Precollege Exposure to Racial/Ethnic Difference and First-Year College Students Racial Attitudes

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by Nicholas A. Bowman & Dafina-Lazarus Stewart 2014

Background/Context: Despite burgeoning racial and ethnic heterogeneity within the United States, many students grow up in racially homogeneous schools and neighborhoods. This lack of interracial interaction appears to play a substantial role in shaping students racial attitudes and world views upon entering college.

Purpose/Objective/Research Question/Focus of Study: The aim of the study was to examine the relationships among multiple forms of precollege exposure to racial/ethnic diversity and racial attitudes (e.g., perceptions of workplace discrimination) upon entering college.

Research Design: A quantitative survey examined attitudes, precollege environments, and other indicators among 3,924 entering first-year college students (with approximately equal numbers of Asian Americans, Blacks, Hispanics, and Whites) at 28 U.S. colleges and universities. Structural equation modeling analyses were conducted on the full sample as well as several racial/ethnic groups separately.

Conclusions/Recommendations: Findings indicated that exposure to racial/ethnic difference in students precollege neighborhoods and schools predict high school interracial friendships, which in turn predict their complex racial attitudes. The multigroup analyses further demonstrate that the relationships between interracial friendships and multiple racial attitudes are nonsignificant among White students, but significant for all other groups. These findings have implications for the promotion of meaningful curricular and cocurricular diversity interventions both before and during college.

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INTRODUCTION

In the 21st century, considerable attention has been paid to the presence of and engagement with racial/ethnic diversity at American colleges and universities. According to several meta-analytic reviews, college diversity experienceswhether these occur in the classroom, the cocurriculum, or through peer interactionsare consistently associated with reduced intergroup bias and improved cognitive skills (Bowman, 2010a; Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Denson, 2009; Pettigrew & Tropp, 2006). The beneficial effects of diversity experiences are apparent for students from all backgrounds, but the magnitude of this relationship is sometimes contingent upon students race/ethnicity, gender, and social class (e.g., Bowman, 2009, 2010b; Hu & Kuh, 2003; Nelson Laird & Niskode-Dossett, 2010; Padgett et al., 2010; Pascarella, Palmer, Moye, & Pierson, 2001; Sax, 2008).

However, it is important to consider college experiences as part of an ongoing socialization process via educational systems that begin in primary and secondary schools. Students precollege school experiences represent their initial introductions to social relationships beyond their family networks. Particularly for traditional-age students, the undergraduate college years continue their socialization and education about social issues. College, as we understand it, is a continuation, not a new beginning. Students do not arrive as *tabula rasa*, but as deep wells (Freire, 1970/2000) already filled with experiences, beliefs, and interpretations of social dynamics on both the macro and micro levels. As such, it is reasonable to expect that how students experience race, segregation, and intergroup relations before they arrive at college is a critical antecedent of the attitudes they continue to exhibit upon their college matriculation. This study expands upon the previous literature by examining whether and how precollege exposure to diversity predicts students complex racial attitudes (e.g., perceptions of workplace discrimination) upon arriving at college. It also explored the extent to which these relationships vary across several racial/ethnic groups.

THEORETICAL FRAMEWORK

Gurin, Dey, Hurtado, and Gurin (2002) developed a theoretical model to describe how college diversity experiences may affect student outcomes by producing disequilibrium or cognitive dissonance. Drawing on Piaget (1975/1985), such cognitive dissonance requires individuals to either assimilate new experiences into their existing worldviews or to accommodate (i.e., change) those world views to fit their new experiences. One of the most significant implications of Gurin et al.s framework is that one would expect to see smaller attitudinal changes among students with substantive exposure to diversity before college. Indeed, the impact of college diversity experiences sometimes varies as a function of students precollege diversity experiences, but these moderation effects are not always in the expected direction (Bowman & Denson, 2012; Jayakumar, 2008). This research also suggests that the apparent impact of college diversity experiences is hampered if those diversity experiences do not continue from primary and secondary education into higher education.

However, an important question remains: What are the effects of continued neighborhood and educational racial/ethnic segregation on young peoples racial attitudes? This issue is critical given that residential racial segregation still characterizes most students primary and secondary schools and neighborhoods (Orfield, 2009; Reardon & Yun, 2002). The intergroup contact hypothesis suggests that interracial contact over an extended period of time leads to reduced prejudice and bias under optimal conditions: equal status among groups within the situation, common goals among group members, presence of intergroup cooperation, support of relevant authorities, and potential for developing friendships (Allport, 1954; Pettigrew, 1998). Interestingly, even under optimal conditions, the link between interracial contact and reduced racial prejudice tends to be somewhat weaker for minority status groups (e.g., Blacks, Latinos, Asian Americans) than for majority status groups (e.g., Whites; see Denson, 2009; Smith, 1994; Tropp & Pettigrew, 2005). Tropp and Pettigrew (2005) suggest that the optimal conditions for intergroup contact are less likely to be met for people from minority groups. However, it is also possible that people from majority groups generally have more to learn about outgroups and therefore have a greater opportunity for growth and change. Thus, precollege diversity experiences, such as living in a racially diverse neighborhood, attending racially diverse schools, and having interracial friendship networks, may have a greater impact on the racial attitudes of White students than on the attitudes of students of color at college matriculation.

RESIDENTIAL AND SCHOOL SEGREGATION

The literature on neighborhood and school racial segregation is unified in the conclusion that residential neighborhoods and primary and secondary public schools are becomingly increasingly resegregated as policies designed to promote school desegregation, like bussing, have been discontinued (Orfield, 2009; Reardon & Yun, 2002). In fact, a recent analysis of Department of Education data has found that Blacks and Latinos are experiencing increasing double segregationby both race and social classthroughout the country (Orfield, Kucsera, & Siegel-Hawley, 2012). The most dramatic increases have been seen in the western United States and have particularly affected Latino students. Although residential segregation patterns are declining for some groups, there is still significant and increasing school segregation by both race and class. Further, schools are more segregated today than they were in the 1960s, which is largely due to continued segregated housing patterns and school zoning laws that reinforce those boundaries (Richmond, 2012).

INTERRACIAL FRIENDSHIPS

Previous research has identified a variety of precollege diversity experiences and attitudes that predict interracial friendships during college; these include high school interracial friendships (Bowman, 2012; Fischer, 2008; Park, 2012; Stearns, Buchmann, & Bonneau, 2009), interracial anxiety (Levin, van Laar, & Sidanius, 2003), social distance to other races (Bowman, 2013; Fischer, 2008), and the racial diversity of the high school student body (Park & Kim, in press). High school racial diversity variables are often moderately or highly correlated with one another; as a result, these precollege characteristics are sometimes combined into a single variable (e.g., Bowman, 2013; Milem, Umbach, & Liang, 2004) or the indirect effects of precollege diversity exposure on college interracial contact are examined (Jayakumar, 2008; Milem et al., 2004; Park & Kim, 2013).

Other studies have examined the formation of interracial friendships during high school, and Allports (1954) contact theory is generally the underlying framework informing this line of inquiry. For instance, Brown, Brown, Jackson, Sellers, and Manuel (2003) found that athletic team sport affiliation resulted in a higher number of interracial friendships between White and non-White students under the optimal conditions delineated by Allport, but not necessarily changes in attitudes toward social policies meant to alleviate the effects of discrimination. Other studies have not examined the extent to which these optimal conditions exist in secondary school settings. Several studies have analyzed the effects of school racial composition with inconsistent results; specifically, higher percentages of students of color sometimesbut not alwaysled to higher frequencies of interracial friendships (Brown et al., 2003; Kao & Joyner, 2004; Moody, 2001; Quillian & Campbell, 2003).

In addition to Allports contact theory, scholars have applied homophily as a framework for their studies. The definition of what exactly constitutes homophily varies across studies; in this discussion, we will use Wimmer and Lewiss (2010) definition and theoretical framework. These authors assert that *homophily* consists of peoples actual preference for having ingroup friendships and interactions and that homophily serves as just one of several mechanisms that affect the prevalence of same-race friendships. In addition, the *availability* of different-race peers, which is often operationalized as the representation of racial groups within a high school or college, shapes the potential pool of people with whom students can form different-race friendships. Moreover, the *propinquity*, or spatial proximity, of different-race peers is important, because people who are neighbors, classmates, teammates, or members of the same organization are generally more likely to develop friendships. Wimmer and Lewis as well as Kao and Joyner (2004) both demonstrate the need to attend to ethnic homophily, not just racial homophily, in understanding the friendship networks of Latino and Asian students.

Finally, Moody (2001) has observed that school administrators in secondary schools can help to facilitate interracial contact. By moderating student representation in such organizational factors as academic track, extracurricular activities, and grade level, school administrators may be able to counteract the segregationist effects of concentrating large numbers of racial minority groups in certain spaces and activities. These efforts increase the propinquity of different-race peers and therefore provide additional opportunities to form interracial friendships.

PRESENT STUDY

The research reviewed above illustrates that students come to college having had varying opportunities to develop interracial friendships, and they have generally formed attitudes about race and social policy that may be related to their interracial experiences (or lack thereof). Contact theory suggests that interracial friendships can produce more open and progressive attitudes about race among students. The extent to which this is the case has significant implications for how K12 and higher education administrators may promote interracial interactions and construct diversity curricula both within and outside of the classroom.

The present study expands upon existing research in several ways. The vast majority of previous studies have examined the link between interracial contact and the general valence (positive/negative) of intergroup attitudes, whereas this study examines attitudes and perceptions of complex racial issues. In addition, we included neighborhood and school characteristics at multiple time points so that we could consider the extent to which relatively early exposure to racial/ethnic difference predicts students friendships and attitudes several years later. The use of structural equation modeling analyses also enabled us to investigate both direct and indirect effects of racial/ethnic difference on racial attitudes. Finally, the multi-institutional dataset used in this study contained approximately equal numbers of students from several racial/ethnic groups, so we were able to conduct subgroup analyses with reasonably large samples.

We explored several hypotheses using a large, multi-institutional dataset. First, the presence of racial/ethnic difference in students K12 schools and neighborhoods will be positively related to racial/ethnic difference in their high school friendship groups. Second, racial/ethnic difference in high school friendships will be associated with less perceived discrimination, greater optimism regarding changes in discrimination over time, and less preference for racial separatism. Third, students precollege environments will have indirectand possibly directrelationships with these racial attitudes. Fourth, because the relationships between intergroup contact and attitudes are generally stronger among majority groups (Denson, 2009; Tropp & Pettigrew, 2005), these hypothesized effects will be at least as strong among White students as among students of color.

METHOD

DATA SOURCE AND PARTICIPANTS

We utilized data from the National Longitudinal Survey of Freshmen (NLSF), which included undergraduates from 28 selective colleges and universities; these institutions are diverse in terms of student demographics, region, and institutional type (for a complete list of schools, see Massey, Charles, Lundy, & Fischer, 2003). Among incoming freshmen at these institutions, the median combined SAT score (Verbal + Math) was 1243, and 71% of students were in the top 10% of their high school graduating class. A total of 4,573 first-year studentsapproximately equal numbers of Asians, Blacks, Hispanics, and Whiteswere invited to take part in interviews in Fall 1999, and 3,924 students (86%) agreed to participate. The response rates were fairly similar across racial/ethnic groups, ranging from 83% for White students to 89% for Black students. Although this data collection occurred in person, virtually all of the questions were closed-ended (i.e., the resulting data were quantitative, not qualitative). The analytic sample in this study included 1,051 Blacks, 998 Whites, 959 Asians, and 916 Hispanics.

Measures

Racial/ethnic Attitudes

Three attitudinal outcome measures were used. Perceived workplace discrimination was indicated with six items (α = .84), each of which used an 11-point scale (0 = strongly disagree to 10 = strongly agree). One item asked whether a qualified White job applicant would consistently be hired over a qualified African American job applicant, and another asked whether African Americans need to be better trained and more qualified than the most qualified White person. These items were also asked for Hispanics/Latinos and for Asians (relative to Whites). Expected decrease in discrimination during the next 20 years was measured with three items (α = .85), each of which used a three-point scale (1 = more discrimination to 3 = less discrimination). One item asked about expected changes in discrimination toward African Americans, another asked about Hispanics/Latinos, and a third item asked about Asians. Preference for racial separatism was measured via 30 items (α = .97), which all used a five-point scale (1 = strongly disagree to 5 = strongly agree). For example, some items asked whether African Americans should not date Whites, should live in predominantly African American neighborhoods, and should have predominantly African American friends. The same items were also asked regarding Hispanics/Latinos and Asians.

Precollege Exposure to Racial/ethnic Difference

Participants reported the percentage of African Americans, Asians, Hispanics/Latinos, Whites, and other racial/ethnic groups in their high school student body and their neighborhood (within a three-block radius of their residence) during the senior year of high school. They also provided the same figures for the school and neighborhood that they attended when they were 13 years old, along with the race/ethnicity of their 10 closest friends during their last year of high school. For these five measures, the percentage of friends/students/neighbors who were from a different racial/ethnic group was computed for each participant. For example, a Hispanic participant who reported that her high school student body was comprised of 70% Hispanics, 20% Whites, 5% Asians, and 5% African Americans would have a value of .30 (i.e., 30%) for this variable.

Analyses

The structural equation modeling (*SEM*) statistical software program EQS 6.1 was used to analyze covariance matrices of the data with maximum likelihood estimation. Robust standard errors were used to account for the ordinal scales of some variables (Bentler, 2006). Precollege exposure to difference was indicated with observed variables, and the three racial/ethnic attitude measures were indicated with latent variables. To maximize goodness of fit, the items for each attitudinal outcome were grouped into three parcels, and these parcels were used to create the latent variables (see Bandalos, 2002). For example, the 30 items for the racial separatism scale were grouped into three parcels, and the value for each parcel was determined by computing the mean of the 10 items within that parcel. All parcels and the precollege exposure to difference variables were then standardized with a mean of zero and a standard deviation of one for inclusion in the final structural equation model. To ensure that the models were properly identified, the path from one of the parcels to each latent factor was set equal to one (Kline, 2011).

The two exogenous variables (i.e., those that were not predicted by any other variable) were racial/ethnic difference in ones student body and ones neighborhood at age 13. These two variables predicted racial/ethnic difference in students high school and in their neighborhood during senior year, and the neighborhood and school variables from age 13 and the senior year all predicted racial/ethnic difference in students close friends during the senior year. Racial/ethnic difference in ones high school student body, neighborhood, and close friends predicted each of the three racial/ethnic attitudes. Correlational paths were also included between the neighborhood and school composition at age 13, between the disturbances (i.e., error terms) for neighborhood and school composition in the senior year, and among the disturbances for each of the racial/ethnic attitudes (*SEM* requires that correlations for endogenous variables be modeled between the corresponding error terms, not the variables themselves).

Two primary SEM analyses were conducted; the first examined the relationships for all students, and the second examined a multigroup model in which each race/ethnicity in the sample was treated as a separate group. For the multigroup analysis, the factor loadings, correlations, variances for latent factors, and structural paths were initially constrained to be equal across all groups, and some direct paths and correlations were allowed

- Nicholas Bowman *Bowling Green State Universit* E-mail Author NICHOLAS A. BOWMAN is a assistant professor of higher educatic and student affairs at Bowli Green State University. His research interests includ the conditions and processes through which diversity experiences predict student outcomes, the experiences a outcomes of religious minori students, and t impact of colle rankings on various constituents. H recent researc has been published in education and psychology journals, including *Educational Researcher* a *American Education Research Journal.*
- Dafina-Lazarus Stewart *Bowling Green State Universit* E-mail Author DAFINA-LAZARUS STEWART, Ph is associate professor of higher educatic and student affairs at Bowli Green State University. Her research interests includ issues pertine to democratizi higher educatic institutions for underrepresen students. She i the editor of th volume Multicultural Student Servic Building Bridge Re-visioning Community a most recently published an article in the Journal of Neg Education, Racially minoritized students at U.S four-year institutions.

to vary on the basis of both theoretical predictions and the presence of significant between-group differences.

RESULTS

Before conducting the primary analyses, a measurement model that only included the three latent attitudinal factors and their constituent parcels (along with the corresponding error terms and variances) was tested. The goodness-of-fit indices indicated that the data fit the model quite well: normed fit index (NFI) = .997, nonnormed fit index (NNFI) = .998, comparative fit index (CFI) = .998, and root mean-square error of approximation (RMSEA) = .020.

The goodness of fit indices for the structural model were also excellent: NFI = .997, NNFI = .998, CFI = .999, and RMSEA = .017. The results for direct and indirect effects are shown in Table 1; results for the correlational paths for this analysis are presented in Table 2. Racial/ethnic difference in students neighborhood and their school at age 13 are each (a) positively related to racial/ethnic difference in students high school and neighborhood during their senior year, and (b) positively related (both directly and indirectly) to racial/ethnic difference in close friends in the senior year. Having more racially diverse friends in the senior year of high school is negatively related to perceived workplace discrimination, expected decrease in discrimination, and preference for racial separatism. Racial/ethnic difference in neighborhood during the senior year is directly and positively related to perceived workplace discrimination and expected decrease in discrimination, and racial/ethnic difference in high school is positively and directly associated with perceived workplace discrimination and preference for racial separatism. Some indirect effects are significant as well; racial/ethnic differences in neighborhood and school during the senior year have negative indirect effects on all three attitudinal outcomes. Racial/ethnic difference in neighborhood at age 13 is positively and indirectly related to expected decrease in discrimination, whereas this indirect relationship is negative for preference for racial separatism. Racial/ethnic difference in school composition at age 13 is also positively and indirectly associated with perceived workplace discrimination.

Figure 1 displays the results for the direct paths for the multigroup analysis, and Table 3 contains the corresponding correlational paths. The data also fit this multigroup model quite well: NFI = .980, NNFI = .989, CFI = .990, and RMSEA = .032. Most of the relationships do not differ significantly by race and are therefore substantively identical to the single-group analysis. However, the correlations between school and neighborhood difference at age 13 and in high school are stronger for Asians and Hispanics than for Blacks and Whites. The direct paths that differ significantly across groups all involve racial/ethnic difference in high school friends. The link between high school student body and friendship difference is strongest for Hispanics and weakest for Whites, whereas the link between neighborhood and friendship difference is stronger for Hispanics and Whites than for Asians and Blacks (despite the group differences, all of these relationships are positive and significant). In addition, racial/ethnic difference in high school friends is negatively and significantly related to perceived workplace discrimination and preference for racial separatism for all groups except Whites, for whom both relationships are nonsignificant.

DISCUSSION

While previous research has examined the relationship between high school racial/ethnic composition and the composition of students high school friendships (Kao & Joyner, 2004; Moody, 2001; Quillian & Campbell, 2003), this study demonstrates that racial/ethnic difference in students neighborhoods and middle schools also predicts their friendship groups upon entering college. These observed effects may operate through somewhat different mechanisms. Using the language and concepts from Wimmer and Lewiss (2010) theoretical framework, the presence of students from different racial/ethnic backgrounds at ones high school contributes to the *availability* of different-race peers whom one could possibly befriend. Having different-race neighbors is perhaps most strongly related to the *propinquity* of potential friends; that is, the close spatial proximity of ones neighbors means that students are much more likely to spend timeand potentially develop friendshipswith these neighbors. The presence of different-race peers at ones middle school and ones neighborhood during middle school could potentially lead to friendships that persist for several years. In addition, this early exposure could reduce ones tendencies toward racial *homophily* (i.e., preference for same-race peers), which then leads to a greater number of different-race friends even when accounting for students high school and neighborhood environments.

The relationship between racial/ethnic difference in the high school student body and high school friendships is positive and fairly substantial among all students, but it is strongest for Hispanics and weakest for Whites. Within this sample, Whites attend the most racially homogeneous high schools and have the most same-race friends, whereas Hispanics attend high schools at which approximately half of the students are White (on average), and they have the most different-race friends of any group (Massey et al., 2003). Therefore, the observed group differences may be, at least in part, the product of range restriction, because there is the least variation in the high school student body and friendship groups of Whites.

The relationships between racial/ethnic difference in high school friendships and two of the attitudinal outcomes (perceived workplace discrimination and preference for racial separatism) also vary by race. That is, diversity of high school friends is associated with lower perceived discrimination and preference for racial separatism among Asians, Blacks, and Hispanics, but these effects are nonsignificant among Whites. These findings are contrary to research that sometimes shows the opposite racial moderation effect for diversity experiences and intergroup bias (Denson, 2009; Tropp & Pettigrew, 2005), but this may be driven by the particular racial attitudes used in the current study. The discrimination items focus on differential treatment that people of color receive in hiring (versus Whites), and many respondents might assume that Whites are primarily responsible for this discrimination (i.e., White employees would be making these biased judgments). The preference for racial separatism construct is concerned with the extent to which people of color should interact outside of their racial/ethnic group (i.e., not racial separatism among Whites). In addition, it is important to note that the vast majority of Asian, Black, and Hispanic students different-race high school friends in this sample are White (Massey et al., 2003). Thus, students of color who have White friends may feel that all Whites are less biased toward people of color and therefore less likely to commit workplace discrimination. It also makes sense that students of color who have different-race friendswhich is a form of racial integration in and of itselfwould be less likely to support tendencies toward interactions with ones racial ingroup.

Expected decrease in discrimination has, by far, the least pronounced results of the three attitudinal outcomes; that is, the relationships between precollege factors and this outcome, along with the correlations between this outcome and the other two outcomes, are quite modest. Expecting that discrimination will decrease in the future could be construed as an optimistic outlook on race relations, which is consistent with the negative association between different-race high school friendships and this outcome (i.e., people who have cross-race friendships have a rosier outlook on the possibility of intergroup relations). However, if an expected decrease in discrimination actually reflects such positive views, then one might expect that this belief would be associated with lower perceptions of current workplace discrimination, but the correlation between these constructs is nonsignificant. It seems that this prediction is probably shaped by a host of factors, most of which are not included in this model.

Some limitations in this study should be noted. First, the data within this analytic sample are cross-sectional, so it was not possible to examine changes in attitudes or friendship composition over time. The use of longitudinal methods with attitudinal and friendship pretests would permit one to draw stronger conclusions about the potential impact of precollege factors. Second, this sample consists of students who attended selective colleges and universities, so these findings may not generalize to broader populations of college-going students. Some research has shown that the link between interpersonal diversity interactions and student outcomes does not vary by academic achievement or socioeconomic status (Goodman, 2011; Loes, Salisbury, & Pascarella, 2013; Padgett et al., 2010; Pascarella, Salisbury, Martin, & Blaich, 2012), whereas others have found that diversity interactions are more strongly related to changes in critical thinking and political views among students with lower ACT scores (Loes, Pascarella, & Umbach, 2012; Pascarella et al., 2012, 2014). As a result, the present analyses of selective institutions may, if anything, underestimate the relationships between precollege diversity and entering racial attitudes. Third, the findings do not clarify the motivation or conditions of the precollege interracial friendships held by respondents in this sample. It is unknown whether these respondents choose same-race friendships based on racial homophily or a related mechanism such as propinquity (cross-race roommate pairings) or balancing (reciprocal friendships). Fourth, our data do not discern whether Hispanic and Asian respondents same-race friendships are intraethnic (e.g., ChicanoChicano or KoreanKorean) or interethnic (e.g., NicaraguanPuerto Rican or JapaneseVietnamese). A deeper understanding of the nature of these respondents friendships is necessary for better deciphering the relationship between those friendships and their racial attitudes.

CONCLUSION AND IMPLICATIONS

Working toward the creation of an equitable and just society requires not only holding positive attitudes toward diverse individuals and groups, but also perceiving the need and potential for change as well as a commitment to fostering inclusion. This study explored the link between students precollege exposure toand direct experiences withracial/ethnic difference and their attitudes toward complex racial issues upon entering college. The findings revealed numerous important relationships, including when and how these dynamics vary across racial/ethnic groups. The lasting effects of reasonably early exposure to racial/ethnic difference in students schools and neighborhoods highlight the importance that residential housing patterns and K12 school boundaries can have in shaping future college students and adults. For example, these findings reinforce that students of color have more experiences with interracial friendships than White students and that Hispanic students have the greatest number of cross-racial friendships.

This finding raises several implications for K12 educators and policy makers. First, it is important that racial segregation is not allowed to reassert itself, insulating White students from exposure and interaction with racially and ethnically diverse others, while isolating particularly Black and Latino students in school districts that are underresourced and struggle to attract and retain quality administrative and teaching staff. Orfield et al. (2012) argue such resegregation defies the spirit and the letter of existing civil rights legislation. School zoning laws should seek to preserve racially integrated districts as much as possible for K12 students. At the postsecondary level, although school zoning laws do not exist to assign students to particular institutions, students tend to attend colleges and universities that are in-state (and thus more familiar) instead of going out of state, and larger public universities have greater residential diversity in their student bodies than smaller public and private colleges (*The Chronicle of Higher Education*, 2011). It is reasonable to surmise, then, that colleges in relatively rural areas particularly may continue to reflect greater degrees of White racial homogeneity in their enrollments. Without further interventions, propinquity may contribute to fewer interracial friendships among White students and reinforce racial homophily.

Second, particularly because the school or neighborhood may not be racially well-integrated, support for high-quality multicultural education must be maintained. As discussed earlier, research has found that engagement with diversity in the curriculum is associated with positive effects on racial attitudes for all students (Bowman, 2010b; Davies et al., 2011; Denson, 2009; Pettigrew & Tropp, 2006). Curricula should expand students awareness and knowledge of diverse cultures and experiences as well as focus on teaching effective interracial communication and anti-racism training. We believe current policies that restrict the teaching of ethnic studies, such as a 2010 state law eliminating Chicano studies in Arizona public schools (Ceasar, 2011), will likely undermine students multicultural knowledge and effective interracial engagement. White students, who may not have other means for interracial engagement through their neighborhoods and other activities outside school, may reap the greatest detriments of the absence of such curricula.

Third, as Moody (2001) recommended, K12 school administrators should consider ways to encourage and support interracial engagement. Moody suggested that administrators promote engagement opportunities by managing students participation in extracurricular activities and class enrollments. While this strategy can be effective, we feel it is important that integration efforts do not appear to be forced or orchestrated, especially in schools where students of color are significantly underrepresented. If students of color feel that their presence in certain situations is largely intended to promote learning for White students, then Allports (1954) optimal conditions for interracial contact are very unlikely to be met. The magnitude of the benefits of interracial engagement is sometimes uneven across racial groups and other social identity factors (Denson, 2009; Tropp & Pettigrew, 2005), which may be indicative of such dynamics.

These findings also have implications for educators and policy makers in higher education. Residential and school zoning segregation patterns at the K12 level limit the opportunities for White students to develop interracial friendships and the skills needed to develop trust and rapport across lines of race. Moreover, as noted above, students tend to seek colleges that are closer to home, which may result in continued exposure to environments that are racially homogeneous. In such conditions, White students have less need to develop interracial friendships to create peer networks for social and/or academic support. Consequently, it may be necessary for higher education administrators to be more intentional about developing skills for diverse interactions among White students, particularly during the first year of college. Creating opportunities for interracial contact by forming cross-race roommate pairings in residence halls and racially diverse classes may lead to some changes in interracial affect and interracial anxiety (Shook & Fazio, 2008; van Laar, Levin, Sinclair, & Sidanius, 2005), but these experiences may not be sufficient for shifting deep-seated racial attitudes (Brown et al., 2003). Therefore, education about social issues is necessary for all students, not just racial majority students. Students of color should not be assumed to understand the dynamics of oppression and privilege or be used as teaching tools for racial majority students. Instead, diversity workshops and classes should assume that some students may have more experience with racial issues, but all students likely need to develop greater complexity and sophistication with understanding and discussing racial dynamics and how race and racism intersect with other social categories and systems of oppression.

Finally, consistent with Wimmer and Lewis (2010) and Moodys (2001) recommendations, it is important to consider multiple tie-generating mechanisms when evaluating interracial friendship networks. Higher education administrators should consider the effects of other spaces where friendships are formed, such as certain majors and extracurricular activities, which may be accentuating the propinquity of same-race peers and thus limiting opportunities for interracial contact. At the college level, administrators obviously cannot sort students by race into academic majors, student organizations, or other extracurricular involvements. If evaluations of academic majors and extracurricular activities (other than support and advocacy groups for student populations) reveal racial segregation effects, then college administrators may want to further evaluate the factors leading to such segregation. As Tatum (2003) has argued, it is too simplistic to only ask why students of color may appear to clump together in certain majors, activities, and organizations. Instead, our findings offer a different lens through which college administrators could understand how same-race friendships persist due to how majors are filled (through propinquity and balancing) that resists simply targeting the concentration of students of color in certain academic programs as the problem to be solved.

Although students do not matriculate to college as blank slates and students socialization continues in the college environment, higher education offers students the opportunity to extend, confirm, or reevaluate their prior learning and create new experiences not previously accessible. Having a deeper understanding of the role of precollege experiences will enable faculty and practitioners to refine and sharpen college diversity experiences in the first year to better account for students precollege experiences.

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Table 1. Standardized Coefficients for Structural Equation Modeling Analyses of Precollege Exposure to Racial/Ethnic Difference and Racial/Ethnic Attitudes in the First Year of College

Dependent and Independent Variables	Direct Effect	Indirect Effect	Total Effect
Neighborhood in Senior Year			
Neighborhood at age 13	.811***		.811***
School at age 13	.085***		.085***
High School in Senior Year			
Neighborhood at age 13	.236***		.236***
School at age 13	.608***		.608***
Close Friends in Senior Year			
Neighborhood in senior year	.266***		.266***
High school in senior year	.351***		.351***
Neighborhood at age 13	.075*	.298***	.373***
School at age 13	.118***	.236***	.354***
Perceived Workplace Discrimination			
High school friends in senior year	−.219***		−.219***
Neighborhood in senior year	.085**	−.058***	.027
High school in senior year	.179***	−.077***	.102***
Neighborhood at age 13		.030	.030
School at age 13		.038*	.038*
Expected Decrease in Discrimination			
High school friends in senior year	−.092**		−.092**
Neighborhood in senior year	.101**	−.025**	.076*
High school in senior year	.018	−.032**	−.014
Neighborhood at age 13		.052**	.052**
School at age 13		−.013	−.013
Preference for Racial Separatism			
High school friends in senior year	-.288***		−.288***
Neighborhood in senior year	-.029	−.076***	−.106***
High school in senior year	.193***	−.101***	.092**
Neighborhood at age 13		−.086***	−.086***
School at age 13		.013	.013

Note. Dependent variables are listed in bold. Total effect denotes the combination of direct and indirect effects. For goodness of fit, normed fit index (NFI) = .997, nonnormed fit index (NNFI) = .998, comparative fit index (CFI) = .999, and root mean-square error of approximation (RMSEA) = .017.
* $p < .05$ ** $p < .01$ *** $p < .001$

Table 2. Correlations from the Single-Group Structural Equation Modeling Analysis

Variable 1	Variable 2	Correlation
Racial/ethnic difference in school at age 13	Racial/ethnic difference in neighborhood at age 13	.829***
Racial/ethnic difference in high school during senior year	Racial/ethnic difference in neighborhood during senior year	.430***

Perceived workplace discrimination	Expected decrease in discrimination	.048*
Perceived workplace discrimination	Preference for racial separatism	.249***
Expected decrease in discrimination	Preference for racial separatism	.069***

Note. With the exception of the first row, the correlations provided above were between disturbances (i.e., error terms), because correlations cannot be conducted directly for endogenous variables (i.e., variables that are predicted by other variables).

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 3. Correlations from the Multigroup Structural Equation Modeling Analysis.

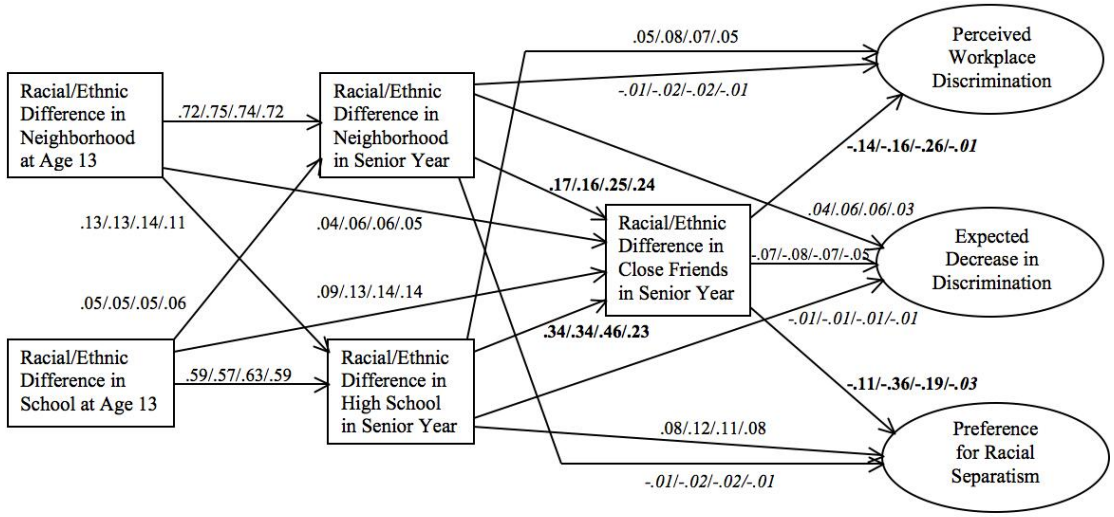
Correlation

Variable 1	Variable 2	Asian	Black	Hispanic	White
Racial/ethnic difference in school at age 13	Racial/ethnic difference in neighborhood at age 13	**.863*** **	**.613*** **	**.862*** **	**.514*** **
Racial/ethnic difference in high school during senior year	Racial/ethnic difference in neighborhood during senior year	**.622*** **	**.267*** **	**.550*** **	**.309*** **
Perceived workplace discrimination	Expected decrease in discrimination	.016	.016	.016	.016
Perceived workplace discrimination	Preference for racial separatism	.173***	.173***	.173***	.173***
Expected decrease in discrimination	Preference for racial separatism	.046*	.046*	.046*	.046*

Note. With the exception of the first row, the correlations provided above were between disturbances (i.e., error terms), because correlations cannot be conducted directly for endogenous variables (i.e., variables that are predicted by other variables). Figures in bold indicate that the coefficients differ significantly across groups ($p < .01$) and that the constraints of equality were freed.

* $p < .05$ ** $p < .01$ *** $p < .001$

Figure 1. Standardized coefficients for multigroup structural equation modeling analyses of precollege exposure to racial/ethnic difference and racial/ethnic attitudes in the first year of college



Note. The four figures for each path represent the coefficients for each group: Asian/Black/Hispanic/White. Figures in italics do not differ significantly from zero (i.e., $p > .05$). Figures in bold indicate that the coefficients differ significantly across groups ($p < .01$) and that the constraints of equality were freed. For ease of presentation, correlations, factor loadings, error terms, and variances are not shown. For goodness of fit, normed fit index (NFI) = .980, non-normed fit index (NNFI) = .989, comparative fit index (CFI) = .990, and root mean-square error of approximation (RMSEA) = .032.