Traditional and Race-based Bullying in Racial-Minority Majority and Racially Diverse Schools

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Abstract

Few studies in the U.S. have simultaneously examined general and race-based bullying with consideration of school-level racial composition. The current study examined victimization as a function of school racial composition, in minority-majority and diverse schools ($N = 1911$, Mage = 13.7 years) enrolled in 7th grade in 24 public schools (42.3% Hispanics, 9.0% non-Hispanic White, 28.9% non-Hispanic Black, and 19.7% non-Hispanic Asian). Multilevel regression analyses suggest student-level protective factors related to both forms of victimization, but, school racial composition was only significant in explaining race-based bullying. Specifically, minority-majority schools had lower levels of race-based victimization compared to racially diverse schools. Findings suggest that consideration of school contextual factors offers a more nuanced understanding of the relation between race and victimization.

Keywords Bullying victimization · Race · School composition · Race-based bullying

Introduction

Bullying is an ever-present behavior in schools that has both concurrent and long-term consequences on psychological well-being and physical health as well as academic functioning (Halliday et al., 2021). According to the U.S. Department of Health and Human Services, bullying is defined as unwanted aggressive behavior that has been or is likely to be repeated and involves an observable or perceived power imbalance; while race-based bullying is a specific form of bias-based bullying that occurs when one is bullied based on their social identity (e.g., gender, religion, race). Bullying victimization is not evenly distributed, and bullying is more often targeted at racial/ethnic minorities, though studies have yielded inconclusive findings (Xu et al., 2020). To date, most studies have examined racial differences at the individual level, despite recommendations that consideration of contextual factors, like school racial/ethnic composition, can yield more precision in understanding such disparities (Basilici et al., 2022). Examination of school racial composition provides important insights given bullying is power-based and race-based bullying is identity based; yet studies are limited such that they mostly rely on either a European or Canadian sample, most U.S. studies have consisted primarily of White adolescents, and few examined general and race-based bullying simultaneously. This study addresses the literature gap by utilizing a sample that primarily consisted of racial/ethnically minority adolescents to examine the role of school racial/ethnic composition in adolescent experiences of general and race-based bully victimization.

The Importance of Examining Racial/Ethnic Composition

Based on the School Crime Survey (U.S. Department of Education, 2021), in the 2019 school year, one out of five students reported being bullied (22%), but it was not equally distributed across student characteristics; rather, Black, Asian and Other races (Not Hispanic/Latino) were disproportionately more likely to report being bullied at school. Much of bullying victimization is identity-based, particularly with regard to race, and disproportionately

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among student, but, the survey also indicated that general bullying and race-based bullying are less prevalent when students of color are the majority at school (U.S. Department of Education, 2021).

These trends are noteworthy, insofar as they reflect the importance of race at the individual and school-level in bullying incidence. They are also important in light of recent demographic trends provided by the U.S. Department of Education, National Center for Education Statistics, such as the increasing Hispanic/Latino population, the increasing rate of Asian immigrants, and increasing racial segregation in public schools. In the 2021 school year, more than half of all students attended schools with a racial minority-majority (i.e., where the majority are non-White; National Center for Education Statistics, 2023). While roughly 33% of students attend schools with 75% minority enrollment or more (up from 20% in 2010), over half of Black, Hispanic and Pacific Islanders attended schools where 75% or more of students were minorities (compared to 5% of White students). Majority composition reflects population percentages such that White students are most likely to attend a school where their race/ethnicity is the majority, followed by Hispanic/Latino students and then Black students (44, 31, 22%; National Center for Education Statistics, 2023). The shifting landscape of diversity in schools calls for studies that reflect those trends. However, when studying race-based differences in bullying, and bullying targeted at one's race, it is imperative to consider the school-level racial composition, given bullying is about power, which could change as a function of school-level composition. The current study is unique in examining individual and school-level contextual factors in predicting general bullying and race-based bullying in both racial minority-majority schools and racially diverse schools.

Individual Race and Bullying

Over the last decade, scholars have given more attention to the overlap between race and bullying at the student level, though, findings are conflicting and complex. With regard to victimization, conclusions from large-national data surveys are sometimes inconsistent with smaller samples. One of the earlier meta-analyses on race and victimization (Vitoroulis & Vaillancourt, 2015) found that racial minority students were overall more likely to be victims of bullying, but effects were generally small, and largely disappeared when accounting for methodological variations. However, data from the 2019 School Crime Supplement survey found that Black, Multiracial, and Asian students were disproportionately victims (in that order), compared to White and Hispanic students (U.S. Department of Education, 2021). This is consistent with a more recent comprehensive review (Xu et al., 2020). In their review, larger studies

limited to U.S. samples more consistently found that Black and Native American students are more likely than White and Hispanic/Latino students to report being a victim of bullying as compared to studies finding null differences or those finding higher rates of victimization among majority youth. However, the review (Xu et al., 2020) also noted some inconsistencies, including studies that found higher rates of victimization among Hispanic youth (relative to other racial/ethnic group) and a large middle school study that found no differences in victimization between White, African American, Latino and Asian Students. One unfortunate gap in literature is the lack of research on Asian adolescents, especially given studies that indicate Asian students report general bullying (Wang et al., 2016) and racial discrimination (Greene et al., 2006) at levels higher than other racial/ethnic groups.

As compared to general bullying, there is a smaller, but more consistent literature which shows that racial and ethnic minority youth (including immigrants) are more likely than majority and native-born youth to experience bias-based bullying (Xu et al., 2020), especially race-based harassment (Bucchianeri et al., 2016), though race-based bullying remains greatly understudied relative to general forms of bullying.

School-level Racial/Ethnic Context

To date, most studies examining patterns of bullying across racial/ethnic groups have examined these from the student-level, without taking school-level racial composition into consideration (Graham, 2006), which some have argued to be a more nuanced and precise framework to examined differences (Vitoroulis & Vaillancourt, 2015). Despite this, a recent review of bullying and school racial composition (Basilici et al., 2022) found that of the twenty qualifying studies, most rely on European or Canadian samples, and those that utilize samples from the United States show great variability with regard to sample characteristics, coding/definition of minority groups, and developmental period. Because the definition of bullying entails elements of power, not surprisingly, studies examining peer victimization in the context of school diversity (i.e., composition) have drawn upon theories that invoke power, bias and intergroup relations to explain peer victimization, primarily imbalance of power (Graham, 2006) and to a lesser extent, social identity theories (see Durkin et al., 2011). Both emphasize the social context in understanding intergroup relations, such as relative group majority/minority status, but the latter emphasizes the role of racial identity and the former, numerical dominance in understanding aggression (see Durkin et al., 2011, p 244). Imbalance of power theory has dominated the literature examining general peer victimization. This theory draws from contact theory (Pettigrew,

2008) and postulates that more balanced schools will have less aggressive behavior than schools with a clear majority, and that the power of a group is not determined by their race/ethnicity, but rather their relative numerical minority/ majority status in a given school (Graham, 2006). However, contact theory also acknowledges the possibility that diversity can elicit greater tension and negativity between racial groups when status differences and competition are present (Benner & Graham, 2011).

Studies examining general bullying have yielded mixed support for the role of diversity in peer victimization patterns. A study (Juvonen et al., 2006) found that greater classroom and school-level diversity was related to reduced victimization, theorizing that greater balance in racial/ethnic groups results in more intergroup contact and in turn, more favorable out-group attitudes. Similarly, another study (Felix & You, 2011) found that high school students in classes with more same-ethnicity peers, and in more diverse schools, experienced less victimization across most bullying types, though they did not examine classroom and school-level diversity for race-based bullying victimization. Still, other studies have found that numerical minority status is only a risk factor for victimization among students of color or that bullying perpetration did not vary as a function of school ethnic composition (Vitoroulis et al., 2016).

School-level Racial/Ethnic Context and Race-Based Bullying

The role of school diversity and composition may be even more salient for race-based bullying as opposed to general bullying, because composition at the school level conveys important information about one's relative identity standing in that school. Further, much bullying is identity-targeted (Bucchianeri et al., 2016), and the size and delineation of racial groups in one's school may be particularly relevant to race-based discrimination during middle school when racial identity is a salient developmental task (French et al., 2006).

Like general bullying, studies examining school racial context and race-based bullying have found mixed evidence of benefits and relation between school composition and victimization. A study conducted in Britain (Durkin et al., 2011) categorized minority students as those who were not English/British/Northern Irish/Christian; otherwise stated, they were categorized as minority based on their cultural status not school numerical status. Increasing percentages of ethnic minorities did not relate to general aggression but was related to being a victim of discriminatory aggression, for both cultural minority and majority students. However, there was a protective effect of minority student presence when that rate exceeded 81%. In addition to the British study (Durkin et al., 2011), a handful of studies in the U.S. support the heightened importance of school-level diversity

when examining race-based bullying, as opposed to general bullying. A study (Fisher et al., 2015) examined the intersection of race, school diversity and both race-based and general victimization. In their middle school sample, which was predominantly White (89% Caucasian, 11% African American, N = 4581), they found that numerical minority status was related to victimization in general, but particularly race-based bullying. In their study, White students experienced more race-based bullying when they were the minority in their school, however, Black students were more likely to experience race-based bullying when in schools with more of their own race. However, its important to note that <1% of White students in that sample were a numerical minority (0–25% of school composition), whereas only a third of the Black students were in Black majority schools. Despite this sampling consideration, their results reflected tenets of both power imbalance and social identity theory. Another study (Bellmore et al., 2012) examined race-based discrimination among high school students and found that school-level diversity was protective against discrimination; however, other forms of bullying victimization were not examined in that study. In their study, a curvilinear relationship between diversity and discrimination was noted, such that highly diverse and highly non-diverse schools had the lowest rates of victimization (as compared to balanced schools). Still, other investigations indicate greater ethnic diversity can heighten discrimination experiences for racial/ethnic minority youth (Benner & Graham, 2011). Taken together, variation in methods, sampling, developmental stage and geography have yielded little consensus as to how school racial composition affects patterns of different forms of victimization for adolescents.

Individual-level Covariates

One limitation of prior work studying school racial composition is neglect of correlated risk and protective factors at the individual level; which can lead to over-estimation or mis-specification of school contextual variables. This is particularly the case in studies examining race-based bullying victimization. Specifically, school climate is a well-established correlate of general victimization, and perceived support, trust and acceptance by students and teachers are salient protective factors for general forms of victimization (e.g., physical, verbal, relational) (Zych et al., 2019). Thus, both student-student and student-teacher relations were accounted for, the former of which captures acceptance of diverse students. Conflict resolution skills, sometimes referred to as social competence, is also an established protective factor for victimization (see Cook et al., 2010 for review). Lastly, meta-analyses reveal small, but significant effects of family socioeconomic status on victimization (Tippett and Wolke, 2014). Though the literature is more mixed with regard to the

magnitude of the role of socioeconomic status (SES) on victimization, it is nonetheless important to include given the confounding with historically marginalized minority groups (Ratcliffe & McKernon, 2012).

Current Study

Some studies suggest the relation between bullying victimization and race may vary as a function of the school racial/ethnic composition, but considerable work needs to be done to address several shortcomings in the literature and build a more robust body of knowledge. Mainly, most studies of racial diversity as a school-level factor have drawn upon samples from foreign countries, which are not generalizable to U.S. samples. Second, few studies have incorporated individual-level risk and protective factors as covariates, which not only provides for a more robust model of the complex multi-determined contributors, but also helps isolate the unique contribution of individual and school-level factors. Third, Asian students are under-represented in bullying studies, especially those examining race. To address these literature gaps, the current study examines a racial/ethnically diverse sample of adolescents, including Asians, and had two aims. First, to explore bullying at the student-level, examining differences on the basis of race, while controlling for known individual-level correlates of bullying. Second, to examine school-level contextual factors, to see if there were differences in rates of bullying victimization for racially diverse versus minority-majority schools, taking individual covariates into account.

Methods

Participants

Data were drawn from a longitudinal, large school-based violence prevention program of *Fourth R*. Participants were 1911 adolescents (mean age = 13.7 years, SD = 0.62, range: 13 to 16 years; 51% female) enrolled in 7th grade in 24 public schools in southeast Texas, who self-reported to be 42.3% Hispanics, 9.0% non-Hispanic White, 28.9% non-Hispanic Black, and 19.7% non-Hispanic Asian. For this study, other racial/ethnic groups (i.e., "American Indian," "multiple," "other") were excluded (n = 456).

Procedure

In 2018, 3738 students enrolled in 7th grade mandated classes (e.g., health, physical education) at 24 schools were recruited in class. Students who returned parental consent forms and signed the child assent form completed the baseline survey during a class session (50 min). A makeup session was scheduled for those who were unable to complete the survey in the given time. A total of 2768 adolescents (response rate: 74%) completed the baseline survey and met the inclusion criteria. One year later after post intervention implementation, 2367 participants (retention rate: 85.5%) completed the follow up survey. Participants received $10 gift cards each for participating in the baseline and follow up survey. The study was approved by the last author's university Institutional Review Board.

Measures

Bullying

Seven items from the Revised Olweus Bully/Victim Questionnaire (OBVQ, Olweus, 1996) were used to measure general bullying victimization, including verbal, relational and physical. Participants reported whether they had been bullied by others in the past year to items such as "Left you out of things, excluded, or ignored you" and "Hit, kicked, pushed, and shoved you around, or locked you indoors". Responses were scored on a 5-point scale (1 = never, 2 = rarely, 3 = occasionally, 4 = somewhat often, 5 = often). Cronbach's α for this scale was 0.88. One item "teased you with mean names about your race or color" from the OBVQ (Olweus, 1996) was used to measure race-based bullying. Participants responded on the same 5-point scale indicated above. For race-based bullying, responses were dichotomized (1 as 0, 2–5 as 1) for analysis due to a small number of adolescents endorsed 3–5 as response (n = 217, 11.4%).

School climate

Using the Classroom Climate Scale (Dahlberg et al., 2005), participants reported two dimensions of school climate: 1) student-to-student relationships (7 items; e.g., "students stop other students who are unfair or disruptive at school," "students make friends easily," "students from different social classes and races get along well") and 2) student-to-teacher relationships (4 items; e.g., "teachers treat students with respect," "teachers treat students fairly"). Participants responded on a 4-point scale anchored by 1 (strongly disagree) and 4 (strongly agree). For analyses, scale means were used for each of the dimensions. Both student-to-student and student-to-teacher relationship scales had a Cronbach's α of 0.90.

Conflict resolution skills

The Management of Conflict subscale of Adolescent Interpersonal Competence Questionnaire (Buhrmester,

1990) was used to measure conflict resolution skills. On a scale of 1 (= poor at this) to 5 (= extremely good at this), adolescents responded how good they were at eight items such as "dealing with disagreements in ways that make both people happy in the long run," and "controlling your temper when having a conflict with someone." The scale had a Cronbach's α of 0.91.

Demographic characteristics

Students reported their age, gender, and race. For living situations, students picked one of the answer options from living with "both parents," "one parent and one step-parent," "mother (only)," "father (only)," "grandparent(s)," and "other." Living situation was dichotomized as living with both parents or "other" living situation.

School racial/ethnic composition

Information was collected on total student enrollment and enrollment of students from Hispanic, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian in each school from the National Center for Educational Statistics (NCES) databank. The number of students from each racial/ethnic group were divided by the total enrollment in the same school to obtain the % of students from each racial/ethnic group at the school. A dichotomous variable was then created to represent if the school had a racial/ethnic majority. If a school had one racial/ethnic group consisted of more than 50% of the student population, the school was considered as having a racial/ethnic majority. Schools with no racial/ethnic majority group was considered as racially/ ethnically diverse. Among the racial/ethnic majority schools, schools were coded as Hispanic majority (i.e., the majority group was Hispanic), non-Hispanic Black majority, or non-Hispanic Asian majority. There was no non-Hispanic White majority school in our data.

Percentage of free/reduced lunch (FRL)

Percent of free/reduced lunch was derived from the number of free lunch or reduced-price lunch eligible students in each school, divided by the total number of students enrolled in the same school to calculate the % of socio-economically disadvantaged students at the school.

Data Analysis Approach

The current study used a multilevel modeling approach to assess individual and school-level contributors to victimization and perpetration. First, at the individual level, race, and several covariates (i.e., risk and protective factors) that are associated with bullying behavior, including age, sex,

living situation, teacher and student perceived support and interpersonal conflict resolution skills were assessed. At the school-level, two school characteristics: percent free-reduced lunch, and whether it was a diverse or minority-majority school were assessed. The coding of the schools was decided upon based on the breakdown of sample schools as well as having little a priori basis to make multiple cross-minority-majority comparisons, and cross-cultural inferences. Further, collapsing allowed for greater generalizability, as there is greater possibility our school compositions may not generalize across geographic areas. While our schools reflect increased migration trends and segregation, sensitivity to compositional differences across studies is important (see Basilici et al., 2022). Nonetheless, in exploratory analyses, minority-majority schools were examined separately by racial majority (e.g., Hispanic majority and Black majority) to see if any significant differences emerged that may point to future studies.

Variable means, standard deviations, frequencies, and percentages in SPSS 29.0 for Mac (IBM Corp., 2021) were first examined. Next, general bullying and race-based bullying were compared across student race/ethnicity and school type, using chi-square analysis. Two separate multilevel regression analyses were performed in Mplus 8.7 (Muthen & Muthen, 1998–2017) to examine how at the student level, student race/ethnicity, controlling for student-student relationships, student-teacher relationship, conflict resolution skills, adolescent age, gender, and living situation and at the school level, racially/ethnically diverse schools (minority-majority schools as the reference group), controlling for % of socioeconomically disadvantaged students, were associated with adolescent experiences of general bullying and race-based bullying. To explore whether the type of minority-majority schools mattered, two additional multilevel regression models were tested as exploratory analyses by replacing the dichotomous school racial/ethnic composition variable with a categorical variable that differentiates Hispanic majority, non-Hispanic Black majority, or non-Hispanic Asian majority schools within the minority-majority schools, using racially/ethnically diverse schools as the reference group. Both sets of analyses utilized maximum likelihood estimator with robust standard errors (MLR) using the Monte Carlo integration. The study had 0.8 to 2.2% of missingness on the key study variables. Missing data was handled using Full Information Maximum Likelihood (Graham, 2012).

Results

Adolescent characteristics are shown in Table 1. Of the 24 schools, 8 were racially/ethnically diverse (i.e., no racial/ ethnic group consisted of 50% or above of the student

Table 1 Adolescent characteristics (N adolescents $= 1911$, N schools $= 24$)

Adolescent characteristics	N (%)
Age, mean (SD)	2.65 (0.62)
Race	
Hispanic	809 (42.3%)
Non-Hispanic White	172 (9.0%)
Non-Hispanic Black	553 (28.9%)
Non-Hispanic Asian	377 (19.7%)
Gender	
Female	973 (50.9%)
Male	938 (49.1%)
Living situation	
Living with both parents	652 (34.7%)
Other	1229 (65.3%)
School type	
Racially/ethnically diverse schools ($n = 8$)	808 (42.3%)
Minority-majority schools ($n = 16$)	1102 (57.7%)
Hispanic Majority schools ($n = 9$)	612 (32.0%)
Non-Hispanic Black majority schools ($n = 5$)	229 (12.0%)
Non-Hispanic Asian majority schools ($n = 2$)	261 (13.7%)

% are valid %

population), 16 had a racial/ethnic group that were more than 50% of the student population, including 9 Hispanic majority schools, 5 Non-Hispanic Black majority schools, and 2 Non-Hispanic Asian majority schools (see Fig. 1 for student race/ethnic composition in schools). The school sizes ranged from 353 to 1540, with an average student enrollment of 1019 ($SD = 323$), and between 21 to 191 students participated in the study from individual schools. The percentage of FRL students ranged from 7.6 to 100% in the schools, with a mean of 69.5% ($SD = 0.30$).

Of the participants, 1297 (68.7%) reported being a victim of any general bullying in the past year. As shown in Table 2, based on chi-square analyses, higher proportion of non-Hispanic Asian students (75.0%) reported bullying victimization than Hispanic (66.7%) and non-Hispanic Black students (65.0%), but no difference was identified with non-Hispanic White students (75.4%), $\chi^2 = 15.45$, $p < 0.01$. Examining by school type, significantly higher proportion of students in racial/ethnic diverse schools (73.8%) reported bullying victimization than those in minority-majority schools (64.8%), $\chi^2 = 17.39$, $p < 0.001$. For race-based bullying, 483 participants (25.6%) reported being a victim in the past year. Significantly higher proportion of non-Hispanic Black (28.3%), and non-Hispanic Asian (31.9%) students reported race-based bullying than their Hispanic counterparts (21.0%), $\chi^2 = 18.83$, $p < 0.01$. Similarly, significantly higher proportion of students in racial/ethnic diverse schools (28.7%) reported race-based bullying

victimization than those in minority-majority schools (23.3%), $\chi^2 = 6.84$, $p < 0.01$.

As shown in Table 3, student race/ethnicity did not significantly associate with general nor race-based bullying victimization, after controlling for individual level and school level covariates. Being in a racial/ethnic majority school [Adjusted Odd Ratio (AOR) $= 0.68$, 95% confident interval (CI): 0.62, 0.89, $p < 0.01$] in comparison to be in a racially/ethnically diverse school, were negatively associated with race-based bullying victimization, but not for general bullying victimization. Among the covariates, student-student relationships and student-teacher relationships were significantly associated with general bullying victimization ($\beta = -0.10$, $p < 0.01$; AOR $= 0.81$, 95% CI: 0.69, 0.96, $p < 0.05$) and race-based bullying victimization ($\beta = -0.07$, $p < 0.05$; AOR $= 0.81$, 95% CI: 0.67, 0.98, $p < 0.05$).

Exploratory Analysis

With a further exploration of which racial/ethnic group was the majority in the racial/ethnic majority schools (see Table 4), while no school type difference was identified for general bullying victimization, for race-based bullying victimization, students in a Hispanic majority schools were significantly less likely than those in a racially/ethnically diverse school to reported race-based bullying victimization (AOR $= 0.62$, 95% CI: 0.43, 0.88, $p < 0.01$). No other school type difference was identified.

Sensitivity Analysis

Intervention status was included in the initial analyses as a school-level covariate since data were drawn from an intervention study, but was not significant. Thus, it was removed from subsequent analyses since it was not a substantive aim of the study.

Discussion

Over the last decade there has been increased attention to and interest in examining the role of race in bullying. Larger, more diverse studies and meta-analyses suggest race, as a student-level variable, can be a risk factor for victimization, particularly for Black and Native American students. However, scholars have pointed out that examination of race is best approached in frameworks that account for school-level racial/ethnic composition (see Basilici et al., 2022). Despite this, consideration of racial composition and bullying patterns has lagged in comparison to student-level approaches, and studies in the United States remain very limited, especially when

Fig. 1 School Racial/ethnic composition by School Type
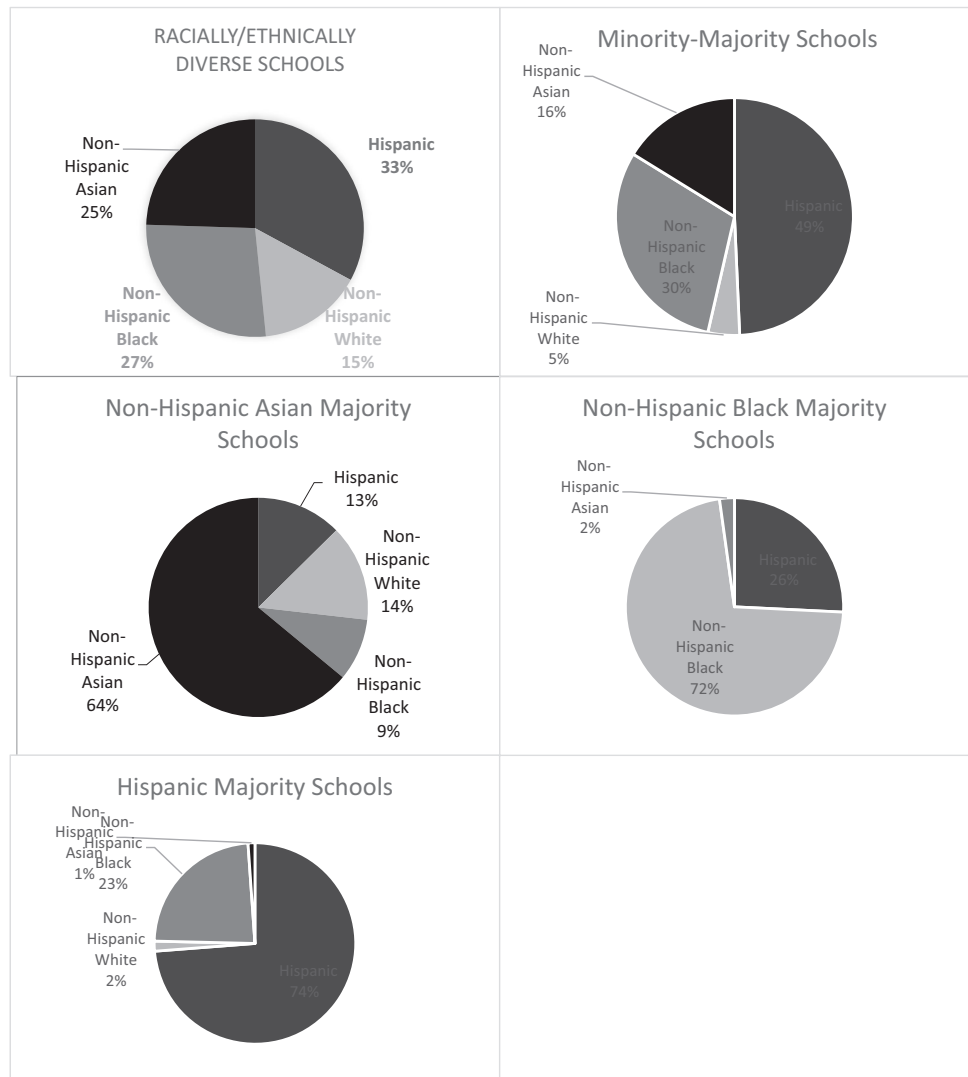
restricted to those examining race-based bullying. This is both surprising and disadvantageous given the changing demographics in schools, marked by an increasing immigrant and Hispanic population, and increasing segregation (National Center for Education Statistics, 2023). Because much of bullying is identity-based, and involves power dynamics, positioning students' race in the context of school-level composition could offer valuable information, insofar as the racial majority at school may contrast with a students' cultural majority status. A predicate of the present investigation is that students' race in relation to bullying, is best understood in the context of school-level racial composition. The current study examined general and race-based bullying victimization with consideration of race at both the individual and school-level. To accomplish this, the current study leveraged a highly racially diverse dataset, predominantly students of color, wherein bullying patterns were compared across racially diverse schools and racial-minority-

majority schools, in which Black, Hispanic or Asian students were the majority population (see Fig. 1).

With regard to general victimization, school racial composition was not a significant predictor, nor was race at the student-level, after accounting for other covariates. Individual level covariates, such as parent education, and protective factors (positive relationships with teachers and students) were significant, and in line with a substantial body of work (for review, see Zych et al., 2019). However, it is important to highlight that despite several significant student-level variables, individual-level variables explained a smaller percentage of variance in victimization than school-level factors. Thus, one cannot assert that student-level factors are necessarily more important in explaining general victimization. In brief, the current findings suggest race (at the student or school-level) is not valuable in explaining bullying prevalence for general bullying, when controlling for other student-level characteristics, which is inconsistent with a few prior studies (e.g., Hanish & Guerra,

Table 2 General bullying and race-based bullying by student race/ethnicity and school type

	General bullying N (%)	Race-based bullying N (%)
Total	1297 (68.7%)	483 (25.6%)
By student race/ethnicity		
Hispanic	533[a] (66.7%)	167[a,c] (21.0%)
Non-Hispanic White	129 (75.4%)	43 (25.1%)
Non-Hispanic Black	353[a] (65.0%)	153[b] (28.3%)
Non-Hispanic Asian	282[b,c] (75.0%)	120[b] (31.9%)
χ^2	15.45**	18.83**
By school type		
Racially/ethnically diverse schools	590 (73.8%)	229 (28.7%)
Minority-majority schools	706 (64.8%)	253 (23.3%)
χ^2	17.39***	6.84**
By minority-majority school type		
Racially/ethnically diverse schools	590[d,e] (73.8%)	229[d] (28.7%)
Hispanic majority schools	388[f,g] (64.5%)	127[f] (21.2%)
Non-Hispanic Black majority schools	125[f,g] (55.1%)	60 (26.7%)
Non-Hispanic Asian majority schools	193[d,e] (74.2%)	66 (25.4%)
χ^2	38.16***	10.16*

**p < 0.01; ***p < 0.001. Superscripts indicate Bonferroni post hoc analysis results significant at 0.5 level

[a]Significantly different than Non-Hispanic Asian

[b]Significantly different than Hispanic

[c]Significantly different than Non-Hispanic Black

[d]Significantly different than Hispanic majority schools

[e]Significantly different than non-Hispanic black schools

[f]Significantly different than racially/ethnically diverse schools

[g]Significantly different than Non-Hispanic Asian majority schools

Table 3 Multilevel regression analysis based on school racial/ethnic diversity

	General bullying victimization β	Race-based bullying victimization AOR (95% CI)
Individual level variates		
Student-student relationship	−0.10**	0.81* (0.69, 0.96)
Student-teacher relationship	−0.07*	0.81* (0.67, 0.98)
Conflict resolution skills	−0.04	1.04 (0.91, 1.18)
Age	−0.03	0.99 (0.84, 1.17)
Living Situation (ref.: living with both parents)	0.06*	1.12 (0.84, 1.49)
Gender (ref.: female)	−0.09***	0.95 (0.77, 1.18)
Race (ref.: Non-Hispanic White)		
Hispanic	−0.05	0.82 (0.44, 1.53)
Non-Hispanic Black	−0.03	1.06 (0.56, 2.02)
Non-Hispanic Asian	−0.01	1.61 (0.93, 2.80)
School level variates		
% FRL	−0.23	1.14 (0.76, 1.71)
Minority-majority schools (ref.: racially/ethnically diverse schools)	−0.09	0.68** (0.62, 0.89)
R^2		
Individual level	0.04	0.04
School level	0.08	0.74

β standard coefficient, *AOR* adjusted odds ratio, *CI* confidence interval, *ref.* reference group

*p < 0.05; **p < 0.01; *** p < 0.001

2000); though, it is important to contextualize this conclusion in light of having a sample that is predominantly students of color, nested within schools that were all minority-majority.

In contrast to general bullying victimization, findings are consistent with other studies suggesting that racial composition may be more relevant for race-based bullying (see Fisher et al., 2015). In contrast to previous work, the current study is unique in identifying the importance of racial composition, even controlling for conflict resolution skills, parent education, and student-level perceptions of peer climate and teacher relationship quality. In addition, findings are consistent with studies suggesting greater ethnic diversity can heighten discrimination experiences (Durkin et al., 2011). This pattern is also consistent with larger nationally representative samples (U.S. Department

of Education, 2021), wherein schools in which students of color were a majority, race-based bullying was less prevalent. Race-based bullying may be particularly sensitive to school-level group composition to the extent group (racial) identity meaning can change relative to the racial composition. Comparison to other studies is hindered by differences in sampling and methods. For example, at least one study with a non-U.S. sample found greater diversity results in higher levels of general victimization (Vervoort, et al., 2010), but that study did not look at race-based bullying. A study (Bellmore et al., 2012) found a curvilinear relationship with diversity and discrimination, such that discrimination was highest in moderately diverse schools (with an even balance of two groups), and lower in highly diverse and lowest in highly non-diverse schools. Unfortunately, the current study sample did not yield any perfectly balanced schools, so it is not possible to make direct comparisons to this investigation, but studies that replicate and refine these characterizations are needed.

Table 4 Exploratory multilevel regression analysis based on minority-majority school type

	General bullying victimization ß	Race-based bullying victimization AOR (95% CI)
Individual level variables		
Student-student relationship	−0.10**	0.81* (0.68, 0.96)
Student-teacher relationship	−0.07*	0.81* (0.67, 0.98)
Conflict resolution skills	−0.04	1.03 (0.91, 1.18)
Age	−0.03	0.99 (0.83, 1.17)
Living situation (ref.: living with both parents)	0.06*	1.12 (0.85, 1.49)
Gender (ref.: female)	−0.09***	0.96 (0.77, 1.19)
Race (ref.: Non-Hispanic White)		
Hispanic	−0.06	0.83 (0.45, 1.54)
Non-Hispanic Black	−0.02	1.02 (0.54, 1.93)
Non-Hispanic Asian	−0.01	1.59 (0.94, 2.70)
School level variables		
% FRL	0.11	1.47 (0.88, 2.44)
School type (ref.: racially/ethnically diverse schools)		
Hispanic majority schools	−0.17	0.62** (0.43, 0.88)
Non-Hispanic Black majority schools	−0.69	0.76 (0.55, 1.05)
Non-Hispanic Asian majority schools	0.14	0.83 (0.56, 1.23)
R^2		
Individual level	0.04	0.04
School level	0.39	0.93

ß standard coefficient, *AOR* adjusted odds ratio, *CI* confidence interval, *ref.* reference group

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The benefits of a racial-minority-majority school seem to be incompatible with power balance theory, but this is premature for several reasons. First, initial studies that were guided by power imbalance theory with U.S. samples did not assess race-based bullying. Second, more recently, support for power imbalance theory has been mixed, and reveals potential intersections between race and the majority group that were beyond the scope of the current study. Notably, a study (Fisher et al., 2015) found mixed support for power balance theory, as both White students in the minority and Black students who were majority in their school reported more victimization, yet a study (Bellmore et al., 2012) found diversity to be protective against discrimination. Third, the purported benefits of power balance are drawn from two lines of reasoning; first, is the notion that whenever one group has majority power (versus more evenly distributed), bullying is more prevalent, accentuating the in group/out group contrast. The second line of reasoning draws upon intergroup contact theory (Pettigrew, 1998), and the positive trickle-down effects on attitudes of more intergroup contact. There is support for the positive benefits of intergroup contact, but only under certain conditions (Pettigrew & Tropp, 2006). First, (a) differences in social status being are explicitly minimized; (b) pairs or groups of individuals must be given a common goal to direct their interactions, and must be incentivized to work together to achieve their goal; (c) an extended amount of interpersonal contact, including mutual disclosure to assist participants in discovering areas of commonality; and (d) those in positions of authority (i.e., teachers) must explicitly acknowledge, encourage and support positive, collaborative interactions. Therefore, it may be that racial/ethnic diversity can serve as a catalyst for more between-group comparison and elicit more racial discrimination *absent* practices that provide conditions for positive intergroup contact (Cohen & Lotan, 1995). Indeed, the current findings are consistent with the proposition set forth by contact theory that diversity can amplify intergroup racial tension when culturally based status differences exist. Fourth, the sample makeup, measurement and school compositions (minority segregated vs highly diverse) did not allow one to determine whether bullying is occurring within or between groups; only at the school level. Thus, this precludes making parallel comparisons with other studies drawing upon power imbalance, which have been able to ascertain levels of victimization among minority vs. majority groups.

Additional analyses were conducted in an exploratory nature, to provide information useful for future studies.

These revealed Hispanic majority schools had lower levels of race-based bullying than diverse schools. This model was exploratory, as there are no studies from which we could base hypotheses, and we had an uneven number of majority schools across race (e.g., Hispanic Majority=9, Black majority=5, Asian majority=2), which is why it is conceivable that there was not adequate power to detect a significant difference for Asian majority schools. Nonetheless, this information could be useful important to present given the dearth of studies inclusive of Asian students (Huang & Vidourek, 2019). These analyses also suggest that cultural differences between racial minority groups may be an underexamined component of bullying dynamics and warrant further study.

Limitations

The current study population offers valuable information about the role of school diversity on bullying victimization, utilizing a sample that captures important shifts in school composition playing out on a national level. Few studies of race-based bullying have gone beyond classroom level composition, and assessed school-level racial composition as a contextual factor, especially in the U.S. Furthermore, few have had adequate numbers of students from different, often underrepresented, racial backgrounds to differentiate among groups; an important factor for generalizability. However, there are a few limitations that should be noted. First, it should be noted that despite a diverse sample, there were not adequate numbers of multiracial youth to incorporate as an independent subgroup. Because this is a growing under-represented population, future studies are needed to build a knowledge base. Second, because school shut-downs started happening subsequent to this data collection, analyses were limited to cross-sectional models, as subsequent data collection would pose challenges for interpretation (especially for the variables of interest). Thus, one needs to be cautious about inferring causation. Third, the current study also lacked significant geographic diversity, with both districts reflecting urban schools in southeast Texas, a consideration for generalizability. In addition, the sample includes a high number of students from low income, predominantly racial minority schools, which could explain why the rates of bullying are slightly higher than nationally-drawn samples. Fourth, the measure of race-based bullying was narrow in scope, capturing only verbal teasing, an important factor when placing and comparing these findings in the context of other related investigations. Lastly, the present investigation did not assess perpetration, nor did it draw upon methods that allow us to assess who is bullying whom. As a result, no inferences can be drawn as to whether the victimization is the result of intra vs inter-group bullying, only mean school levels.

Suggestions for Future Research

Given the societal status/power differences between racial groups, future studies would generate benefit from investigating how race-based victimization patterns would play out across varying thresholds of White students, as there is evidence that students who belong to groups in positions of power in the broader society could feel particularly threatened by the increasing or dominant presence of other racial/ethnic groups (Johnson et al., 2005). In addition, samples with sufficient representation across several racial groups would allow for more refined assessment of how race and minority status interact with regard to race-based victimization. These priorities, alongside understanding *who* is bullying *whom* (i.e., ingroup vs outgroup) would help construct a more nuanced understanding of bullying and race dynamics.

Conclusion

Despite the well-known racial disparities in bullying, less is known how school racial composition contribute to the disparities, particularly in schools serving minority adolescents. Using a sample of racial/ethnically diverse sample of adolescents that were primarily racial/ethnic minorities, the study found that adolescents in minority-majority schools were less likely to be a victim of race-based bullying than their peers enrolled in racial/ethnic diverse schools. Findings from the present study add to a small literature examining general and race-based bullying victimization in the context of school-based racial composition in the United States. Findings reinforce the importance of going beyond individual-level frameworks/approaches to understanding the complex dynamics of race and bullying. School-level racial composition may have more salience for race-based bullying than general bullying, though individual risk and protective factors remained significant for both forms of bullying. Furthermore, students reported less race-based bullying victimization in minority-majority schools than diverse schools, suggesting protective benefits of having a majority of same-race peers for race-based bullying. One should contextualize the results within the sample characteristics, which was predominantly students of color, wherein no case were White students (cultural majority) more than one-fourth of the school population. It is important to investigate racial minority-majority schools in their own right, especially given much of bullying is identity-based, and race is a veritable risk factor for bullying.

Compliance with Ethical Standards

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