

Article

# Cross-Racial Interactions during College: A Longitudinal Study of Four Forms of Interacial Interactions among Elite White College Students

# William Carson Byrd

Department of Pan-African Studies, University of Louisville, Strickler Hall, Room 438, Louisville, KY 40292, USA; E-Mail: wcarson.byrd@louisville.edu; Tel.: +1-502-852-0003; Fax: +1-502-852-5954

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**Abstract:** College and universities present distinct opportunities to interact across racial and ethnic lines that may influence people's prejudice toward different groups. This study examines the influence of four forms of cross-race interaction on traditional and modern forms of racial prejudice among white college students at 28 of the most selective colleges and universities in the US. This study finds that, although white students' level of racial prejudice declines over four years, interracial contact during college does not significantly influence their level of prejudice. Moreover, a race-related form of social identity is the most consistent influence on students' racial prejudice.

**Keywords:** intergroup contact theory; racial prejudice; social identity; college students

#### 1. Introduction

Intergroup contact research has been a cornerstone of social psychological research for the better part of a century [1–4]. Most of this research has found various forms of interaction between group members reduces prejudice, particularly when Allport's [2] key conditions are met [4]. However, many of these studies were cross-sectional making it impossible to verify or identify a causal link between contact and prejudice reduction, and limited longitudinal analyses of intergroup contact effects exist, though they are increasing in presence. Recently, a resurgence among scholars examining interracial contact on college campuses nationwide has led to the development of more information about the phenomenon and its processes [5–21]. The current study extends this important line of research by examining the effects of cross-race interactions among white students at elite colleges in the U.S. over four years.

The dynamic history of race relations in the U.S. [22] has led scholars to examine the effects of cross-race interaction on cognitive and affective forms of racial prejudice. However, recent research has somewhat shied away from the "meat" of prejudice, the cognitive component. It is not the author's contention that studies that focus on affective prejudice are not significant or important contributions to research. Previous research has clearly identified the importance of building empathy, the role of emotions such as anxiety, and how cross-race interaction can reduce affective prejudice, which has an important, positive influence on cognitive prejudice [4]. However, more research examining the influence of cross-racial interaction on cognitive prejudice is needed to avoid an overreliance on targeting affect in future research and program endeavors. The current study extends the research literature by examining traditional racial prejudice toward three racial-ethnic outgroups and a form of modern racial prejudice, racial resentment [23,24] among white college students. Beyond the personal characteristics and precollege information included in previous studies of interracial contact among college students, this study includes measures of external factors that can influence interracial contact and prejudice such as perceptions of a college's commitment to racial-ethnic diversity and the proportion of racial-ethnic minority students on campus as a proxy for racial threat, and includes four forms of interracial contact students participate in during college. Additionally, a race-related form of social identity is included in the analyses.

Overall, white students' levels of racial prejudice decreased from college entrance to completion, but interracial contact during college did not significantly influence their levels of prejudice. A race-related form of social identity was the most consistently significant factor to influence white students' racial prejudice. The possible reasons for these findings, particularly in relation to the context of cross-race interaction on elite college campuses, and what these findings mean for the intergroup contact theory are discussed below. The following sections discuss the intergroup contact theory and racial prejudice, in addition to the recent research on cross-race interactions among white college students, and the possible influence of race as a form of social identity.

## 2. Intergroup Contact Theory and Racial Prejudice

Generally defined, intergroup contact is the "actual face-to-face interaction between members of clearly defined groups" [25] (p. 754). The intergroup contact theory, or the contact hypothesis as it is often called, states that a person's level of prejudice toward an outgroup will reduce in size through interactions with members of an outgroup under certain key conditions [2,3]. However, some researchers misinterpret the theory to mean that intergroup contact in-and-of itself will result in positive effects and prejudice reduction [3]. This misinterpretation also glosses over Allport's [2] important point that many cross-group interactions are "superficial", allowing false images and stereotypes to develop.

Allport's [2] original work outlined four key conditions. First, *equal status* must exist between the members of different groups during the interaction. However, there is a debate about whether this condition is more important when people enter an interaction or during the interaction itself [3]. Second, the people interacting must have *common goals*. Third, *intergroup cooperation* must exist between the persons involved in the interaction. Through cooperation, people are more likely to attain their goals than through competition [26]. Fourth, *authoritative support* must exist in society for

intergroup contact. Such social support allows intergroup contact situations to become more acceptable [3]. Though the original theorization relied on these conditions, in some instances previous research has found positive effects of intergroup contact even if not all four conditions are met [3,4,27].

The contact hypothesis has been extended by Pettigrew [3] with a fifth key condition, friendship potential. Cross-group friendships allow for close interaction and repeated contact in a variety of settings [3,28–30]. Two considerations are also added to intergroup contact theory by Pettigrew [3]: (1) individuals' previous attitudes and experiences influence whether they seek or avoid intergroup contact situations; and (2) intergroup contact is nested within social institutions and influenced by social structure and culture, including societal norms. Additionally, interactions and networks are embedded within organizations, which can "broker" personal ties to other individuals, organizations, and resources [31]; all of which can influence an individual's level of racial prejudice. Pettigrew and Tropp's [4] meta-analysis found that intergroup contact situations reduced prejudice. Studies that did not allow participants to avoid intergroup contact, and structured intergroup contact situations that met all of Allport's [2] optimal conditions, showed greater reduction in prejudice among respondents. Pettigrew and Tropp [4] also found that intergroup contact effects generalized to entire outgroups, outgroup members in other situations, and outgroup members not involved in the contact situation. Authorities' support for intergroup contact also greatly influenced the context of the situation, but not in isolation. The results of the meta-analysis also indicated that intergroup anxiety mediated intergroup contact and prejudice as well, and repeated intergroup contact can lower individuals' anxiety.

A number of different forms of interracial contact could reduce racial prejudice among college students: interracial friendships, interracial dating, participation in diverse student organizations, and living in diverse residential settings. These forms of interracial contact represent different levels of intimacy, trust, common interests, and likelihood of sharing information about different racial-ethnic groups. More intimate forms of contact such as interracial friendships may show greater prejudice reduction. These different forms of interracial contact influenced students' racial prejudice [16], but their relative influence has not been investigated. That is, previous quantitative research has not included all four of these cross-race interaction forms in one group of analyses to examine a fuller picture of how students' social lives with other racial and ethnic groups can influence their prejudice levels. The current study fills this gap in the literature by examining the influence of each form of interracial contact on college students' racial prejudice.

Racial prejudice is one of the most examined forms of prejudice in the intergroup contact literature. Generally, prejudice is composed of an affective and cognitive component. The affective component of racial prejudice reflects negative emotions and feelings toward a group, while the cognitive component reflects a poorly or unfounded belief about a group, better known as a stereotype [32,33]. Traditionally, while social psychology focused on the cognitive component of prejudice, the affective component adds a significant amount to researchers' understanding of prejudice [28]. The component of prejudice used in intergroup contact studies matters. A recent review of intergroup contact literature found intergroup contact influenced the affective component of prejudice more than the cognitive component [34].

Since the Civil Rights Movement traditional racial prejudice, once marked my overt bigotry and beliefs in racial inferiority, has evolved into a more subtle form that typically defends traditional "American" values (such as the belief in meritocracy and other values that allow victim-blaming

to occurring in situations of failure by an outgroup), exaggerating cultural differences instead of claiming outright genetic inferiority or difference, and limiting positive emotions toward outgroup members [30,32,35–38]. One conceptualization of modern racial prejudice is racial resentment, a stratification ideology in which whites use racial individualism to explain inequality in society and their racial policy attitudes [24,39]. Racial individualism allows whites to view a racial-ethnic group's social position in society as a reflection of the group's efforts and initiative [23]. Racial resentment is a key component of symbolic racism, and this conceptualization has slowly replaced symbolic racism as a more accurate approach to understand modern racism in the U.S. [23,24,38,39]. The most recent perspective of symbolic racism is a set of racial beliefs among whites that develop through early socialization around race and racial issues [38,40], and centers on the belief that blacks "violate such traditional values as self-reliance and hard work" [24]. This view of racial inequality by whites focuses on the individual and their group, while often dismissing structural explanations of inequality [41] and increasing their level of disagreement of governmental efforts toward equal opportunity and racial equality such as affirmative action [23,24,37,39].

Both traditional and modern forms of racial prejudice continue today and are examined in the current study. Different forms of cross-race interaction may differentially influence a modern form of racial prejudice compared to traditional prejudice toward outgroups. From the intergroup contact literature, the following hypothesis is posed for examination in this study:

H1: Cross-race interaction, regardless of form, will reduce white students' racial prejudice levels toward racial-ethnic minorities.

#### 3. Social Identity and Race

Students' social identity may significantly influence their racial prejudice toward separate outgroups. Social identity is a person's sense of belonging to a social category or group [42,43], and originates from a person's group membership [44]. Social identity theory developed out of the work of intergroup relations scholars, particularly Turner and colleagues [45]. This theory posits that people attempt to maintain a positive social identity, which derives from favorable comparisons of their ingroup with other outgroups [44]. Social identity theory builds off of self-categorization, whereby a person categorizes other people who are similar to them along some dimension (*i.e.*, race, ethnicity, religion, gender, social class, *etc.*) as the "ingroup" [43,44].

A person's social identity is activated in different contexts and situations, which include cross-race interactions. People have multiple components of their identity and these different components can override one another in different situations, meaning that identity maintenance is a continuous process. The salience of a person's identity may be activated in various ways based on the components of their identity and the situation at hand [44]. Social categories precede individuals, and individuals are socialized into these structured group categories; however, social identity theory does not often consider the social structural characteristics that can influence the activation of a group identity [43]. These categories are quite large, have traditionally been constructed and reconstructed by one group of people (whites) to distinguish who is a member of their ingroup [22,36,46]. Scholars have identified several dimensions of group identification that point to the complexity of the identity maintenance

process, such as closeness or attachment to a group [47]. This study uses closeness to different racial-ethnic groups as proxy measures of a student's race-related social identity.

One identity maintenance strategy that can influence a person's social identity is ingroup bias [44]. Social identity theory hypothesizes that higher levels of identification with the ingroup by a person will lead to more positive ingroup bias [43]. Furthermore, a person's ingroup identification can influence their level of stereotyping and prejudice toward an outgroup [43,48]. Thus, a person's social identity with one racial-ethnic group most likely leads to higher levels of prejudice toward other racial-ethnic groups.

Students are socialized and interact with each other during their childhoods leading up to their entrance into college with race, racial prejudice, and racism in mind [49,50]. Through the social identity process and identifying with structured categories like race and ethnicity, people develop knowledge of the components of each category, the relationships between the categories, and act according to this knowledge; thus, people "[act] in the context of, referring to, and reaffirming the social structure" [43] (p. 232); [51]. Therefore, by the time students enter college, they have developed some degree of racial identity, in regard to their closeness to and identification with a racial-ethnic group. This may directly influence their level of racial prejudice and amount of cross-race interaction they take part in during college. Thus, a second hypothesis is presented for examination in this study:

H2: More ingroup closeness among white students will increase their levels of racial prejudice and resentment towards racial-ethnic outgroups, while more outgroup closeness will reduce their racial prejudice toward outgroups and their level of racial resentment.

# 4. White Students' Interactions in College

Whites are the group most associated with intergroup contact research. Thus, much of the literature on college students focuses on white students. Previous research has found white students to be the most isolated group on college campuses. They mostly interact with other whites and are the least likely to interact across racial-ethnic lines [6,7]. White students' interracial contact is more homophilous [52]; as these students mainly interact with each other. White freshmen at 28 selective colleges and universities had higher averages of whites in the ten closet friends of their friendship networks (7.45) than Asian Pacific Islanders (1.20), blacks (0.69), and Hispanics and Latinos (0.46) [53]. The friendship pattern somewhat shifted for the same white college students by the end of their sophomore year. Among their four closest friends, white students still preferred other whites in their friendships (3.14) over Asian Pacific Islanders (0.26), Hispanics and Latinos (0.08), and blacks (0.05). A study of ten selective colleges and universities found the same pattern among white students [7]. The UCLA student study found similar results among white students and found whites reported more Hispanic and Latino friends over Asian Pacific Islander and black friends [10,16]. White students at 28 selective colleges and universities overwhelmingly dated other whites (96.0%) over Asian Pacific Islanders (18.5%), black (9.9%), and Hispanics and Latinos (9.3%) [53].

The UCLA student study found similar results for white students' dating patterns with white students dating each other most followed by Hispanics and Latinos, Asian Pacific Islanders, and blacks [8,16]. In relation to student organization participation, white students are more likely to be members of Greek fraternities and sororities [16,17]. In a study of ten selective colleges and

universities, white students were found to room with other whites (96.0%) at higher rates than Asian Pacific Islanders (26.1%), blacks (16.5%), and Hispanics and Latinos (13.6%) [7].

Recent studies of white college students found white students with higher levels of cross-race interactions during college had lower levels of affective prejudice, specifically interracial friendships [5–11,18]. The longitudinal UCLA study confirms cross-sectional research that white students' interracial friendships reduce racial prejudice over time [10,16]. As expected, a reverse effect was found in the UCLA study as more ingroup friendships increased racial prejudice. These findings support Pettigrew's (1998) addition to the intergroup contact theory that friendship potential and interaction overtime would lead to lower levels of prejudice. Inconsistent results exist among intergroup contact research in relation to the actual size of the effects between interracial friendships and racial prejudice [10,16,29]. Additionally, interracial friendships reduced implicit prejudice toward blacks and Latinos among white students, but not their explicit level of prejudice toward both groups [54], and lowered white students' level of intergroup anxiety, leading to students initiating more cross-race interaction [14].

The UCLA student study found interracial dating reduced affective prejudice among white students [8,16]. However, interracial dating did not lower white students' level of intergroup anxiety. Interracial dating among white students at two liberal arts colleges lowered their negative attitudes toward racial-ethnic minorities [11]. A study of students at ten elite colleges and universities found interracial dating among white students increased their reports of learning new information about a group, more than interracial friendships or rooming with a student of another racial-ethnic group [7].

Little research has examined how student organization participation influenced students' level of racial prejudice, while mixed results exist for cross-race roommates' influence on prejudice. However, the UCLA student study did find that racial-ethnic minority students that were members of ethnic-related organizations and white students who were members of Greek social organizations had higher levels of racial identification and feelings of a zero-sum game between racial-ethnic groups [16,17]. Trail and colleagues [19] found freshman who roomed with a student of another racial-ethnic group had less positive feelings toward that group after a few weeks. However, the UCLA student study found cross-race roommates led to increase cross-race interaction during college and lower levels of affective prejudice among white students, except for whites who roomed with an Asian student [16,21]. The UCLA study also found that white students who roomed with either a black or Latino student had lower levels of affective prejudice toward both groups, indicating an "extended crossover effect" [55,56]. Lastly, Boisjolly and colleagues [57] found white students randomly assigned to room with a black student had more positive attitudes toward diversity and affirmative action at the end of college.

The current study responds to the ever-important question of "does cross-racial interaction during college influence students' racial prejudice"? Further, the current study examines if and how cross-racial interactions such as friendships, dating, roommates, and participating in diverse student organizations significantly influence white college students' different forms of racial prejudice (anti-black, anti-Latino, anti-Asian, and racial resentment). Previous research has not presented as full a picture of white college students' racial prejudice, particularly in regards to prejudice toward multiple groups. The current study focuses on these students as a first step to broadening our

understanding of the complexity of how attending college can influence the interactions and racial beliefs of different racial and ethnic groups.

#### 5. Methods

The current study analyzed data from the National Longitudinal Survey of Freshman (NLSF), a project designed by Douglas S. Massey and Camille Z. Charles and funded by the Mellon Foundation and the Atlantic Philanthropies. The NLSF had five waves of data that followed 3098 students from freshman year (1999–2000) until their graduation from college in the spring of 2003 from 28 of the most selective colleges and universities in the U.S. (based on student SAT scores and class rank and the *U.S. News and World Report College Rankings*). The demographics of the students who completed the study are as follows: 475 white men, 5234 white women, 368 black men, 683 black women, 417 Asian Pacific Islander men, 542 Asian Pacific Islander women, 384 Hispanic and Latino men, and 532 Hispanic and Latina women. (See Massey *et al.* [58] for a discussion of the sampling and collection methods.) Wave 1 corresponded with college entrance of students. Waves 2, 3, 4, and 5 corresponded with the end of freshman, sophomore, junior, and senior years, respectively.

#### 5.1. Measures

A large number of variables were included in the analyses to present as complete picture of cross-race interaction and interracial contact effects as possible. These groups of variables include: racial prejudice; interracial contact; social identity; campus characteristics; precollege and social characteristics; and control variables. The waves of each measure and their coding are discussed below.

## 5.1.1. Racial Prejudice

Two forms of racial prejudice were examined in this study: traditional racial prejudice and racial resentment, a form of modern racial prejudice. Both forms were measured in waves 1 and 5 marking college entrance and completion by students. Traditional racial prejudice consists of overt beliefs and stereotypes about a racial-ethnic group with a general premise that one group is biologically inferior compared to the individual's group. This form of prejudice is sometimes referred to as "biological racism" [23] or "old-fashioned racism" [39]. Common among all of these conceptions of traditional racial prejudice are negative beliefs about a group's intelligence, work ethic, and the disdain for interracial dating, marriage, and integration. For white students, the items used to create the traditional racial prejudice measures included white college students' ratings of blacks, Asian Pacific Islanders, Hispanics and Latinos, and whites on four racial prejudice items. All items were coded to have the negative perceptions of each racial group equal to higher scores and included: the perception of group intelligence on a scale of intelligent (1) to unintelligent (7); group work ethic on a scale of hardworking (1) to lazy (7); group preference for welfare on a scale of preference for self-support (1) to preference for welfare (7); and group initiative of sticking to tasks on a scale of stick to task (1) to give up easily (7). A difference score was created by taking the racial outgroup item score, subtracting the white racial group score giving a difference score of how white college students perceived the three racial outgroups on each item in relation to how they view their own racial group. For example, if a

white college student rated blacks as a 6 on the intelligence scale and whites as a 5, then the difference score would equal 1, reflecting the lower rating that student gave blacks in relation to whites [24]. Three separate scales were then created by averaging the group-specific difference score items, representing traditional anti-black prejudice, traditional anti-Latino prejudice, and traditional anti-Asian prejudice.

The racial resentment scale consisted of several items in the first wave. Students were asked their level of agreement (0 = strongly disagree, 10 = strongly agree) on three items, one for blacks, Hispanics and Latinos, and Asian Pacific Islanders, stating that each group only has themselves to blame for not doing better and they need to try harder to do better at college entrance. These three items are similar to other measures of racial resentment [24,39]. Preliminary analyses found these three items to load on a single factor for white students. Additionally, students were asked their level of agreement on three items stating that blacks, Hispanics and Latinos, and Asian Pacific Islanders, respectively, who are educated and do what is considered "proper" will get ahead in society. These three items were also found to load on a single factor in preliminary analyses, and were correlated with the first racial resentment factor described above. Each group of three items was averaged to create two scales of modern racial resentment for students' college entrance. Three items were asked in Wave 5 similar to those in Wave 1 stating that blacks, Hispanics and Latinos, and Asian Pacific Islanders only have themselves to blame for not doing better in life and should try harder (0 = strongly disagree, 10 = strongly agree). These three items were averaged to create a scale of racial resentment at the end of college. No corresponding items to the second scale at college entrance existed in the final wave of the NLSF.

#### 5.1.2. Interracial Contact

Four forms of interracial contact with each specific racial-ethnic outgroup were measured: interracial friendships, interracial dating, living arrangements, and student organizations. Interracial friendships were measured in waves 1, 2, 3 and 5. In the first two waves, students were asked how many of ten friends were white, black, Asian Pacific Islander, or Hispanic and Latino. In these two waves, the proportion of friends for students of each four racial-ethnic groups was calculated by counting the number of friends in each racial-ethnic group and dividing each number by the total number of friends reported, to create proportions of white friends, black friends, Hispanic and Latino friends, and Asian Pacific Islander friends. In the third and fifth waves students were asked the race of their four closest friends. The proportion of outgroup friendships in was calculated in a similar way for the third and fifth waves. These outgroup friendship proportions were used to create composite indexes of friendship with each racial-ethnic outgroup during college. Each specific racial-ethnic group proportion in the Wave 2 was added to the corresponding proportions from waves 3 and 5 and divided by three to create these indexes.

Data on students' dating patterns across racial-ethnic lines were collected in waves 2, 3, 4, and 5. In each wave, students were asked if they had dated someone in the past year and what their race or ethnicity was. The students could report dating members of the following groups: whites, blacks, Hispanics and Latinos, Asian Pacific Islanders, and other racial-ethnic groups. Dichotomous variables were created for each racial-ethnic group where 1 indicates that the student reported dating someone of

that race and 0 indicates that the student did not report dating anyone of that race during that year. A composite index of interracial dating for each racial-ethnic outgroup was created using a process similar to that used for the interracial friendship indexes. The index was consisted of adding the group-specific dating item in each wave together and then dividing by four (the number of waves the items were asked in).

Data on students' living arrangements were collected during waves 3 and 4 of the study. In both waves students were asked the number of whites, blacks, Asian Pacific Islanders, and Hispanics and Latinos who resided in the same residence (0 to 50 individuals). The proportion of roommates of each racial-ethnic outgroup were calculated by dividing the number of roommates from each group by the total number of roommates of the student. Indexes of interracial living arrangements were calculated by adding each specific racial-ethnic group proportion with the corresponding proportion from the other wave and dividing by two.

Data on students' participation in on-campus organizations were collected during waves 3 and 4. Students indicated the perceived racial-ethnic majority of the group. In Wave 3, students could indicate their membership in eleven types of student organizations, but in Wave 4 students were only allowed to indicate their membership in two student organizations. In each wave students were asked to identify which student organizations were majority white, black, Hispanic and Latino, Asian Pacific Islander, and equally integrated. A proportion of student groups that were a majority of each specific racial-ethnic group were created by counting the number of student groups that were a majority of a particular racial-ethnic group and then dividing this number by the total number of student organizations memberships. An index of interracial student organizations that are a majority of each specific racial-ethnic group was created by adding each proportion from the two waves for each group, and dividing by two.

#### 5.1.3. Social Identity

Generally, "having a particular social identity means being at one with a certain group, being like others in the group, and seeing things from the group's perspective" [43] (p. 226). Several measures in the first and fifth waves of the NLSF were used as proxy measures for students' race-related social identity. In Wave 1 students were asked to indicate how close they felt to ideas of different racialethnic groups, to poor, middle class, and rich members of white, black, Asian Pacific Islander, and Hispanic and Latino groups, and how close they felt to young white, black, Asian Pacific Islander, and Hispanic and Latina/o men and women ("tell me how close you feel to the people in terms of your ideas and feelings about things"; 0 = very distant, 10 = very close). Similarly, in Wave 5 students were asked how close they felt to the ideas of particular racial-ethnic groups, to poor, middle class, and rich members and college students of the four racial-ethnic groups ("how close do you feel to [racial-ethnic group] in terms of your ideas and feelings about things"; 0 = very distant, 10 = very close). An index was calculated for closeness to each group in Wave 1 using the following six items for each group: poor members of racial-ethnic group, middle-class members of racial-ethnic group, rich members of racial-ethnic group, young men members of racial-ethnic group, and young women members of racial-ethnic group. A similar index was calculated for social closeness to each racial-ethnic group in Wave 5 using the same items: poor members of racial-ethnic group, middle-class members of

racial-ethnic group, rich members of racial-ethnic group. However, the items asking students about their level of closeness to young men and women of each racial-ethnic group were not included in Wave 5, but items asking students how close they felt to students at their college of each racial-ethnic group were included in the survey. The closeness items in Wave 1 that measured how close the students felt to young men and women of different racial-ethnic groups were included in the Wave 1 closeness scales with the assumption that students thought of their peers when responding to the questions in Wave 5 concerning separate racial-ethnic student groups at their college. For each group of closeness items in Wave 1 that corresponded to a particular racial-ethnic group, the average was taken to create ingroup and outgroup closeness scales. A similar process was conducted for the Wave 5 closeness items. The three outgroup closeness scales for each student group were averaged in both Wave 1 and Wave 5 to create general outgroup closeness scales for the racial resentment models.

## 5.1.4. Campus Characteristics

Three student group visibility items were used in the analyses. Students were asked their level of agreement about the visibility of the four racial-ethnic groups on their college campus. These items were coded where students who strongly disagreed that a racial-ethnic group was visible on their college campus equaled 0 and students who strongly agreed that a racial-ethnic group was visible equaled 10. Student visibility scores were created with the visibility of white college students' perception of their own racial-ethnic group's visibility on campus subtracted from each racial-ethnic outgroup. Students were also asked their perception of the commitment by their college to diversity (1 = way too little, 5 = way too much). The proportions of black students, Asian Pacific Islander students, and Hispanic and Latino students on campus in Wave 4 were entered into each model. The models also included the proportion of fraternity and sorority members on each campus in Wave 4.

## 5.1.5. Precollege and Social Characteristics

Measures of precollege environments and experiences with interracial interactions were included in the models. The percentages of black, Asian Pacific Islander, and Hispanic and Latino students along with students of other races/ethnicities in the student's school environments at age 18 were converted to proportions and used to create an overall proportion of racial-ethnic minority students. Similarly, the percentages of black, Asian Pacific Islander, and Hispanic and Latino residents in the student's neighborhood at age 18 were converted to proportions and used to create a proportion of racial-ethnic diversity in the student's neighborhood. Gender was a dichotomous variable (0 = male, 1 = female). Interviewers identified student's skin color on a continuum of very light (0) to very dark (10).

#### 5.1.6. Control Variables

Dummy variables identify whether students were born in the U.S. (0 = no, 1 = yes), and whether they identified as a Christian (0 = no, 1 = yes). Dummy variables also identify whether the student attended high school in the South. Mother's and father's education ranged from grade school (1) to graduate/professional degree completion (7). Family income ranged from under \$3000 a year (1) to over \$75,000 a year (14). The midpoint of each range was calculated and entered into the models.

#### 5.2. Missing Data and Analysis

Like most datasets, the NLSF has missing data that can hinder analyses. To resolve this issue, the EM algorithm was used to complete the dataset. This two-step iterative process imputes or fills in missing observations in a dataset. The first step (the *E* step) replaces missing values with a predicted score, resulting from a series of regressions where all other variables serve as predictors of the missing values for the variable that contains missing data in each case [59,60]. Then, the sums, sums squares, and cross products are calculated. Maximum likelihood estimation (the *M* step) produces a covariance matrix and regression coefficients from raw and imputed data to calculate new estimates for missing data points for the next *E* step, when the process begins again [60]. The cycle is run through the EM algorithm cycles until the changes in the covariance matrices fall below a preset criterion, which indicates the changes are small and trivial.

The study used hierarchical regressions to assess interracial contact effects on racial prejudice among each racial-ethnic college student group. In hierarchical regression analysis, blocks of independent variables are entered in different models to build to a full model. With each additional block of variables, the amount of variance explained by the additional variables is calculated along with the total amount of variance explained by all of the variables in the model. Furthermore, the changing influence of the independent variables on the dependent variable that occur with each additional block of variables can be identified through checking the output of results. This procedure has been used in several other longitudinal studies of intergroup contact among college students [8–11,16,17,20,21,61] and cross-sectional data [5,6].

#### 6. Results

#### 6.1. Descriptive Statistics

Table 1 contains the descriptive statistics for the variables in the model for white students. On traditional prejudice, white students held relatively more negative views of blacks and Hispanics and Latinos than their own group at college entrance. In contrast, on average white students held more positive views of Asians Pacific Islanders compared to their own group. At college exit, white students had the similar levels of racial prejudice toward blacks and Hispanics and Latinos, although these levels were less than college entrance levels and were close to zero, which means white students came close to viewing these two groups as being equal to whites. Whites still viewed Asian Pacific Islanders in a more positive light compared to their own group at college exit.

On average, at college entrance white students had a strong level of one dimension of racial resentment: They disagreed that blacks, Hispanics and Latinos, and Asian Pacific Islanders have only themselves to blame for not doing better in life; they should have tried harder. White students also had a strong level of resentment on another dimension: they agreed that educated blacks, Hispanics and Latinos, and Asian Pacific Islanders who do what is "proper" will eventually get ahead in life. At college exit, white students had a stronger level of disagreement on the "blame" scale of racial resentment, indicating that during college their level of racial resentment increased.

 Table 1. Descriptive Statistics of White Students.

| Variable   | Mean  | SD   |
|--|-------|------|
| Traditional racial prejudice at college entrance           |       |      |
| Anti-black racial prejudice                                | 0.27  | 0.64 |
| Anti-Latino racial prejudice                               | 0.31  | 0.72 |
| Anti-Asian racial prejudice                                | -0.57 | 0.70 |
| Traditional racial prejudice at college completion         |       |      |
| Anti-black racial prejudice                                | 0.07  | 0.45 |
| Anti-Latino racial prejudice                               | 0.07  | 0.51 |
| Anti-Asian racial prejudice                                | -0.47 | 0.63 |
| Racial resentment (blame) at college entrance              |       |      |
| Racial resentment blame scale                              | 3.63  | 2.51 |
| Racial resentment (proper behavior) at college entrance    |       |      |
| Racial resentment education scale                          | 7.06  | 1.98 |
| Racial resentment at college completion                    |       |      |
| Racial resentment scale                                    | 2.22  | 2.23 |
| Social identity  |       |      |
| Closeness toward whites at college entrance                | 6.60  | 1.43 |
| Closeness toward whites at college exit                    | 5.57  | 1.61 |
| Closeness toward blacks at college entrance                | 5.43  | 1.36 |
| Closeness toward blacks at college exit                    | 4.92  | 1.41 |
| Closeness toward Asians at college entrance                | 5.43  | 1.40 |
| Closeness toward Asians at college exit                    | 4.92  | 1.51 |
| Closeness toward Latinos at college entrance               | 5.10  | 1.43 |
| Closeness toward Latinos at college exit                   | 4.74  | 1.45 |
| College commitment to diversity                            |       |      |
| Perception of college commitment to diversity              | 3.00  | 1.01 |
| Visibility of students                                     |       | -10- |
| Visibility of black students compared to white students    | -1.95 | 2.44 |
| Visibility of Latino students compared to white students   | -1.42 | 2.32 |
| Visibility of Asian students compared to white students    | -3.65 | 2.85 |
| Interracial friendships during college                     |       |      |
| Proportion of black friends                                | 0.03  | 0.05 |
| Proportion of Latino friends                               | 0.03  | 0.05 |
| Proportion of Asian friends                                | 0.09  | 0.12 |
| Interracial dating during college                          |       |      |
| Proportion of ever dating black partners                   | 0.20  | 0.40 |
| Proportion of ever dating Latino partners                  | 0.21  | 0.41 |
| Proportion of ever dating Asian partners                   | 0.31  | 0.46 |
| Race of college roommates                                  |       |      |
| Proportion of black roommates                              | 0.02  | 0.08 |
| Proportion of Latino roommates                             | 0.02  | 0.08 |
| Proportion of Asian roommates                              | 0.09  | 0.19 |
| Racial Composition of student organizations during college |       |      |
| Proportion mostly black                                    | 0.01  | 0.05 |
| Proportion mostly Latino                                   | 0.00  | 0.03 |
| -  |       |      |
| Proportion mostly Asian                                    | 0.02  | 0.09 |

Table 1. Cont.

| Variable   | Mean      | SD        |
|--|-----------|-----------|
| College-level Characteristics                          |           |           |
| Proportion of black students                           | 0.07      | 0.02      |
| Proportion of Asian students                           | 0.14      | 0.10      |
| Proportion of Latino students                          | 0.05      | 0.03      |
| Proportion of student Greek participation              | .31       | 0.19      |
| Interracial friendships at college entrance            |           |           |
| Proportion of black friends                            | 0.05      | 0.09      |
| Proportion of Latino friends                           | 0.04      | 0.09      |
| Proportion of Asian friends                            | 0.10      | 0.13      |
| Gender   |           |           |
| Woman  | 0.52      | 0.50      |
| Other personal characteristics                         |           |           |
| Skin color   | 1.68      | 1.30      |
| International student $(1 = yes)$                      | 0.05      | 0.22      |
| Christian $(1 = yes)$                                  | 0.70      | 0.46      |
| From the South $(1 = yes)$                             | 0.19      | 0.39      |
| Family characteristics                                 |           |           |
| Mother's education                                     | 5.53      | 1.36      |
| Father's education                                     | 5.93      | 1.38      |
| Family income  | 71,945.35 | 17,829.33 |
| Precollege environment diversity                       |           |           |
| Proportion of racial-ethnic minorities in high school  | 0.31      | 0.21      |
| Proportion of racial-ethnic minorities in neighborhood | 0.15      | 0.18      |
| N  | 998       |           |

Note: Descriptive statistics are based on non-imputed data.

Turning to the measures of social identity, whites felt closest to their own group at both college entrance and exit, though closeness slightly decreased during this time. Interestingly, whites' closeness to blacks and Asians mirrored each other in both size at college entrance and exit as well as decrease over time. This finding is intriguing given the disproportionate amount of interaction white students had with Asian Pacific Islander students as opposed to black students, which is described more below. Moreover, white students felt closer to blacks and Asian Pacific Islanders than to Hispanics and Latinos at both time points. At the end of college, white students did not perceive their college's commitment to diversity in need of change, meaning more or less commitment to campus diversity was needed, but perceived the college's commitment as "just enough". White students perceived all three racial-ethnic outgroups as less visible on campus than their own group with Asian Pacific Islander students the least visible followed by black students, and Hispanic and Latino students.

During college, white students had homogenous friendship networks. Only 3% of their friendships were blacks or Hispanics and Latinos, and 9% with Asian Pacific Islanders. I find 20% of white students who had dated across racial-ethnic lines in the sample dated a black partner, 21% dated a Latino partner, and 31% dated an Asian Pacific Islander partner during college. On average, 2% of white students roomed with black and Hispanic and Latino roommates and 9% roomed with an Asian

Pacific Islander roommate during their sophomore and junior years. Less than 1% of white students were members of a mostly Hispanic and Latino student organization, 1% were members of a mostly black student organization, and 2% were members of a mostly Asian Pacific Islander student organization during their sophomore and junior years.

White students were enrolled in colleges and universities with a student population that contained 7% black students, 14% Asian Pacific Islander students, and 5% Hispanic and Latino students. The colleges and universities attended by white students also had 31% of the student body participating in Greek fraternities and sororities.

White students already had fairly homogenous friendship networks at college entrance. Among these friendships, 4% of their friendships were with Hispanics and Latinos, 5% with blacks, and 10% with Asian Pacific Islanders. Slightly over half the white students in the sample were women (52%). According to interviewer coded rating of students' skin color, white students had light complexions. Among white students, 5% were international students, 70% identified as Christian, and 19% came from the Southern United States. White students had mothers and fathers who averaged slightly more than a bachelor's degree in education and came from homes with average income of \$71,945.35 in 1999 dollars. The white students in the sample attended high schools that averaged 31% racial-ethnic minority students and lived in neighborhoods with 15% racial-ethnic minority neighbors.

# 6.2. College Interracial Contact on Traditional Racial Prejudice

Three models examined the influence of interracial contact on white students' racial prejudice toward each racial-ethnic outgroup. Given space constraints, only the significant results and the findings relating to interracial contact and social identity are reported below. Table 2 shows the regression models of white students' anti-black prejudice. Model 1 contained only the interracial contact measures with blacks and predicted 1% of the variance in white students' anti-black prejudice, though this model was not significant. Interracial contact with blacks during college did not reduce white students' anti-black prejudice by the end of college.

**Table 2.** Interracial Contact Effects on Traditional Anti-black Prejudice at End of College.

| Variable  | Model 1 | Model 2    | Model 3    |
|---|---------|------------|------------|
| Prejudice at college entrance                       |         |            |            |
| Anti-black prejudice at college entrance            |         | 0.177 ***  | 0.174 ***  |
| Contact with primary outgroup during college        |         |            |            |
| Interracial friendships with blacks                 | -0.307  | -0.095     | -0.093     |
| Interracial dating with blacks                      | 0.087   | 0.121      | 0.139      |
| Black roommates                                     | -0.357  | -0.361     | -0.348     |
| Participation in mostly black student organizations | -0.114  | -0.001     | 0.006      |
| Social identity                                     |         |            |            |
| Closeness to whites at the end of college           |         | 0.092 ***  | 0.092 ***  |
| Closeness to blacks at the end of college           |         | -0.090 *** | -0.089 *** |
| Closeness to whites at college entrance             |         | 0.021      | 0.021      |
| Closeness to blacks at college entrance             |         | -0.002     | -0.003     |

Table 2. Cont.

| Variable   | Model 1   | Model 2   | Model 3  |
|--|-----------|-----------|----------|
| Campus characteristics                                   |           |           |          |
| Black students' visibility a                             |           | -0.013    | -0.014   |
| Latino students' visibility a                            |           | 0.017 *   | 0.018 *  |
| Asian students' visibility a                             |           | -0.006    | -0.005   |
| College commitment to diversity                          |           | 0.017     | 0.016    |
| Proportion of black students                             |           | -0.793    | -0.789   |
| Proportion of Latino students                            |           | -0.040    | 0.028    |
| Proportion of Asian students                             |           | -0.138    | -0.074   |
| Proportion of students in Greek organizations on campus  |           | 0.052     | 0.047    |
| Precollege and social characteristics                    |           |           |          |
| Interracial friendships with blacks at college entrance  |           | -0.106    | -0.107   |
| High school racial-ethnic diversity                      |           | -0.023    | -0.016   |
| Neighborhood racial-ethnic diversity                     |           | 0.150 *   | 0.143    |
| Darker skin color  |           | 0.007     | 0.009    |
| Woman  |           | -0.035    | -0.039   |
| Control variables  |           |           |          |
| Father's education                                       |           | 0.002     | 0.002    |
| Mother's education                                       |           | -0.018    | -0.019 * |
| Family income  |           | 0.000     | 0.000    |
| From the South   |           | 0.090 **  | 0.090 ** |
| International student                                    |           | -0.058    | -0.055   |
| Christian  |           | 0.007     | 0.009    |
| Contact with other outgroups during college              |           |           |          |
| Interracial friendships with Asians                      |           |           | -0.040   |
| Interracial dating with Asians                           |           |           | -0.042   |
| Asian roommates  |           |           | 0.008    |
| Participation in mostly Asian student organizations      |           |           | -0.169   |
| Interracial friendships with Asians at college entrance  |           |           | -0.071   |
| Interracial friendships with Latinos                     |           |           | -0.398   |
| Interracial dating with Latinos                          |           |           | -0.129   |
| Latino roommates   |           |           | 0.096    |
| Participation in mostly Latino student organizations     |           |           | 0.223    |
| Interracial friendships with Latinos at college entrance |           |           | 0.204    |
| Constant   | 0.077 *** | -0.121    | -0.114   |
| Adjusted R <sup>2</sup>                                  | 0.001     | 0.193 *** | 0.190    |
| N  | 998       | 998       | 998      |

<sup>&</sup>lt;sup>a</sup> Relative to whites' visibility on campus; \* p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001 (two-tailed tests).

Model 2 significantly explained 19.3% of the variance in white students' anti-black prejudice. White students who had higher levels of anti-black prejudice level at college entrance had higher levels of exiting anti-black prejudice (0.177, p < 0.001). No form of interracial contact with blacks during college significantly reduced white students' exiting anti-black prejudice. Whites' with higher levels of closeness to their own group at college exit had a higher level of prejudice toward blacks (0.092, p < 0.001); however, their higher levels of closeness to blacks at college exit led to lower levels of

anti-black prejudice (-0.090, p < 0.001). Neither social identity measures at the beginning of college affected anti-black prejudice. White students who perceived Hispanic and Latino students as having higher levels of visibility on campus, had more anti-black prejudice at college exit (0.017, p < 0.05). This finding may indicate that white students somewhat connect blacks and Hispanics and Latinos as a possible threat to their group's position on campus. The level of racial-ethnic diversity in white students' precollege neighborhoods increased their anti-black prejudice at college exit (0.150, p < 0.05). White students from the South had higher levels of exiting anti-black prejudice (0.090, p < 0.01).

Model 3 added the Asian Pacific Islander and Hispanic and Latino interracial contact items to test for evidence of an extended contact effect, when interacting with one group influence the perceptions of another group not involved in the interaction, but no support was found for the hypothesis. All variables that were significant in the second model were also significant in the third model, but white students' neighborhood diversity was no longer significant. White students with higher levels of entering anti-black prejudice (0.174, p < 0.001) and closeness to their own group (0.092, p < 0.001) had higher levels of exiting anti-black prejudice, while white students with higher levels of closeness to blacks also continued to have lower levels of their anti-black prejudice (-0.089, p < 0.001). White students who perceived Hispanic and Latino students' as more visible on campus compared to white students had higher levels of anti-black prejudice at the end of college (0.018, p < 0.05). White students who came from the South had higher levels of anti-black prejudice at the end of college (0.090, p < 0.05). Lastly, unlike the previous model, the higher education of white students' mothers, the lower the students' exiting anti-black prejudice was (-0.019, p < 0.05). This model explained 19.0% of the variance in white students' anti-black prejudice; however, this was not a significant change from the second model.

Table 3 displays the regression results of interracial contact effects on white students' anti-Latino prejudice. Model 1 predicted 3% of the variance in exiting anti-Latino prejudice among white students, but this was not significant. As predicted, the more friendships with Latinos that white students' had during college, the lower their level of anti-Latino prejudice was at the end of college (-0.692, p < 0.05).

**Table 3.** Interracial Contact Effects on Traditional Anti-Latino Prejudice at End of College.

| Variable   | Model 1  | Model 2    | Model 3    |
|--|----------|------------|------------|
| Prejudice at college entrance                        |          |            |            |
| Anti-Latino prejudice at college entrance            |          | 0.168 ***  | 0.164 ***  |
| Contact with primary outgroup during college         |          |            |            |
| Interracial friendships with Latinos                 | -0.692 * | -0.468     | -0.429     |
| Interracial dating with Latinos                      | 0.152    | 0.214      | 0.204      |
| Latino roommates                                     | -0.035   | 0.209      | 0.186      |
| Participation in mostly Latino student organizations | -0.082   | -0.018     | -0.015     |
| Social identity                                      |          |            |            |
| Closeness to whites at the end of college            |          | 0.095 ***  | 0.096 ***  |
| Closeness to Latinos at the end of college           |          | -0.091 *** | -0.090 *** |
| Closeness to whites at the beginning of college      |          | 0.011      | 0.009      |
| Closeness to Latinos at the end of college           |          | 0.003      | 0.004      |

Table 3. Cont.

| Variable   | Model 1   | Model 2   | Model 3  |
|--|-----------|-----------|----------|
| Campus characteristics                                   |           |           |          |
| Black students' visibility <sup>a</sup>                  |           | -0.011    | -0.011   |
| Latino students' visibility <sup>a</sup>                 |           | 0.008     | 0.008    |
| Asian students' visibility <sup>a</sup>                  |           | 0.002     | 0.002    |
| College commitment to diversity                          |           | 0.001     | 0.001    |
| Proportion of black students                             |           | -0.972    | -0.860   |
| Proportion of Latino students                            |           | 0.905     | 0.904    |
| Proportion of Asian students                             |           | -0.344    | -0.312   |
| Proportion of students in Greek organizations on campus  |           | 0.061     | 0.071    |
| Precollege and social characteristics                    |           |           |          |
| Interracial friendships with Latinos at college entrance |           | 0.214     | 0.223    |
| High school racial-ethnic diversity                      |           | -0.054    | -0.025   |
| Neighborhood racial-ethnic diversity                     |           | 0.090     | 0.110    |
| Darker skin color  |           | 0.007     | 0.008    |
| Woman  |           | -0.039    | -0.042   |
| Control variables  |           |           |          |
| Father's education                                       |           | 0.015     | 0.014    |
| Mother's education                                       |           | -0.022 *  | -0.022 * |
| Family income  |           | 0.000     | 0.000    |
| From the South   |           | 0.075 *   | 0.076 *  |
| International student                                    |           | 0.003     | -0.005   |
| Christian  |           | 0.022     | 0.023    |
| Contact with other outgroups during college              |           |           |          |
| Interracial friendships with blacks                      |           |           | 0.085    |
| Interracial dating with blacks                           |           |           | 0.071    |
| Black roommates  |           |           | -0.144   |
| Participation in mostly black student organizations      |           |           | -0.157   |
| Interracial friendships with blacks at college entrance  |           |           | 294      |
| Interracial friendships with Asians                      |           |           | -0.018   |
| Interracial dating with Asians                           |           |           | -0.127   |
| Asian roommates  |           |           | 0.008    |
| Participation in mostly Asian student organizations      |           |           | -0.086   |
| Interracial friendships with Asians at college entrance  |           |           | -0.042   |
| Constant   | 0.084 *** | -0.078    | -0.082   |
| Adjusted R <sup>2</sup>                                  | 0.003     | 0.156 *** | 0.153    |
| N  | 998       | 998       | 998      |

<sup>&</sup>lt;sup>a</sup> Relative to whites' visibility on campus; \* p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001 (two-tailed tests).

Model 2 predicted 15.6% of the variance in white students' exiting anti-Latino prejudice and this was a significant difference from the first model. White students with higher levels of anti-Latino prejudice at college entrance had higher levels at college exit (0.168, p < 0.001). White students with higher levels of closeness to other whites at the end of college had higher levels of anti-Latino prejudice (0.094, p < 0.001), while their higher levels of closeness to Hispanics and Latinos led to lower levels of anti-Latino prejudice (-0.091, p < 0.001). The social identity measures at the beginning

of college did not significantly affect white students' level of anti-Latino prejudice at the end of college. The more education white students' mothers had, the lower the students' exiting anti-Latino prejudice was (-0.022, p < 0.05). White students from the South had higher levels of anti-Latino prejudice at the end of college (0.075, p < 0.05).

Model 3 added the Asian Pacific Islander and black interracial contact items. It explained 15.3% of white students' anti-Latino prejudice. This was not a significant change from the second model. Additionally, none of the added interracial contact items presented any extended contact effects. The same variables that were significant in the second model were also significant in the third model. White students with higher levels of anti-Latino prejudice at college entrance had higher levels of anti-Latino prejudice at the end of college (0.164, p < 0.001). At the end of college, white students' closeness to their own group continued to lead to higher levels of exiting anti-Latino prejudice (0.096, p < 0.001), and white students' level of closeness to Hispanics and Latinos led to lower levels of exiting anti-Latino prejudice (-0.090, p < 0.001). The higher level of education among mothers of white students the lower their level of exiting anti-Latino prejudice (-0.022, p < 0.05). Finally, white students from the South had higher levels of anti-Latino prejudice at the end of college (0.076, p < 0.05), and no other variables were significant in this model.

Table 4 displays the models of anti-Asian prejudice among white students. The first model examined the influence of white students' interactions with Asians on their exiting anti-Asian prejudice, and explained -0.3% of the variance, though this was not significant. None of the forms of interracial contact with Asians reduced white students' anti-Asian prejudice at the end of college.

**Table 4.** Interracial Contact Effects on Traditional Anti-Asian Prejudice at End of College.

| Variable  | Model 1 | Model 2    | Model 3    |
|---|---------|------------|------------|
| Prejudice at college entrance                           |         |            |            |
| Anti-Asian prejudice at college entrance                |         | 0.253 ***  | 0.254 ***  |
| Contact with primary outgroup during college            |         |            |            |
| Interracial friendships with Asians                     | 0.141   | 0.313      | 0.343      |
| Interracial dating with Asians                          | -0.198  | -0.069     | -0.091     |
| Asian roommates   | -0.064  | -0.018     | 0.002      |
| Participation in mostly Asian student organizations     | -0.025  | 0.143      | 0.169      |
| Social identity   |         |            |            |
| Closeness to whites at the end of college               |         | 0.019      | 0.018      |
| Closeness to Asians at the end of college               |         | -0.036     | -0.036     |
| Closeness to whites at the beginning of college         |         | 0.002      | 0.002      |
| Closeness to Asians at the end of college               |         | -0.009     | -0.009     |
| Campus characteristics                                  |         |            |            |
| Black students' visibility <sup>a</sup>                 |         | 0.004      | 0.001      |
| Latino students' visibility <sup>a</sup>                |         | -0.015     | -0.016     |
| Asian students' visibility <sup>a</sup>                 |         | 0.031 **   | 0.035 ***  |
| College commitment to diversity                         |         | -0.074 *** | -0.073 *** |
| Proportion of black students                            |         | -0.839     | -0.764     |
| Proportion of Latino students                           |         | 0.798      | 0.925      |
| Proportion of Asian students                            |         | -0.536     | -0.551     |
| Proportion of students in Greek organizations on campus |         | -0.030     | -0.053     |

Table 4. Cont.

| Variable   | Model 1       | Model 2   | Model 3 |
|--|---------------|-----------|---------|
| Precollege and social characteristics                    |               |           |         |
| Interracial friendships with Asians at college entrance  |               | 0.122     | 0.092   |
| High school racial-ethnic diversity                      |               | -0.010    | 0.040   |
| Neighborhood racial-ethnic diversity                     |               | 0.145     | 0.161   |
| Darker skin color  |               | 0.020     | 0.018   |
| Woman  |               | 0.012     | 0.011   |
| Control variables  |               |           |         |
| Father's education                                       |               | 0.019     | 0.019   |
| Mother's education                                       |               | -0.007    | -0.006  |
| Family income  |               | -0.001    | -0.001  |
| From the South   |               | -0.040    | -0.042  |
| International student                                    |               | -0.067    | -0.051  |
| Christian  |               | -0.008    | 0.000   |
| Contact with other outgroups during college              |               |           |         |
| Interracial friendships with blacks                      |               |           | -0.033  |
| Interracial dating with blacks                           |               |           | 0.026   |
| Black roommates  |               |           | -0.019  |
| Participation in mostly black student organizations      |               |           | 0.382   |
| Interracial friendships with blacks at college entrance  |               |           | 0.047   |
| Interracial friendships with Latinos                     |               |           | -0.626  |
| Interracial dating with Latinos                          |               |           | -0.297  |
| Latino roommates   |               |           | 0.150   |
| Participation in mostly Latino student organizations     |               |           | -0.467  |
| Interracial friendships with Latinos at college entrance |               |           | -0.279  |
| Constant   | -0.451<br>*** | 0.109     | 0.121   |
| Adjusted R <sup>2</sup>                                  | -0.003        | 0.158 *** | 0.159   |
| N  | 998           | 998       | 998     |

<sup>&</sup>lt;sup>a</sup> Relative to whites' visibility on campus; p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001 (two-tailed tests).

Model 2 significantly explained 15.8% of the variance in white students' anti-Asian prejudice at the end of college. White students with higher levels of anti-Asian prejudice at college entrance had higher levels of prejudice toward Asians at the end of college (0.253, p < 0.001). Neither the group of interracial contact measures with Asians during college nor the social identity measures were significant in the second model. White students who perceived Asian Pacific Islander students as relatively more visible on campus than white students, had higher levels of prejudice toward Asian Pacific Islanders (0.031, p < 0.05). White students who perceived their college's commitment to diversity as "too much" had lower levels of anti-Asian prejudice (-0.074, p < 0.05). This finding may tie to white students' stereotypes of Asians' academic capabilities and the belief in a meritocratic system.

Model 3 added the black and Hispanic and Latino interracial contact items. It explained 15.9% of the variance in white students' anti-Asian prejudice, an insignificant change from the second model. No support was found for extended contact effects resulting from black and Hispanic and Latino interracial contact. All other variables that were significant in the second model were significant in the

third model. White students with higher levels of anti-Asian prejudice at college entrance significantly had higher levels of prejudice toward Asian Pacific Islanders at the end of college (0.254, p < 0.001). White students who perceived Asian Pacific Islander students to be more visible on campus had higher levels of anti-Asian prejudice (0.035, p < 0.001). Lastly, white students who perceived their college's commitment to diversity as "too much" had lower levels of anti-Asian prejudice (-0.073, p < 0.001).

## 6.3. College Interracial Contact on Racial Resentment

Table 5 presents the significant results of interracial contact on white students' racial resentment. This model explained 18.6% of the variance in white students' racial resentment. White students with higher levels of racial resentment, as measured by blaming minority groups for not doing better, at the beginning of college, had higher levels of exiting racial resentment (0.156, p < 0.001). No measure of interracial contact reduced racial resentment at the end of college for white students.

**Table 5.** Interracial Contact Effects on Racial Resentment at End of College.

| Variable  | Model 1   |
|---|-----------|
| Prejudice at college entrance                                 |           |
| Racial resentment (blame scale) at college entrance           | 0.156 *** |
| Racial resentment (proper behavior scale) at college entrance | -0.016    |
| Contact with outgroups during college                         |           |
| Interracial friendships with blacks                           | -2.127    |
| Interracial dating with blacks                                | -1.152    |
| Black roommates   | -0.771    |
| Participation in mostly black student organizations           | 0.004     |
| Interracial friendships with Asians                           | 1.033     |
| Interracial dating with Asians                                | -0.037    |
| Asian roommates   | -0.273    |
| Participation in mostly Asian student organizations           | 1.162     |
| Interracial friendships with Latinos                          | -1.876    |
| Interracial dating with Latinos                               | -0.652    |
| Latino roommates  | 1.977     |
| Participation in mostly Latino student organizations          | -1.005    |
| Social identity   |           |
| Closeness to whites at the end of college                     | 0.301 *** |
| Closeness to outgroups at the end of college                  | -0.221 ** |
| Closeness to whites at college entrance                       | 0.069     |
| Closeness to outgroups at college entrance                    | -0.056    |
| Campus characteristics  |           |
| Black students' visibility <sup>a</sup>                       | 0.018     |
| Latino students' visibility <sup>a</sup>                      | -0.044    |
| Asian students' visibility <sup>a</sup>                       | -0.022    |
| College commitment to diversity                               | 0.417 *** |
| Proportion of black students                                  | -4.939    |
| Proportion of Latino students                                 | -1.541    |
| Proportion of Asian students                                  | 0.821     |
| Proportion of students in Greek organizations on campus       | 0.454     |

Table 5. Cont.

| Variable   | Model 1   |
|--|-----------|
| Precollege and social characteristics                            |           |
| Interracial friendships with blacks at college entrance          | -0.064    |
| Interracial friendships with Asian Americans at college entrance | 0.500     |
| Interracial friendships with Latinos at college entrance         | 2.409 **  |
| High school racial-ethnic diversity                              | -0.024    |
| Father's education   | -0.002    |
| Mother's education   | -0.109 *  |
| Family income  | -0.003    |
| From the South   | 0.099     |
| International student  | -0.346    |
| Christian  | 0.055     |
| Constant   | 0.706     |
| Adjusted R <sup>2</sup>  | 0.187 *** |
| N  | 998       |

<sup>&</sup>lt;sup>a</sup> Relative to whites' visibility on campus; \* p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001 (two-tailed tests).

White students with higher levels of closeness to their own group at the end of college had higher levels of exiting racial resentment (0.301, p < 0.001), while their higher levels closeness toward outgroups led to lower levels of exiting level of racial resentment (-0.221, p < 0.01). The social identity measures at the beginning of college did not affect white students' level of racial resentment at the end of college. White students who perceived their college's commitment to diversity as "too much" had higher levels of racial resentment at the end of college (0.417, p < 0.001). White students who had more friendships with Hispanics and Latinos at the beginning of college had higher levels of exiting racial resentment (2.409, p < 0.001). White women had lower levels of racial resentment than white men at the end of college (-0.587, p < 0.001). The more education the mothers of white students had, the lower white students' levels of racial resentment at the end of college was (-0.109, p < 0.05), but father's education did not affect white students' level of racial resentment. No other variables were significant in the model.

# 7. Discussion

This study indicates that white students at elite colleges do not experience prejudice reduction as a result of cross-race interaction during college, contrary to many previous studies [4,25]. Although white students' level of racial prejudice, both traditional and modern, was lower at the end of college than at the beginning, cross-race interaction during college did not have a significant positive or negative effect overall. A more powerful predictor of racial prejudice and racial resentment was a race-related form of social identity that the author calls "racialized social identity". This section summarizes the main findings of this study and discusses the influence of racialized social identity on students' level of racial prejudice, and the context that allows for limited cross-racial interactions to persist on college campuses.

#### 7.1. Cross-Racial Interactions

Overall, no forms of interracial contact with blacks, Asian Pacific Islanders, or Hispanics and Latinos during college influenced traditional racial prejudice toward any of the three groups among white students. One precollege measure of interracial contact did influence white students' level of racial resentment. The more Hispanic and Latino friendships white students had the beginning of college, the higher their level or racial resentment was at the end of college. Thus, the findings for white students at elite colleges and universities provide no support for intergroup contact theory, as no form of interracial contact reduced any traditional or modern racial prejudice.

The results are most likely a product of the racial hierarchy at elite colleges and universities and the context of such institutions. Specifically, white students had homophilous interactions on campus, preferring to interact with other whites, which also limited the frequency and duration of their cross-race interactions during college. The increased racial resentment as a result of having more Hispanic and Latino friends at the beginning of college may relate to the differences among Hispanics and Latinos white students interacted with before college, and the ones they interacted with during college. If white students came to college from areas with many new Hispanic and Latino immigrants, their experiences and attitudes may differ from whites who come from areas that have many Hispanics and Latinos that have lived in the U.S. for several generations, who most likely had acclimated to U.S. cultural norms. However, this cannot be confirmed with the current data. Approximately 19% of all Hispanics and Latinos in the NLSF dataset were international students, but the generational status of the remaining Hispanic and Latino students cannot be identified with the data. As Hispanics and Latinos are one, if not the, fastest growing racial-ethnic group in the U.S. [22,62,63], this finding may also be the result of immigration fears among whites that have developed throughout much of the early twenty-first century.

#### 7.2. Social Identity and Closeness

Turning to the race-related social identity measured by social closeness, this group of variables influenced white students' prejudice levels the most. Surprisingly, the largest drop in closeness across the years among white students was not for an outgroup, but actually for their closeness to their own group. White students were less close to their own group at the end of college compared to their level of closeness to other racial groups. The decline in closeness to other whites was nearly double the declines white students had for other racial and ethnic groups at the end of college. One explanation for such a dramatic decline in closeness to their own group is that white students' social circles are not the same as they were prior to college. Thus, they are interacting with whites from all over the country and world that have slightly different social origins that can influence their understanding of what it means to be "white". This understanding is not necessarily a clearly defined racial one between groups, but more a consideration of status within a group. This builds on discussions of "hegemonic whiteness" regarding how, in this case, whites clarify their relation to others who identify as "white" and what whiteness may mean to them as an identity [64].

Among the white students at elite colleges and universities, support for social identity theory and the influence of ingroup bias was found in the anti-black, anti-Latino, and racial resentment models.

White students with more ingroup closeness at the end of college had higher levels of white students' exiting prejudice in all three models. Thus, white students who readily identified with other whites, and the structured category of "white", had higher levels of prejudice toward blacks and Hispanics and Latinos, and racial resentment at the end of college. Ingroup closeness among white students did not influence their prejudice toward Asian Pacific Islanders at the end of college. The high levels of interactions between white and Asian Pacific Islander students on campus may have an influence on these findings. White students may somewhat see Asian Pacific Islanders as part of the white ingroup and not a distinct racial-ethnic outgroup. These findings may indicate the tentative connection in the racial hierarchy between whites and Asian Pacific Islanders on elite college campuses.

Closeness to the focal racial-ethnic outgroup at the end of college reduced white students' exiting traditional racial prejudice toward blacks and Hispanics and Latinos. The lack of significant findings for closeness to Asian Pacific Islanders may relate to the high levels of interaction between white and Asian Pacific Islander students at elite colleges and universities. Outgroup closeness to the general racial-ethnic outgroup in the racial resentment model reduced white students' exiting levels of racial resentment. None of the social identity measures at college entrance were significant in the traditional racial prejudice or racial resentment models. This may result from the same-wave closeness measures in the model and/or the changes that had occurred in white students' level of closeness to each racial-ethnic group.

The significant role of race and ethnicity in the lives of people in the U.S. [22,65] requires sociologists and social psychologists to make "greater effort[s] to address race, especially if they claim that social processes generalize to an increasingly racially and ethnically diverse society" [66] p.361. Such a critique of social psychological work is also found in specific critiques of social identity theory. Scholars point to the lack of consideration in the social identity literature of social structural characteristics that can activate a group identity [43]. Two such categories are race and ethnicity.

As mentioned at the outset of this study, the social categories of race and ethnicity are large and traditionally constructed by whites to distinguish members of their ingroup [22,36,46]. These categories have developed and are refined within a racialized social system [36,65]. A racialized social system refers to a society that places people in racial categories, structured by a racial hierarchy of white privilege and supremacy, and differentially influences the life chances of people dependent upon their position in the hierarchy. Within racialized social systems, the "normal dynamics," issues, and social interactions and relations in society contain a racialized component. Thus, racialized social systems exhibit a racial structure whereby social relations and practices support white privilege [36]. All people and organizations are influenced within a racialized social system, including colleges and universities.

Within societies marked as racialized social systems is a specific form of social identity, a racialized social identity. A racialized social identity is the ingroup identification and bias toward an identity associated with a group within the social structural categories of race and ethnicity, which leads to ingroup bias and outgroup stereotyping that can influence and be influenced by intergroup behavior. Through the process of social identity theory and identifying with a socially structured category, people act with knowledge of, relationships between, and within contexts of such categories reaffirming the racial social structure [43,51].

# 7.3. Historically White Colleges and Universities

The lack of significant effects resulting from cross-race interactions among white students at elite colleges and universities may directly result from the social environment. Until recently, U.S. higher education has been one marked by exclusion and elitism rather than inclusion and equality [67–70]. Standardized tests and admissions practices were specifically designed to protect the privilege of America's white elite by purposefully attempting to deny the admission of Jewish students and racial-ethnic minority students, particularly black students, to elite colleges that are included in this study [69]. Despite the Civil Rights legal rulings and the increased racial-ethnic diversity that has developed since the 1950s, racial-ethnic minority students still face negative racial climates and underrepresentation on campuses [22,63,68,71,72].

In order to interpret the results of this study, the elite colleges and universities in this study need to be framed more appropriately as elite historically white colleges and universities (HWCUs) [73]. Considering these colleges and universities as predominately white institutions (PWIs) only describes the demographic characteristics of these institutions and ignores the racial character and histories. Viewing these colleges and universities as elite HWCUs, we can understand the cross-race interactions and study results of the students on these campuses as influenced by particular histories, symbols, and climates that privilege white students over racial-ethnic minority students, create an unquestioned norm of whiteness (see also Lewis [74] for critical discussion of whiteness), conceal the negative climates and discrimination toward students of color, and constrain students' interactions with each other across racial-ethnic lines. Additionally, structural inequalities that permit racially segregated schools and opportunities for college admissions sets the stage for cross-race interaction, and influences the possible interracial contact effects on racial and prejudice among elite college students [69,75–78].

The patterns of cross-race interaction across the four forms examined in this study and the findings of limited interracial contact effects among the four racial-ethnic student groups can be coupled with the work of Picca and Feagin [79] on the racialized stages of interaction at HWCUs, borrowing from Goffman [80]. Picca and Feagin [79] question the popularly-held notion that racial prejudice among whites has changed, emphasizing that social space is racialized, and the meanings and use of these social spaces are generally controlled by whites. Two forms of stages exist in society: frontstages and backstages.

Racialized backstages are spaces where whites conduct racial performances with people who they perceive to also be white. These comfortable spaces allow whites to learn about racial matters and develop their everyday information and skills to gain advantages in different sectors of society [79]. Whites use their social networks of friends, family, and intimate partners in these racialized backstages to construct racial boundaries in society and reproduce racist ideas, sustaining the overarching white racial frame [22,72,79]. Public stages, racialized frontstages, are more diverse and multicultural spaces.

The patterns of interaction and limited interracial contact effects that existed among the students at elite HWCUs in this study are likely a direct consequence of the racialized environment of these colleges and universities. If students enter with low desires for and expectations of interaction with students from other racial-ethnic groups [7,81], and the campuses allow students plenty of opportunities to avoid someone of a different race or ethnicity [79], then the interactions that most likely take place across racial-ethnic lines are superficial and limited in duration at best. Moreover,

these HWCUs allow racialized backstages to persist in many forms, giving students the opportunity to continue to use racist framings and conceptions of people of separate racial-ethnic groups, and separating friendship groups into racialized frontstages and backstages.

#### 7.4. Limitations

As with most studies, the current one has limitations that need to be addressed. The first limitation relates to the consistency of the interracial contact variables. Unlike previous studies of interracial contact effects among college students [16], data about interracial contact were not consistently available across all waves in this study. Interracial friendship was measured in four out of the five waves, making it the most consistent group of variables in this study, but the questions differed across waves. Interracial dating variables were available in waves 2 through 5. Moreover, these measures allowed students to decide what "dating" meant, and was not specifically defined in the study. Therefore, dating for one student could have meant one date, while it could have meant a long-term relationship to another student. Measures of rooming with students of different races or ethnicities and student organization participation were only available in waves 3 and 4. The student organization items were only available in the third and fourth waves, and like the friendship items, differed across both waves. Thus, some of the findings from this study may have been affected by these changes for the interracial contact variables. Furthermore, none of the interracial contact, which may influence students' level of racial prejudice.

A second limitation of this study relates to the component of racial prejudice examined in the analyses. Interacting across racial-ethnic lines during college for white students at elite HWCUs did not influence their level of racial prejudice toward specific groups with the magnitude found in previous studies of white students and other white adult populations [4,16]. Many studies of intergroup contact use affective measures of prejudice (*i.e.*, negative feelings toward groups) instead of cognitive measures (*i.e.*, group beliefs and stereotypes), which are influenced more by interracial contact [4]. However, simply having less negative feelings toward an outgroup does not mean that the same group is thought about positively. In other words, feeling close to an outgroup does may mean that someone thinks of that group and its members as equals.

A third limitation of this study is the possible violation of the intergroup contact theory's key condition of equal status among people. There were sharp racial disparities in the social backgrounds of the students in this study. White students come from homes with parents that have some post-graduate education, family incomes around \$72,000, neighborhoods with less than a third nonwhite residents, and slightly more than an eighth of nonwhite peers in their former high schools. Asian students had the second highest social origins. Asian students come from homes with parents that have fathers with some post-graduate education and mothers that are college graduates, family incomes around \$67,000, neighborhoods with slightly less than a third nonwhite residents, and 40% nonwhite peers in their former high schools. Latino and black students are much further behind in the parental educational background and family incomes of white and Asian students, and also have more racial-ethnic diversity in their precollege environments. Latino students' parents averaged slightly less than a college degree, come from homes with an average family income of slightly more than \$60,000,

neighborhoods with half racial-ethnic minority residents, and 40% nonwhite peers in the former high schools. Black students' parents averaged slightly less than a college degree, come from homes with an average family income of \$58,000, and lived in neighborhoods and attended high schools with more than half of the residents and students of a racial-ethnic minority group. The described disparities in social origins among students indicate that these students are not on an "equal playing field" when they enter these colleges and universities. Thus, the equal status condition may not be fulfilled among students interacting across racial-ethnic lines given such disparities.

A final limitation of the current study is that the colleges and universities included in this study are elite, meaning highly selective, and most are located in the Northeast. They are a small subset of the American higher education system, with lower levels of racial-ethnic diversity among the students. Therefore, the results and conclusions of this study may not generalize to other colleges and universities. Despite this limitation, it is well known that many higher education institutions mimic the elite colleges and universities. Although this position has been criticized [82], it may still occur in other colleges and universities relating to the structures that can influence interracial contact and racial prejudice among students. Future studies should consider more institutions so they do not limit their results to one segment of the higher education system.

#### 8. Conclusions

The intergroup contact theory continues to be a key theoretical perspective in social psychological research. However, the theory ultimately examines individuals separate from most of the actual context of the interactions. The intergroup contact theory's [2,3] key conditions of equal status, intergroup cooperation, common goals, and support from authorities for intergroup contact may not be fully met within elite HWCUs in this study, and those conditions that are met may be modified given such contexts. Despite these limitations, Pettigrew and Tropp's [4] research indicates that contact effects may still be found in future research. Students at these elite HWCUs do not enter interracial contact situations with an equal status, as found through their average racial prejudice toward other racial-ethnic groups and the social origins of each student group. When entering an interracial contact situation, one student of a racial-ethnic group is most likely viewed as inferior or views the student of another racial-ethnic group as inferior in the interaction. The existence of common goals may exist along with intergroup/interracial cooperation. However, given the research by Picca and Feagin [79] and Myers [72], students may enter these interactions with the general goals of not wanting to offend anyone, and getting through an interracial interaction as quickly as possible, which is supported by a recent study of white and black college students by Babbitt and Sommers [83]. This scenario likely occurs for white students more so than black, Asian, or Latino students given previous research [72,79]. Such goals and cooperation would create the superficial interactions noted over 50 years ago by Allport [2].

Next, it is generally assumed that the administration and faculty of elite HWCUs support cross-race interactions among students, so this key condition may exist. However, if the campus authority figures allow similar racial discrimination and events mentioned above to occur without appropriate corrective action, then racial-ethnic minority students who are subjected to the discrimination on campus may be less likely to enter interracial contact situations. These students may not feel equal to other students

given such a negative racial history of their HWCU. Furthermore, when racial-ethnic minority students enter interactions with white students, they may be skeptical of white students' intentions and/or goals and possible racial prejudice toward the student's racial-ethnic group [84–87]. If something negative occurs, racial-ethnic minority students may wonder if they would be supported by the administration with quick and appropriate action. Pettigrew and Tropp [25] suggest that support by authorities or institutional support for intergroup contact situations is perhaps the most important condition for reducing prejudice. Despite this, the extent of support for cross-race interaction and equality among all racial-ethnic groups within the context of a racialized environment such as a HWCU campus is important to consider. Mentioned above, the misinterpretation of intergroup contact theory that contact in and of itself will reduce prejudice still exists [3]. Applying this reality to HWCUs, simply bringing racial-ethnic minority students to campus, will not address the systemic racism and structures of inequality that exist. The authority figures at HWCUs need to work to disassemble these long-held structures on campus, which could increase the positive effects of interracial contact and also increase the sense of belonging of racial-ethnic minority students at HWCUs.

## **Conflict of Interest**

The author declares no conflict of interest.

#### References

- 1. Williams, R.M. *The Reduction of Intergroup Tensions: A Survey of Research on Problems of Ethnic, Racial, and Religious Group Relations*; Social Science Research Council: New York, NY, USA, 1947.
- 2. Allport, G. *The Nature of Prejudice*; Addison-Wesley: Reading, MA, USA, 1954.
- 3. Pettigrew, T.F. Intergroup contact theory. Annu. Rev. Psychol. 1998, 49, 65–85.
- 4. Pettigrew, T.F.; Tropp, T.R. When Groups Meet: The Dynamics of Intergroup Contact; Psychology Press: New York, NY, USA, 2011.
- 5. Chang, M.J.; Denson, N.; Saenz, V.; Misa, K. The educational benefits of sustaining cross-race interaction among undergraduates. *J. Higher Educ.* **2006**, *77*, 430–455.
- 6. Chang, M.J.; Astin, A.W.; Kim, D. Cross-racial interaction among undergraduates: Some consequences, causes, and patterns. *Res. Higher Educ.* **2004**, *45*, 529–553.
- 7. Espenshade, T.J.; Radford, A.W. *No Longer Separate, Not Yet Equal: Race and Class in Elite College Admission and Campus Life*; Princeton University Press: Princeton, NJ, USA, 2009.
- 8. Levin, S.; Taylor, J.; Caudle, E. Interethnic and interracial dating in college: A longitudinal study. *J. Soc. Pers. Relat.* **2007**, *24*, 323–341.
- 9. Levin, S.; van Laar, C.; Foote, W. Ethnic segregation and perceived discrimination in college: Mutual influences and effects of social and academic life. *J. Appl. Soc. Psychol.* **2006**, *36*, 1471–1501.
- 10. Levin, S.; van Laar, C.; Sidanius, J. The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Process. Intergr. Relat.* **2003**, *6*, 76–92.
- 11. McClelland, K.; Linnander, E. The role of contact and information in racial attitude change among white college students. *Sociol. Inq.* **2005**, *76*, 81–115.

12. Mendoza-Denton, R.; Downey, G.; Purdie, V.J.; Davis, A.; Pietrzak, J. Sensitivity to status-based rejection: Implications for African-American students' college experience. *J. Pers. Soc. Psychol.* **2002**, *83*, 896–918.

- 13. Mendoza-Denton, R.; Page-Gould, E. Can cross group friendships influence minority students' well-being at historically white universities? *Psychol. Sci.* **2008**, *19*, 933–939.
- 14. Page-Gould, E.; Mendoza-Denton, R.; Tropp, L.R. With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *J. Pers. Soc. Psychol.* **2008**, *95*, 1080–1094.
- 15. Scholfield, J.W.; Hausmann, L.R.M.; Ye, F.; Woods, R.L. Intergroup friendships on campus: Predicting close and casual friendships between white and African-American first-year college students. *Group Process. Intergr. Relat.* **2010**, *13*, 585–602.
- 16. Sidanius, J.; Levin, S.; Van Laar, C.; Sears, D.O. *The Diversity Challenge: Social Identity and Intergroup Relations on the College Campus*; Russell Sage: New York, NY, USA, 2008.
- 17. Sidanius, J.; Van Laar, C.; Levin, S.; Sinclair, S. Ethnic enclaves and the dynamics of social identity on the college campus: The good, the bad, and the ugly. *J. Pers. Soc. Psychol.* **2004**, *87*, 96–110.
- 18. Spanierman, L.B.; Neville, H.A.; Liao, H.; Hammer, J.H.; Wang, Y. Participation in formal and informal campus diversity experiences: Effects on students' racial democratic beliefs. *J. Divers. Higher Educ.* **2008**, *1*, 108–125.
- 19. Trail, T.E.; Shelton, J.N.; West, T.V. Interracial roommate relationships: Negotiating daily interactions. *Pers. Soc. Psychol. Bull.* **2009**, *35*, 671–684.
- 20. Van Laar, C.; Sidanius, J.; Levin, S. Ethnic-related curricula and intergroup attitudes in college: Movement toward and away from the in-group. *J. Appl. Soc. Psychol.* **2008**, *38*, 1601–1638.
- 21. Van Laar, C.; Levin, S.; Sinclair, S.; Sidanius, J. The effect of university roommate contact on ethnic attitudes. *J. Exp. Soc. Psychol.* **2005**, *41*, 329–345.
- 22. Feagin, J.R. *Racist America: Roots, Current Realities and Future Reparations*, 2nd ed.; Routledge: New York, NY, USA, 2010.
- 23. Kinder, D.R.; Sanders, L.M. *Divided by Color: Racial Politics and Democratic Ideals*; University of Chicago Press: Chicago, IL, USA, 1996.
- 24. Tuch, S.A.; Hughes, M. Whites' racial policy attitudes in the 21st century: The continuing significance of racial resentment. *Ann. Am. Acad. Pol. Soc. Sci.* **2011**, *634*, 134–152.
- 25. Pettigrew, T.F.; Tropp, L.R. A meta-analytic test of intergroup contact theory. *J. Pers. Soc. Psychol.* **2006**, *90*, 751–783.
- 26. Sherif, M. In *Common Predicament: Social Psychology of Intergroup Conflict and Cooperation*; Houghton Mifflin: Boston, MA, USA, 1966.
- 27. Pettigrew, T.F. Future directions for intergroup contact theory and research. *Int. J. Intercult. Relat.* **2008**, *32*, 187–199.
- 28. Pettigrew, T.F. The affective component of prejudice: Empirical support for the new view. In *Racial Attitudes in the 1990s: Continuity and Change*; Tuch, S.A., Martin, J.K., Eds.; Praeger: Westport, CT, USA, 1997; pp. 76–90.
- 29. Pettigrew, T.F. Generalized intergroup contact effects on prejudice. *Pers. Soc. Psychol. Bull.* **1997**, *23*, 175–185.

30. Pettigrew, T.F.; Meertens, R.W. Subtle and blatant prejudice in Western Europe. *Eur. J. Soc. Psychol.* **1995**, *25*, 57–75.

- 31. Small, M.L. *Unanticipated Gains: Origins of Network Inequality in Everyday Life*; Oxford University Press: New York, NY, USA, 2009.
- 32. Quillian, L. New approaches to understanding racial prejudice and discrimination. *Annu. Rev. Sociol.* **2006**, *32*, 299–328.
- 33. Taylor, M.C.; Pettigrew, T.F. Prejudice. In *Encyclopedia of Sociology*; Borgatta, E.F., Montgomery, R.J., Eds.; Macmillan Reference: New York, NY, USA, 2000; Volume 2, pp. 2242–2248.
- 34. Tropp, L.R.; Pettigrew, T.F. Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Pers. Soc. Psychol. Bull.* **2005**, *31*, 1145–1158.
- 35. Bobo, L.D.; Kluegel, J.R.; Smith, R.A. Laissez-faire racism: The crystallization of a kinder, gentler, antiblack ideology. In *Racial Attitudes in the 1990s: Continuity and Change*; Tuch, S.A., Martin, J.K., Eds.; Praeger: Westport, CT, USA, 1997; pp. 15–42.
- 36. Bonilla-Silva, E. *Racism Without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States*, 2nd ed.; Rowman and Littlefield: Lanham, MD, USA, 2006.
- 37. Schuman, H.; Steeh, C.; Bobo, L; Krysan, M. *Racial Attitudes in America: Trends and Interpretations*; Harvard University Press: Cambridge, MA, USA, 1997.
- 38. Sears, D.O. Symbolic racism. In *Eliminating Racism: Profiles in Controversy*; Katz, P.A., Taylor, D.A., Eds.; Plenum Press: New York, NY, USA, 1988; pp. 53–84.
- 39. Hughes, M. Symbolic racism, old-fashioned racism, and whites' opposition to affirmative action. In *Racial Attitudes in the 1990s: Continuity and Change*; Tuch, S.A., Martin, J.K., Eds.; Praeger: Westport, CT, USA, 1997; pp. 45–75.
- 40. Sears, D.O.; Henry, P.J. The origins of symbolic racism. J. Pers. Soc. Psychol. 2003, 85, 259–275.
- 41. Hughes, M.; Tuch, S.A. How beliefs about poverty influence racial policy attitudes: A study of whites, African Americans, Hispanics, and Asians in the United States. In *Racialized Politics: The Debate about Racism in America*; Sears, D.O., Sidanius, J., Bobo, L., Eds.; University of Chicago Press: Chicago, IL, USA, 2000; pp. 165–190.
- 42. Hogg, M.A.; Abrams, D. Social Identifications: A Social Psychology of Intergroup Relations and Group Processes; Routledge: London, UK, 1988.
- 43. Stets, J.E.; Burke, P.J. Identity theory and social identity theory. Soc. Psychol. Q. 2000, 63, 224–237.
- 44. Brown, R. Social identity theory: Past achievements, current problems, and future challenges. *Eur. J. Soc. Psychol.* **2000**, *30*, 745–778.
- 45. Turner, J.C.; Hogg, M.A.; Oakes, P.J.; Reicher, S.D.; Wetherell, M.S. *Rediscovering the Social Group: A Self-Categorization Theory*; Blackwell: New York, NY, USA, 1987.
- 46. Zuberi, T. *Thicker than Blood: How Racial Statistics Lie*; University of Minnesota Press: Minneapolis, MN, USA, 2001.
- 47. Ashmore, R.D.; Deaux, K.; McLaughlin-Volpe, T. An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychol. Bull.* **2004**, *130*, 80–114.
- 48. Tajfel, H.; Turner, J.C. The social identity theory of intergroup behavior. In *Psychology of Intergroup Relations*; Worchel, S., Austin, W.G., Eds.; Nelson-Hall Publishers: Chicago, IL, USA, 1997; pp. 7–24.

49. Van Ausdale, D.; Feagin, J.R. *The First R: How Children Learn Race and Racism*; Rowan and Littlefield: Lanham, MD, USA, 2001.

- 50. Lewis, A.E. *Race in the Schoolyard: Negotiating the Color Line in Classrooms and Communities*; Rutgers University Press: New Brunswick, NJ, USA, 2003.
- 51. Thoits, P.A.; Virshup, L.K. Me's and we's: Forms and functions of social identities. In *Self and Identity: Fundamental Issues*; Ashmore, R.D., Jussim, L., Eds.; Oxford University Press: New York, NY, USA, 1997; pp. 106–133.
- 52. McPherson, M.; Smith-Lovin, L.; Cook, J.M. Birds of a feather: Homophily in social networks. *Annu. Rev. Sociol.* **2001**, *27*, 415–444.
- 53. Charles, C.Z.; Fischer, M.J.; Mooney, M.A.; Massey, D.S. *Taming the River: Negotiating the Academic, Financial, and Social Currents in Selective Colleges and Universities*; Princeton University Press: Princeton, NJ, USA, 2009.
- 54. Aberson, C.L.; Shoemaker, C.; Tomolillo, C. Implicit bias and contact: The role of interethnic friendship. *J. Soc. Psychol.* **2004**, *144*, 335–347.
- 55. Pettigrew, T.F. Secondary transfer effects of contact: Do intergroup contact effects spread to noncontacted groups? *Soc. Psychol.* **2009**, *40*, 55–65.
- 56. Wright, S.C.; Aron, A.; McLaughlin-Volpe, T.; Ropp, S.A. The extended contact effect: Knowledge of cross-group friendships and prejudice. *J. Pers. Soc. Psychol.* **1997**, *73*, 73–90.
- 57. Boisjolly, J.; Duncan, G.J.; Kremer, M.; Levy, D.M.; Eccles, J. Emapthy or apathy? The impact of diversity. *Am. Econ. Rev.* **2006**, *96*, 1890–1905.
- 58. Massey, D.S.; Charles, C.Z.; Lundy, G.F.; Fischer, M.J. *The Source of the River: The Social Origins of Freshmen at America's Selective Colleges and Universities*; Princeton University Press: Princeton, NJ, USA, 2003.
- 59. Duncan, T.E.; Duncan, S.C.; Lu, F. A comparison of model- and multiple imputation-based approaches to longitudinal data with partial missingness. *Struct. Equ. Model.* **1998**, *5*, 1–21.
- 60. Enders, C.K. A primer on maximum likelihood algorithms available for use with missing data. *Struct. Equ. Model.* **2001**, *8*, 128–141.
- 61. Saenz, V.B.; Ngai, H.N.; Hurtado, S. Factors influencing positive interactions across race for African American, Asian American, Latino, and white students in college. *Res. High. Educ.* **2007**, *48*, 1–38.
- 62. Cobas, J.A.; Duany, J.; Feagin, J.R. *How the United States Racializes Latinos: White Hegemony and its Consequences*; Cobas, J.A., Duany, J., Feagin, J.R., Eds.; Paradigm: Boulder, CO, USA, 2009.
- 63. O'Brien, E. *The Racial Middle: Latinos and Asian Americans Living Beyond the Racial Divide*; New York University Press: New York, NY, USA, 2008.
- 64. Hughey, M.W. White Bound: Nationalists, Antiracists, and Shared Meanings of Race; Stanford University Press: Stanford, CA, USA, 2012.
- 65. Bonilla-Silva, E. Rethinking racism: Toward a structural interpretation. *Am. Sociol. Rev.* **1997**, *62*, 465–480.
- 66. Hunt, M.; Jackson, P.B.; Powell, B.; Steelman, L.C. Color-blind: The treatment of race and ethnicity in social psychology. *Soc. Psychol. Q.* **2000**, *63*, 353–364.
- 67. Bowen, W.G.; Kurzweil, M.A.; Tobin, E.G. *Equity and Excellence in American Higher Education*; University of Virginia Press: Charlottesville, VA, USA, 2005.

68. Feagin, J.R.; Vera, H.; Imani, N. *The Agony of Education: Black Students at White Colleges and Universities*; Routledge: New York, NY, USA, 1996.

- 69. Soares, J.A. *The Power of Privilege: Yale and America's College Elite*; Stanford University Press: Stanford, CA, USA, 2007.
- 70. Thelin, J.R. *A History of American Higher Education*; Johns Hopkins University Press: Baltimore, MD, USA, 2004.
- 71. Chou, R.S.; Feagin, J.R. *The Myth of the Model Minority: Asian Americans Facing Racism*; Paradigm: Boulder, CO, USA, 2008.
- 72. Myers, K.A. *Racetalk: Racism Hiding in Plain Sight*; Rowman and Littlefield: Lanham, MD, USA, 2005.
- 73. Bonilla-Silva, E. The invisible weight of whiteness: The racial grammar of everyday life in contemporary America. *Ethn. Racial Stud.* **2012**, *35*, 173–194.
- 74. Lewis, A.E. "What group?" Studying whites and whiteness in the era of "color blindness". *Sociol. Theory* **2004**, *22*, 623–646.
- 75. Kahlenberg, R.D. *Affirmative Action for the Rich: Legacy Preferences in College Admissions*; Kahlenberg, R.D., Eds.; Brookings Institution Press: Washington, DC., USA, 2010.
- 76. Kozol, J. *The Shame of the Nation: The Restoration of Apartheid Schooling in America*; Crown Publishers: New York, NY, USA, 2005.
- 77. Kozol, J. Savage Inequalities: Children in America's Schools; Harper Perennial: New York, NY, USA, 1992.
- 78. Massey, D.S.; Mooney, M.A. The effects of America's three affirmative action programs on academic performance. *Soc. Probl.* **2007**, *54*, 99–117.
- 79. Picca, L.H.; Feagin, J.R. *Two-Faced Racism: Whites in the Backstage and Frontstage*; Routledge: New York, NY, USA, 2007.
- 80. Goffman, E. The Presentation of Self in Everyday Life; Doubelday: Garden City, NY, USA, 1959.
- 81. Pryor, J.H.; Hurtado, S.; Saenz, V.B.; Santos, J.L.; Korn, W.S. *The American Freshman: Forty-Year Trends*, 1966–2006; Higher Education Research Institute, UCLA: Los Angeles, CA, USA, 2007.
- 82. Kraatz, M.S.; Zajac, E.J. Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change. *Am. Sociol. Rev.* **1996**, *61*, 812–836.
- 83. Babbitt, L.G.; Sommers, S.R. Framing matters: Contextual influences on interracial interaction outcomes. *Pers. Soc. Psychol. Bull.* **2011**, *37*, 1233–1244.
- 84. Shelton, J.N.; Richeson, J.A. Ethnic minorities' racial attitudes and contact experiences. *Cult. Divers. Ethnic Minor. Psychol.* **2006**, *12*, 149–164.
- 85. Shelton, J.N.; Richeson, J.A.; Salvatore, J. Expecting to be the target of prejudice: Implications for interesthnic interactions. *Pers. Soc. Psychol. Bull.* **2005**, *31*, 1189–1202.
- 86. Siegelman, L.; Tuch, S.A. Metastereotypes: Blacks' perceptions of whites' stereotypes of blacks. *Public Opin. Q.* **1997**, *61*, 87–101.
- 87. Torres, K.C.; Charles, C.Z. Metastereotypes and the black-white divide: A qualitative view of race on an elite college campus. *Du Bois Rev.* **2004**, *1*, 115–149.
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