial environments and college diversity experiences. *Review of Higher Education*, 34(1), 1–37.
- Sáenz, V., Ngai, H. N., & Hurtado, S. (2007). Factors influencing positive interactions across race for African American, Asian American, Latino, and White college students. *Research in Higher Education*, 48(1), 1–38.
- Strayhorn, T. L. (2010). When race and gender collide: Social and cultural capital's influence on the academic achievement of African American and Latino males. *Review of Higher Education*, 33(3), 307–332.
- Titus, M. (2006). Understanding college degree completion of students with low socioeconomic status: The influence of institutional financial context. *Research in Higher Education*, 47(4), 371–398.
- U.S. Census Bureau. (2009). *Income, poverty and health insurance coverage in the United States: Reports, P60-236(RV), and historical tables—table F-05*. Washington, DC: Author.
- Walpole, M. (2008). Emerging from the pipeline: African American students, socioeconomic status, and college experiences and outcomes. *Research in Higher Education*, 49(3), 237–255.
- Zuniga, X., Williams, E. A., & Berger, J. B. (2005). Action-oriented democratic outcomes: The impact of student involvement with campus diversity. *Journal of College Student Development*, 46, 660–678.

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