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School Disorder and Dropping Out: The Intersection of Gender, Race, and Ethnicity

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Abstract

A growing body of research is exploring the affects school disorder has on educational progress. It is also known that educational success and failure are linked to gender, racial, and ethnic disparities. Other issues, however, remain less explored. For example, how do perceptions of individual adolescents about disorder affect behavior? Or whether or how school-level physical and social disorder are related to gender, racial, and ethnic disparities. Do any of these factors affect the likelihood of dropping out? This study draws from the Education Longitudinal Study of 2002, with a focus on a subsample consisting of Black/African American, Latina/o American, Asian American, Native American, multiracial American, and White American public school students in 580 public schools. We analyze the role school disorder has on dropping out, among racial and ethnic minority adolescents. The results suggest that, in general, school disorder has greater influence among racial and ethnic minority youth.

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Introduction

Schools are formative institutions that provide opportunities for exploration of identity, acquisition of skills, and socialization, all crucial elements of healthy adolescent development (Kozol, 2005, 2012; LeBlanc, Swisher, Vitaro, & Tremblay, 2008; Peguero & Bracy, 2015). However, adolescent development can be compromised when students attend poorly operated schools. School disorder can negatively affect adolescents' school performances, behaviors, and interactions with their classmates and teachers. Aspects of school disorder, such as students not feeling safe, disruptions in the learning process, presence of gangs and crime, and racial/ethnic tension between students, have been found to be associated with delinquency, depression, poor cognitive functioning, poor test scores, school detachment, and diminished academic motivation (Cornell & Mayer, 2010; Kozol, 2005, 2012; LeBlanc et al., 2008; Lo et al., 2011; Peguero & Bracy, 2015; Wang & Dishion, 2012). Conversely, adolescents who perceive their schools to be orderly are likely to have higher self-esteem, exhibit prosocial behavior, form school bonds, make educational progress, and ultimately achieve academic success (Cornell & Mayer, 2010; LeBlanc et al., 2008; Lo et al., 2011; Wang & Dishion, 2012). Therefore, it is reasonable to test whether school disorder is linked to adolescents' likelihood of dropping out of school and whether that likelihood is moderated by gender and race/ethnicity.

According to the U.S. Department of Education, between 2010 and 2012, approximately one in five public school students did not receive a high school diploma (Stetser & Stillwell, 2014), and roughly 30% of Black/African American and Latina/o American, 11% of Asian American, and 35% of Native American students did not receive a regular high school diploma (Stetser & Stillwell, 2014). Dropping out is a serious problem because these former students experience poorer health, more likely to be unemployed, engage in delinquency, use drugs, and be incarcerated (Kozol, 2005, 2012; Rumberger, 2011). High school dropouts also affect the U.S. national economy with higher unemployment, greater health care expenses, and reduced tax contributions (Rumberger, 2011; Tyler & Lofstrom, 2009).

Dropping out is also stratified by gender and race/ethnicity. The overrepresentation of Black/African Americans and Latino American males who drop out of school is both historical and persistent (Noguera, 2008; Rios, 2011; Rumberger, 2011). Despite the gender and racial/ethnic differences

among school dropouts, the association between school disorder and school dropout has not been fully explored. In response, our study extends the literature on racial/ethnic minority adolescent development and educational disparities by exploring the impact of school disorder on dropping out. More specifically, we explore gender and racial/ethnic differences in relation to the impact of school disorder on dropping out.

The Importance of School Climate

School climate is often defined as "shared beliefs, values, and attitudes that shape interactions between students, teachers, and administrators and set the parameters of acceptable behavior and norms for the school" (Koth, Bradshaw, & Leaf, 2008, p. 96). A "healthy" or positive school climate is argued to be essential in providing effective and safe schools. Positive school climate has been linked to students' engagement and academic achievement (Griffith, 1999; Lee, Bryk, & Smith, 1993), reduced risk of antisocial and violent behavior (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Kuperminc, Leadbeater, & Blatt, 2001; LeBlanc et al., 2008), and lower likelihood of dropping out (Chen, 2007; Peguero & Bracy, 2015).

School disorder is more apt to occur in larger schools with high rate of crime and truancy as well as in schools with high percentage of racial/ethnic minorities and students with low socioeconomic status (SES; Gottfredson et al., 2005; Welsh, Stokes, & Greene, 2000). School disorder can significantly disrupt students' learning, academic performances, and educational achievement (Cornell & Mayer, 2010; Kozol, 2005, 2012; Peguero & Bracy, 2015), which can, in turn, contribute to dropout. Furthermore, school disorder can also result in poor attendance (Chen, 2007; Kozol, 2005, 2012; Rumberger, 2011). To illustrate, Chen (2007) found that students attending a disorderly school displayed low achievement as indicated in their presence in the classroom and their attendance records.

In addition, if students perceive their school climate as chaotic, they are likely to feel unsafe and may attempt to avoid school altogether, which can elevate their risk of dropping out (Kozol, 2005, 2012; Rumberger, 2011). As a whole, research has provided strong evidence demonstrating how school disorder can significantly impact students' educational outcomes, as reflected by truancy and dropping out.

The Significance of the Intersection of Gender and Race/Ethnicity

It is well documented that gender, race, and ethnicity are important variables that influence school-related predictors and outcomes. Research that

examines gender and racial/ethnic disparities in academic achievement, access to educational resources, and quality of schools has major implications on the life chances of these youth (Crenshaw, Ocen, & Nanda, 2015; Harrison, 2015; E. W. Morris, 2007; M. W. Morris, 2016). Because students of different genders and race/ethnicities may have qualitatively different experiences than their counterparts, it is important to investigate the impact of school disorder on youths' likelihood of dropping out.

This study incorporates an intersectional approach, recognizing that gender and race/ethnicity are always experienced simultaneously within an individual (Crenshaw et al., 2015; Ferguson, 2000; M. W. Morris, 2016). Gender and race/ethnicity are also intertwined within social institutions, such as schools and function as the cultural lenses through which students, teachers, and administrators interact with each other within this environment (Crenshaw et al., 2015; Ferguson, 2000; Harrison, 2015; E. W. Morris, 2007; M. W. Morris, 2016; Rios, 2011). Given the complexity of these intersecting identity categories, they are not simply additive; rather, these intersections produce unique social positions for boys and girls of distinct racial/ethnic categories (Crenshaw et al., 2015; Ferguson, 2000; Harrison, 2015; M. W. Morris, 2016; Rios, 2011). Furthermore, these intersections can create both oppression and privilege, and this theoretical framework emphasizes the need to explain differences in the meanings that boys and girls attribute to their school experience (Crenshaw et al., 2015; Ferguson, 2000; Harrison, 2015; E. W. Morris, 2007; M. W. Morris, 2016; Rios, 2011).

Because social, cultural, and educational processes are gendered and racialized, expectations and norms and the intersections of gender and race/ethnicity can contribute to distinct educational experiences for both boys and girls (Ferguson, 2000; E. W. Morris, 2007; M. W. Morris, 2016; Rios, 2011; Rodríguez, 2014). Expectations of educational failure and success, academic pursuits and attainments, area of educational interests such as math or science, "good" or "bad" school behavior, and experiences with school violence or misbehavior are all found to have distinct gender and racial/ethnic patterns (Ferguson, 2000; E. W. Morris, 2007; M. W. Morris, 2016; Rios, 2011; Rodríguez, 2014). Despite racial/ethnic minority girls' high educational aspirations, their likelihood of dropout is higher than that of White girls (Crenshaw et al., 2015; M. W. Morris, 2016; Rodríguez, 2014). Furthermore, when racial/ethnic minority girls leave school, they are not likely to return and complete school (Rodríguez, 2014; Rumberger, 2011; Stearns & Glennie, 2006). Racial/ethnic minority girls also report that their schools are unsafe and disorderly (Crenshaw et al., 2015; M. W. Morris, 2016; Peguero & Bondy, 2015). Prior research has also demonstrated that racial/ethnic minority boys are often perceived as "aggressive" and "problematic" who warrant

additional monitoring by teachers and administrators, which often result in increased formal sanctions (Ferguson, 2000; Portillos, González, & Peguero, 2012; Rios, 2011). Thus, racial/ethnic minority boys often report that their schools are unjust because they are under increased monitoring, surveillance, and scrutiny for their perceived behavior (Noguera, 2008; Portillos et al., 2012; Rios, 2011). However, White girls and boys are often regarded as non-threatening, studious, and well-mannered by teachers and administrators (Crenshaw et al., 2015; Ferguson, 2000; E. W. Morris, 2007; Noguera, 2008).

Additional Factors Associated With School Disorder and Dropping Out

Research points to a variety of other individual, family, and school factors that are related to the likelihood of dropping out. Students with increased educational achievement, involvement in academically related extracurricular activities, and positive peer relationships are less likely to leave school before graduating (Bradley & Renzulli, 2012; Kozol, 2005, 2012; Rumberger, 2011). On the contrary, student misbehavior, victimization, and low SES are significant risk factors for dropping out (Bradley & Renzulli, 2012; Peguero & Bracy, 2015; Stearns & Glennie, 2006). According to the National Center for Educational Statistics, the rate of school dropout of students with families in low SES was 5 times greater than their peers from high-income families (7.4% vs. 1.4%; Chapman, Laird, Ifill, & KewalRamani, 2011). For family characteristics, higher SES, two-parent/guardian structures, and increased involvement are argued to be protective factors against negative educational outcomes (Kozol, 2005, 2012; Rumberger, 2011; Stearns & Glennie, 2006). In general, schools whose student bodies have higher levels of poverty and larger families are more likely to drop out (Bradley & Renzulli, 2012; Kozol, 2005, 2012; Rios, 2011; Rumberger, 2011; Stearns & Glennie, 2006). It is apparent that students who attend urban and rural schools have increased risk of dropping out of school than students who attend suburban schools (Jordan, Kostandini, & Mykerezi, 2012; Peguero, Ovink, & Li, 2016).

The Current Study

A positive school climate as well as a healthy adolescent development is strongly linked to educational attainment. Adolescence is a period characterized as a time of opportunities as well as of vulnerability to risky behaviors, which can influence school performances and the likelihood of graduating. However, adolescent development is also shaped by multiple contexts, including the home, the classroom, the school, and the community (Chen,

2007; Cornell & Mayer, 2010; Kozol, 2005, 2012; Peguero & Bracy, 2015). It is plausible that multilevel contextual school factors linked to disorder may be influencing students' decision to stay with or drop out of school, and that relationship may differ by gender and race/ethnicity as well as inform this study's research questions.

Research Question 1: Are adolescents' perceptions of school disorder as well as school-level physical and social disorder linked to the likelihood of dropping out?
Research Question 2: Is the relationship between adolescents' perceptions of school disorder, school-level physical and social disorder, and dropping out moderated by gender and race/ethnicity?

Based on the aforementioned research, this study proposes the following four hypotheses:

Hypothesis 1: Adolescent's perception of school disorder will contribute to the increased likelihood of dropping out.
Hypothesis 2: Increased school-level physical and social disorder will contribute to the increased likelihood of dropping out.
Hypothesis 3: The detrimental effects of adolescent's perception of school disorder will have on her or his likelihood of dropping out will vary by gender and race/ethnicity.
Hypothesis 4: The detrimental effects of increased school-level physical and social disorder on the likelihood of dropping out will vary by gender and race/ethnicity.

Method

Data and Participants

Data for this research are drawn from the restricted-use Education Longitudinal Study of 2002 (ELS), a survey administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the U.S. Department of Education. ELS data also provide "mappings" to additional external data sets, such as the Common Core of Data (CCD). The CCD is the Department of Education's primary database on public elementary and secondary education in the United States. The CCD provides much of school-level data (e.g., proportion of Black/African Americans, Latina/o Americans, and Asian Americans within a school). ELS begins the survey in the 10th grade and continues to observe the progression into

postsecondary and/or the workforce in this national sample (Ingels et al., 2007). These data include information about the experiences and backgrounds of students, parents, and teachers, and a description of the schools the students attended. We focused on 12,030 public school students in the base year ELS sample. Due to attrition, 230 additional cases were excluded, causing the sample to drop to 11,800 cases. This sample includes students who identified as being Black/African American, Latina/o American, Asian American, Native American, multiracial American, and White American. ELS also include imputed values (via sequential hot deck imputation) for certain key variables, including family SES and achievement. We used these imputed values in analyses. For other missing data for variables not imputed by ELS, we utilized Stata 11's "mi" command to perform multiple-imputation analysis, including imputation, data management, and estimation. This imputation procedure provides five univariate and two multivariate imputation methods, and combines the estimation and pooling steps of the multiple-imputation procedure. We used the final subsample of 11,820 cases in 580 public schools.

Measures

Dependent Variable

The dependent variable in this study is having *dropped out of school* (dichotomized as 1 = yes and 0 = no). For the purposes of this study, dropping out (1 = yes) is indicated if a student was no longer enrolled in school by the third wave (i.e., second follow-up) of the study that occurred in 2006-2007, approximately 4 years after the first wave. NCES researchers constructed a variable defined as "ever dropout" in the third wave of the study, capturing whether a student has ever dropped out since the initial 10th grade survey. Using this wave of data as the follow-up year provides the most reliable information regarding whether a student "ever" dropped out of high school, because the first follow-up that occurred 2 years later may not have captured all students who may have eventually dropped out.

Independent Variables

We constructed a Perceptions of School Disorder Scale (ranging from 0-12, $\alpha = .69$), using responses from the student survey. Adolescents were asked about their perceptions of school disorder during the 2001-2002 academic year. Perception of school disorder is based on four Likert-type scale items (ranging from 0 = *strongly disagree* to 3 = *strongly agree*): (a) I don't feel

safe at this school, (b) disruptions by other students get in the way of my learning, (c) there are gangs in school, and (d) fights often occur between different racial/ethnic groups.

School's physical disorder was recoded by independent NCES researchers, based on 15 measures (e.g., graffiti on the walls/doors/ceilings, classroom broken lights, etc.; $\alpha = .83$).

The *school's level of social disorder* is measured using school administrators' responses to 19 questions that represent the amounts and types of social disorder within their schools (0 = *never happens*, 4 = *happens daily*). The School-Level Social Disorder Scale ($\alpha = .85$) measures include tardiness, absenteeism, class cutting, physical conflicts, robbery or theft, vandalism, use of alcohol, use of illegal drugs, students under the influence of drugs or alcohol while at school, the sale of drugs in the schoolyard, possession of weapons, racial/ethnic tensions, student bullying, gang activities, physical abuse of teachers, verbal abuse of teachers, students' acts of disrespect toward teachers, gang activities, and undesirable cult or extremist group activities.

Gender is coded male or female, based on the student's self-report of biological sex.

In ELS, individual-level *race/ethnicity* is measured as the adolescents' self-report regarding with which racial/ethnic group they identify. The public school sample included 1,780 Black/African Americans, 1,870 Latina/o Americans, 1,290 Asian Americans, 580 multiracial Americans, and 6,300 White Americans (reference group). To obtain a sufficient representation for the analyses, racial/ethnic minority groups were oversampled in ELS. Thus, the sample weights calculated by NCES are applied during the analysis to compensate for the sampling design and for nonresponse bias (Ingels et al., 2007).

As noted, the CCD provides the information for the *proportion of racial/ethnic minority* (i.e., Black/African Americans, Latina/o Americans, and Asian Americans) within a school separately.

Student educational achievement uses the standardized measure developed by RTI and NCES. ELS includes a reading and math composite score, based on standardized tests developed by the Educational Testing Service (ETS). For the students without both scores, the composite was based on the single available score, which is the average of the two standardized scores, restandardized to a national mean of 50.0 and standard deviation of 10 (Ingels et al., 2007).

Student involvement in academic activities ($\alpha = .91$) is a count index constructed by counting the number of affirmative responses to five activities adolescents could engage in: (a) band, orchestra, chorus, or choir; (b) school

play or musical; (c) student government; (d) academic- (or achievement) related honor society; and (5) school yearbook, newspaper, or literary magazine.

Positive peers (α = .85) measures adolescents' assessment of "among your close friends, how important is it to them that they" (a) attend classes regularly, (b) study, (c) get good grades, (d) finish high school, and (e) continue education past high school (0 = *not important*, 1 = *somewhat important*, and 2 = *very important*).

Adolescent *school misconduct* is a total sum index (α = .80) consisting of five items that measure frequency of a student's misconduct or reactions to misconduct during the school year (0 = *never*, 1 = *1-2 times*, 2 = *more than twice*): (a) cutting or skipping classes, (b) getting into a physical fight at school, (c) getting into trouble for not following school rules, (d) school suspension, and (e) suspension or probation. The range for student misconduct is from 0 to 10, with higher values representing greater levels of misconduct.

Adolescents were asked whether they had been victims of various forms of mistreatment at school. *School-based victimization* (α = .68) is a four-item count index that assesses whether or not the adolescent was victimized at school: (a) someone threatened to hurt me at school, (b) someone hit me, (c) someone used strong-arm or forceful methods to get money or things from me, and (d) someone bullied me.

Family SES is a preconstructed composite measure of family SES, as created by NCES. It is a standardized (*z* score) variable based on five equally weighted, standardized components: father's/guardian's education, mother's/guardian's education, family income, father's/guardian's occupational prestige, and mother's/guardian's occupational prestige. Parents' occupational prestige was derived from the General Social Survey (GSS) occupational prestige scores (Ingels et al., 2007).

Family structure is a dichotomous variable that measures whether two parents/guardians are present in the adolescent's household. A single-parent/guardian household serves as the reference group.

Family involvement is an eight-item index (α = .91) that measures how active the adolescents' parents/guardians are in their child's education. The items are (a) checking homework, (b) helping with homework, (c) discussing school courses, (d) discussing school activities, (e) discussing topics studied in class, (f) discussing grades, (g) discussing transferring, and (h) discussing college attendance. The count index ranges from 0 to 8, with higher scores indicating greater family involvement.

School poverty is measured by the proportion of students who receive free or reduce priced lunches.

School size is measured by total student enrollment.

A *school security* (α = .85) index is constructed by counting the number of times school administrators responded positively regarding school security measures: (a) control access to school buildings during school hours, (b) control access to school grounds during school hours, (c) require students to pass through metal detectors each day, (d) perform one or more random metal-detector checks on students, (e) close the campus for most students during lunch, (f) use one or more random dog sniffs to check for drugs, (g) perform one or more random sweeps for contraband, (h) require clear book bags or ban book bags on school grounds, (i) require students to wear badges or picture IDs, (j) require faculty and staff to wear badges or picture IDs, and (k) use one or more security cameras to monitor the school. The security count index ranges from 0 to 11 with higher scores indicating greater school security.

School location indicates school site: urban, rural, or suburban (reference category).

Data Analysis

ELS is a cluster sample in which schools are sampled with unequal probability. Students are then sampled or "nested" within these selected schools, with the result that the subsample of ELS violates the independence assumption. The nested structure of ELS (i.e., students within schools) makes multilevel modeling an appropriate analytic tool (Raudenbush, Bryk, & Congdon, 2008). Because dropping out is a dichotomous variable for this study, we use Hierarchical Generalized Linear Models (HGLM) to analyze the multilevel relationships between gender, race/ethnicity, school disorder, and dropping out of school. All Level 1 (student) and Level 2 (school) predictors have been centered on their group and grand means, allowing us to examine the probability of dropping out within each school.

The analyses proceed in several steps. Table 1 presents descriptive statistics for the study variables. In addition, because gender and race/ethnicity are central, Table 2 presents individual-level descriptive statistics by gender and race/ethnicity. Table 3 displays the HGLM results of the relationships and interactions among school disorder, race, ethnicity, and pertinent factors for the likelihood of females dropping out. In the baseline model of Table 3, dropping out is regressed on race/ethnicity, perceptions of school disorder, school-level proportion of racial/ethnic minorities, and school-level physical and social disorder. In Model 2 of Table 3, dropping out is regressed on race/ethnicity, school-level proportion of racial/ethnic minorities, and other individual and school characteristics. In Model 3, perceptions of school disorder and school-level physical and social disorder are added back to the analyses.

Table 1. Descriptive Statistics.

	Range	*M*	*SD*
Student-level variables			
Dropping out	0-1	0.13	0.33
Perceptions of school disorder	0-12	4.66	2.16
Female	0-1	0.51	0.50
Male	0-1	0.49	0.50
Black/African American	0-1	0.15	0.35
Latina/o American	0-1	0.16	0.36
Asian American	0-1	0.11	0.31
Native American	0-1	0.01	0.10
Multiracial American	0-1	0.05	0.21
White American	0-1	0.53	0.49
Educational achievement	21.56-79.85	49.48	9.92
Academic involvement	0-5	0.54	0.85
Positive peers	0-10	5.03	3.84
Misconduct	0-10	3.12	1.91
Victimization	0-4	0.65	0.96
Family SES	−2.11-1.98	−0.08	0.71
Family structure	0-1	0.75	0.43
Family involvement	0-8	5.03	2.79
School-level variables			
Physical disorder	0-15	1.22	1.70
Social disorder	0-19	12.84	1.68
% Black/African American	0-100	18.49	0.25
% Latina/o American	0-96	14.05	0.22
% Asian American	0-81	5.12	0.11
% White American	0-100	60.86	0.32
Poverty	0-100	24.93	18.63
Size	50-4,630	1,410	839.90
Security	0-11	3.58	2.33
Rural locale	0-1	0.22	0.42
Urban locale	0-1	0.28	0.45
Suburban locale	0-1	0.50	0.50

Note. SES = socioeconomic status.

To understand whether school disorder, especially among racial/ethnic minorities, is associated with dropping out, interactions between perceptions of school disorder, and race/ethnicity, as well as school-level physical and social disorder and school-level proportion of racial/ethnic minorities are

Table 2. Student-Level Descriptives by Gender, Race, and Ethnicity.

	Females						Males					
	Black/African American	Latina/o American	Asian American	Native American	Multiracial American	White American	Black/African American	Latina/o American	Asian American	Native American	Multiracial American	White American
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Dropping out	0.14 (0.34)*	0.16 (0.36)*	0.05 (0.22)	0.15 (0.36)*	0.14 (0.35)*	0.09 (0.28)	0.22 (0.41)*	0.21 (0.41)*	0.10 (0.30)	0.25 (0.43)*	0.19 (0.39)*	0.11 (0.31)
Perceptions of school disorder	4.82 (2.18)*	5.32 (2.22)*	5.06 (1.97)*	4.52 (2.01)	4.84 (2.14)*	4.27 (1.98)	4.95 (2.18)*	5.44 (2.19)*	5.31 (2.27)*	4.92 (2.08)	4.68 (2.18)*	4.26 (2.14)
Student characteristics												
Educational achievement	44.08 (8.06)*	44.57 (9.14)*	51.95 (10.04)	46.41 (7.25)*	49.35 (8.63)*	52.27 (8.88)	43.91 (8.33)*	44.21 (9.56)*	51.94 (10.51)	45.10 (7.79)*	49.71 (10.33)*	51.92 (9.65)
Academic involvement	0.60 (0.88)*	0.46 (0.80)*	0.65 (0.87)	0.51 (0.89)*	0.72 (1.01)	0.76 (0.91)	0.43 (0.84)	0.30 (0.72)*	0.44 (0.79)	0.31 (0.62)	0.43 (0.80)	0.41 (0.76)
Positive peers	4.96 (4.11)*	4.70 (4.01)*	5.83 (3.88)	4.70 (3.65)*	5.23 (3.63)*	5.93 (3.65)	3.45 (3.93)*	4.14 (3.82)*	5.12 (3.84)	3.16 (3.74)*	4.49 (3.65)	4.83 (3.66)
Misconduct	3.28 (1.94)*	3.37 (2.01)*	2.83 (1.56)	2.92 (1.63)	3.51 (2.03)*	2.80 (1.67)	3.52 (2.17)*	3.68 (2.19)*	3.11 (1.95)	3.32 (1.94)	3.56 (2.08)*	3.06 (1.90)
Victimization	0.54 (0.84)	0.46 (0.81)*	0.38 (0.76)*	0.57 (0.93)	0.75 (1.01)*	0.56 (0.89)	0.55 (0.87)*	0.70 (1.02)*	0.73 (1.03)	0.78 (1.04)	1.01(1.12)	0.84 (1.07)
Family characteristics												
SES	−0.28 (0.62)*	−0.49 (0.65)*	−0.04 (0.85)*	−0.24 (0.71)*	−0.05 (0.64)	0.06 (0.67)	−0.23 (0.64)*	−0.43 (0.65)*	−0.06 (0.84)*	−0.25 (0.59)*	0.01 (0.69)	0.08 (0.65)
Structure	0.50 (0.50)*	0.75 (0.43)*	0.84 (0.36)	0.55 (0.50)*	0.70 (0.46)*	0.80 (0.39)	0.54 (0.49)*	0.73 (0.44)*	0.82 (0.38)	0.69 (0.46)*	0.73 (0.44)*	0.81 (0.39)
Involvement	5.03 (2.95)*	4.76 (2.94)*	5.02 (2.65)*	5.25 (2.66)	5.14 (2.72)*	5.78 (2.25)	4.05 (3.25)*	4.02 (3.08)*	4.73 (2.84)	3.32 (3.11)*	4.63 (2.95)	5.03 (2.73)

Note. Significant differences are denoted with asterisks. Significance tests are based on chi-square tests (for dummy variables) and Welch's *t* tests (for continuous variables), and verified with nonparametric Wilcoxon–Mann–Whitney tests; statistically significant in Bonferroni tests compared with White Americans. SES = socioeconomic status.
*$p \leq .05$.

Table 3. Hierarchical Generalized Linear Model Effects (Standard Errors) and Odds Ratios for Female Dropping Out.

	Model 1		Model 2		Model 3		Model 4	
	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR
Within school								
Race and ethnicity								
Black/African American	0.156 (.276)	1.169	−0.425 (.291)†	0.653	−0.417 (.305)†	0.658	−0.998 (.451)*	0.352
Latina American	0.494 (.342)†	1.639	0.018 (.327)	1.018	0.018 (.326)	1.018	−0.468 (.464)	0.625
Asian American	0.268 (.395)	1.308	0.327 (.399)	1.387	0.322 (.397)	1.381	0.217 (.724)	1.242
Native American	0.669 (.986)	1.953	0.451 (.991)	1.571	0.500 (.992)	1.649	0.985 (.956)	3.340
Multiracial American	−0.296 (.330)	.743	−0.815 (.410)*	0.442	−0.816 (.408)*	0.441	−2.378 (1.044)*	0.092
Perceptions of school disorder	0.113 (.040)**	1.120	—	—	.047 (.040)	1.048	−0.005 (.057)	0.994
Black/African American	—	—	—	—	—	—	0.133 (.088)*	1.142
Latina American	—	—	—	—	—	—	0.104 (.084)†	1.109
Asian American	—	—	—	—	—	—	0.027 (.104)	1.027
Native American	—	—	—	—	—	—	−0.244 (.435)	0.782
Multiracial American	—	—	—	—	—	—	0.323 (.172)*	1.381
Student characteristics								
Educational achievement	—	—	−0.071 (.010)***	0.931	−0.069 (.010)***	0.932	−0.071 (.010)***	0.931
Academic involvement	—	—	−0.401 (.101)***	0.669	−0.405 (.100)***	0.666	−0.405 (.099)***	0.666
Positive peers	—	—	−0.049 (.023)*	0.951	−0.049 (.023)*	0.951	−0.051 (.023)*	0.949
Misconduct	—	—	0.276 (.035)***	1.318	0.277 (.035)***	1.319	0.278 (.036)***	1.321
Victimization	—	—	0.059 (.086)	1.061	0.034 (.088)	1.034	0.028 (.091)	1.029
Family characteristics								
SES	—	—	−0.413 (.140)**	0.661	−0.419 (.138)**	0.657	−0.427 (.137)**	0.651
Structure	—	—	−0.333 (.165)*	0.716	−0.337 (.165)*	0.713	−0.330 (.166)*	0.718
Involvement	—	—	0.009 (.030)	1.009	0.011 (.030)	1.011	0.012 (.031)	1.012

(continued)

Table 3. (continued)

	Model 1		Model 2		Model 3		Model 4	
	β (*SE*)	OR	β (*SE*)	OR	β(*SE*)	OR	β (*SE*)	OR
Between schools								
Race and ethnicity								
% Black/African American	0.939 (.248)***	2.557	0.518 (.331)†	1.678	0.322 (.383)	1.380	1.316 (.985)†	6.689
% Latina/o American	0.747 (.234)**	2.112	0.413 (.365)	1.512	0.264 (.358)	1.302	−2.803 (2.35)	0.060
% Asian American	−1.755 (.987)**	.063	−1.721 (.905)*	.178	−1.786 (.869)*	0.167	−2.611 (.987)†	0.001
Physical disorder	0.032 (.044)	1.032	—	—	0.060 (.047)	1.062	0.044 (.073)	1.045
Black/African American	—	—	—	—	—	—	−0.335 (.276)	0.715
Latina/o American	—	—	—	—	—	—	0.604 (.250)**	1.831
Asian American	—	—	—	—	—	—	0.514 (1.287)	1.672
Social disorder	0.021 (.038)	1.021	—	—	0.033 (.046)	1.034	0.025 (.062)	1.025
Black/African American	—	—	—	—	—	—	−0.154 (.110)	0.856
Latina/o American	—	—	—	—	—	—	0.231 (.191)	1.260
Asian American	—	—	—	—	—	—	1.214 (.903)†	3.370
School characteristics								
Poverty	—	—	.015 (.004)***	1.016	0.016 (.004)***	1.016	0.012 (.005)**	1.012
Size	—	—	−.001 (.001)	.998	−0.001 (.001)	0.997	−0.001 (.001)	0.998
Security	—	—	−.018 (.027)	.981	−0.012 (.028)	0.987	−0.015 (.028)	0.984
Urban locale	—	—	−.097 (.186)	.907	−0.124 (.179)	0.883	−0.151 (.184)	0.859
Rural locale	—	—	−.117 (.185)	.888	−0.114 (.186)	0.892	−0.106 (.191)	0.899
Intercept	−2.142 (.068)***		−2.605 (.076)		−2.612 (.076)***		−2.654 (.077)***	
Random effects	Variance	χ^2	Variance	χ^2	Variance	χ^2	Variance	χ^2
	.156*	626.746	.293**	658.539	.295**	655.018	0.30134**	653.020

Note. The omitted categories are White American females and single-parent/guardian family structures and suburban schools. OR = odds ratio; SES = socioeconomic status. †$p \leq .1$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

added to the analyses and presented in the final model (see Table 3). The relationships and interactions among school disorder, race/ethnicity, and pertinent factors for dropping out for males are presented in Table 4.

Results

Descriptive statistics for all variables are presented in Table 1. We found that 13% of the student in the sample dropped out. The average level of students' perception of school disorder was 4.66 on a 12-point scale. The average level of physical disorder, as indicated by independent NCES researchers, was 1.22 ($SD = 1.70$) on a 15-point scale. The average level of social disorder, as indicated by school administrators, was 12.84 ($SD = 1.68$) on a 19-point scale (see Table 1).

There are significant student differences for key student variables by gender and race/ethnicity. For females, Latina American ($M = 0.16$, $SD = 0.36$), Native American ($M = 0.15$, $SD = 0.36$), Black/African American ($M = 0.14$, $SD = 0.34$), and multiracial American ($M = 0.14$, $SD = 0.35$) female students are more likely to drop out of school than are White American ($M = 0.09$, $SD = 0.28$) females. Latina American ($M = 5.32$, $SD = 2.22$), Asian American ($M = 5.06$, $SD = 1.97$), multiracial American ($M = 4.84$, $SD = 2.14$), and Black/African American ($M = 4.82$, $SD = 2.18$) female students have relatively higher perceptions of disorder at their schools than do White American ($M = 4.27$, $SD = 1.98$) females.

Among males, Native American ($M = 0.25$, $SD = 0.43$), Black/African American ($M = 0.22$, $SD = 0.41$), Latino American ($M = 0.21$, $SD = 0.41$), and multiracial American ($M = 0.19$, $SD = 0.39$) male students are more likely to quit school than White American ($M = 0.11$, $SD = 0.31$) males. Latino American ($M = 5.44$, $SD = 2.19$), Asian American ($M = 5.31$, $SD = 2.27$), Black/African American ($M = 4.95$, $SD = 2.18$), and multiracial American ($M = 4.68$, $SD = 2.18$) males have relatively higher perceptions of disorder at their school than White American ($M = 4.27$, $SD = 1.98$) males.

In the baseline model of Table 3, female dropouts are regressed on race/ethnicity, perceptions of school disorder, school-level proportion of racial/ethnic minorities, and school-level physical and social disorder. As female students' perceptions of school disorder increase, the likelihood of dropping out also increases ($\beta = 0.113$, $p \leq .01$). At the school level, as the proportion of Black/African American ($\beta = 0.939$, $p \leq .001$) and Latina/o American ($\beta = 0.939$, $p \leq .001$) students increase within a school, the likelihood of female students dropping out also increases. However, as the proportion of Asian American ($\beta = -1.755$, $p \leq .01$) students increase within a school, the likelihood of female students dropping out also decreases.

Table 4. Hierarchical Generalized Linear Model Effects (Standard Errors) and Odds Ratios for Male Dropping Out.

	Model 5		Model 6		Model 7		Model 8	
	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR
Within school								
Race and ethnicity								
Black/African American	0.778 (.161)***	2.177	0.239 (.199)†	1.270	0.239 (.193) †	1.270	0.175 (.357)	1.192
Latino American	0.575 (.210)**	1.778	0.080 (.222)	1.083	0.064 (.221)	1.066	0.188 (.449)	1.207
Asian American	0.022 (.182)	1.023	0.083 (.197)	1.087	0.052 (.197)	1.053	−0.310 (.587)	0.733
Native American	1.507 (.540)**	4.515	1.317 (.567)*	3.733	1.292 (.543)**	3.641	−0.352 (.622)	0.703
Multiracial American	0.811 (.275)**	2.251	0.598 (.333)*	1.818	0.596 (.337)*	1.815	1.294 (.764)*	3.649
Perceptions of school disorder	0.148 (.031)***	1.160	—	—	0.081 (.033)**	1.084	0.081 (.043)*	1.084
Black/African American	—	—	—	—	—	—	0.008 (.061)	1.008
Latina American	—	—	—	—	—	—	−0.024 (.078)	0.976
Asian American	—	—	—	—	—	—	0.061 (.091)	1.062
Native American	—	—	—	—	—	—	−0.160 (.150)	0.851
Multiracial American	—	—	—	—	—	—	0.339 (.152)*	1.404
Student characteristics								
Educational achievement	—	—	−0.041 (.006)***	0.959	−0.040 (.006)***	0.960	−0.042 (.006)***	0.958
Academic involvement	—	—	−0.275 (.104)**	0.759	−0.271 (.098)**	0.762	−0.269 (.096)**	0.764
Positive peers	—	—	−0.026 (.023)	0.973	−0.023 (.023)	0.976	−0.025 (.023)	0.974
Misconduct	—	—	0.239 (.032)***	1.270	0.233 (.031)***	1.263	0.236 (.032)***	1.267
Victimization	—	—	−0.071 (.074)	0.931	−0.104 (.078)	0.900	−0.107 (.078)	0.897
Family characteristics								
Statuses	—	—	−0.421 (.095)***	0.656	−0.419 (.097)***	0.657	−0.430 (.097)***	0.650
Structure	—	—	−0.336 (.131)**	0.714	−0.338 (.133)**	0.712	−0.342 (.136)**	0.709
Involvement	—	—	−0.045 (.024)*	0.955	−0.047 (.024)*	0.954	−0.043 (.024)*	0.957

(continued)

Table 4. (continued)

	Model 5		Model 6		Model 7		Model 8	
	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR	β (*SE*)	OR
Between schools								
Race and ethnicity								
% Black/African American	1.686 (.441)***	5.402	0.840 (.425)*	2.318	0.904 (.418)*	2.470	1.618 (.266)*	3.607
% Latina/o American	0.913 (.265)***	2.492	0.036 (.500)	1.037	0.070 (.535)	1.072	−1.996 (.998)	0.135
% Asian American	−0.342 (.731)	.710	−0.709 (.826)	0.491	−0.677 (.789)	0.507	−2.307 (.998)	0.099
Physical disorder	−0.017 (.040)	.983	—	—	−0.020 (.039)	0.979	−0.073 (.056)	0.928
% Black/African American	—	—	—	—	—	—	−0.335 (.278)	0.715
% Latina/o American	—	—	—	—	—	—	0.412 (.228)*	1.510
% Asian American	—	—	—	—	—	—	1.525 (.956)**	12.495
Social disorder	0.054 (.052)	1.055	—	—	0.062 (.052)†	1.065	0.158 (.058)**	1.171
% Black/African American	—	—	—	—	—	—	−0.511 (.151)	0.599
% Latina/o American	—	—	—	—	—	—	0.175 (.195)	1.192
% Asian American	—	—	—	—	—	—	0.073 (.459)	1.076
School characteristics								
Poverty	—	—	0.015 (.006)**	1.015	0.015 (.006)*	1.015	0.008 (.006)†	1.008
Size	—	—	0.001 (.001)**	1.002	0.001 (.001)†	1.001	0.001 (.001)	1.001
Security	—	—	−0.010 (.027)	.989	−0.010 (.027)	0.989	−0.019 (.026)	0.980
Urban locale	—	—	0.198 (.188)†	1.219	0.239 (.185)†	1.270	0.214 (.166)†	1.238
Rural locale	—	—	−0.117 (.190)	.889	−0.086 (.192)	0.917	0.011 (.184)	1.011
Intercept	−1.861 (.058)***		−2.048 (.055)***		−2.051 (.056)***		−2.083 (.057)***	
Random effects	Variance	χ^2	Variance	χ^2	Variance	χ^2	Variance	χ^2
	.271***	752.394	.349***	794.742	.340***	783.394	.29154***	743.244

Note. The omitted categories are White American males and single-parent/guardian family structures; and, suburban schools. OR = odds ratio; SES = socioeconomic status. †$p \leq .1$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

In Model 2 of Table 3, female dropping out is regressed on race/ethnicity, school-level proportion of racial/ethnic minorities, and other individual and school characteristics. At this stage of analysis for female student race/ethnicity, multiracial American ($\beta = -0.815$, $p \leq .05$) females are less likely to leave school early. At the school level, as the proportion of Asian American ($\beta = -1.721$, $p \leq .05$) students increase within a school, the likelihood of female students dropping out also decreases. Regarding female student characteristics, females with increased educational achievement ($\beta = -0.071$, $p \leq .001$), academic involvement ($\beta = -0.401$, $p \leq .001$), and who report having positive peer relationships ($\beta = -0.049$, $p \leq .05$) are less likely to drop out. Females who engage in school misconduct, however, are more likely to drop out ($\beta = 0.276$, $p \leq .001$). For family characteristics, female students within families with higher SES ($\beta = -0.413$, $p \leq .01$) and those who come from two-parent/guardian family structures ($\beta = -0.333$, $p \leq .05$) are less likely to leave school before graduating. For school characteristics, as the proportion of students who receive free or reduced lunch increase within a school ($\beta = 0.015$, $p \leq .001$), the likelihood of female students dropping out also increases. In general, these student, family, and school control characteristics remain consistent throughout the analysis.

In Model 3, perceptions of school disorder and school-level physical and social disorder are added back to the analyses. At this stage, regarding race/ethnicity of female student, multiracial Americans ($\beta = -0.816$, $p \leq .05$) are less likely to drop out. At the school level, as the proportion of Asian American ($\beta = -1.786$, $p \leq .05$) students increases, the likelihood of female students dropping out also drops.

To understand whether school disorder, especially among racial/ethnic minorities, is a factor affecting females dropping out, interactions between perceptions of school disorder, race, and ethnicity, as well as school-level physical and social disorder and school-level proportion of racial/ethnic minorities are added to the analyses (see the final Model 4 of Table 3). At this stage, regarding female student race/ethnicity, Black/African American ($\beta = -0.998$, $p \leq .05$) and multiracial American ($\beta = -2.378$, $p \leq .05$) girls are less likely to leave school early. As for the interaction between perceptions of school disorder, race/ethnicity, and the likelihood of female dropping out, as Black/African American ($\beta = 0.133$, $p \leq .05$) and multiracial American ($\beta = 0.323$, $p \leq .05$) female students' perceptions of school disorder increase, the likelihood of their dropping out also increases. As for the interaction between school physical disorder, proportion of racial/ethnic minorities, and the likelihood of females dropping out, as school physical disorder and the proportion of Latina/o American ($\beta = 0.604$, $p \leq .01$) increase, dropout likelihood also increases. As for the interaction between school social disorder, proportion of

racial/ethnic minorities, and the likelihood of female dropping out, as school physical disorder increases, the likelihood of female students dropping out also increases.

In the baseline Model 5 of Table 4, male dropping out is regressed on race/ethnicity, perceptions of school disorder, school-level proportion of racial/ethnic minorities, and school-level physical and social disorder. At this stage, regarding male student race/ethnicity, Black/African American ($\beta = 0.778$, $p \leq .001$), Latino American ($\beta = 0.575$, $p \leq .01$), Native American ($\beta = 1.507$, $p \leq .01$), and multiracial American ($\beta = 0.811$, $p \leq .01$) students are more likely to drop out. Results also indicate that, as male student perceptions of school disorder increase, the dropout likelihood also increases ($\beta = 0.148$, $p \leq .001$). At the school level, as the proportion of Black/African American ($\beta = 1.686$, $p \leq .001$) and Latina/o American ($\beta = 0.913$, $p \leq .001$) students increases school, the likelihood of male students dropping out also increases.

In Model 6 of Table 4, male dropping out is regressed on race/ethnicity, school-level proportion of racial/ethnic minorities, and other individual and school characteristics. Looking at male student race/ethnicity, Native American ($\beta = 1.317$, $p \leq .05$) and multiracial American ($\beta = 0.598$, $p \leq .05$) boys are more likely to drop out. At the school level, as the proportion of Black/African American ($\beta = 0.840$, $p \leq .05$) students increases, the likelihood of dropping out also increases. Males with higher educational achievement ($\beta = -0.041$, $p \leq .001$) and academic involvement ($\beta = -0.275$, $p \leq .01$) are less likely to leave high school early. Males who act up in school, however, are more likely to drop out ($\beta = 0.239$, $p \leq .001$). Male students whose families have attained higher SES ($\beta = -0.421$, $p \leq .001$), with two-parent/guardian families structures ($\beta = -0.336$, $p \leq .01$), and whose families have higher levels of school involvement ($\beta = -0.045$, $p \leq .05$) are less likely to quit early. As the proportion of male students who receive free or reduced lunches increases ($\beta = 0.015$, $p \leq .01$) and school enrollment increases ($\beta = 0.001$, $p \leq .01$), the likelihood of their dropping out also increases. In general, these student, family, and school control characteristics remain consistent throughout the analysis.

In Model 7, perceptions of school disorder and school-level physical and social disorder are added back to the analyses. For male student race/ethnicity, Native American ($\beta = 1.292$, $p \leq .01$) and multiracial American ($\beta = 0.596$, $p \leq .05$) boys are more likely to drop out. Results also find that, as male students' perception of school disorder increases, so does the likelihood of dropping out ($\beta = 0.081$, $p \leq .01$). As the proportion of Black/African American ($\beta = 0.904$, $p \leq .05$) males increases, the dropout likelihood also increases.

To understand whether school disorder, especially among racial/ethnic minorities, is a factor affecting male dropout rates, interactions between perceptions of school disorder, and race/ethnicity as well as school-level physical and social disorder and school-level proportion of racial/ethnic minorities are added to the analyses (see the final Model 4 of Table 3). Multiracial American ($\beta = 1.294$, $p \leq .05$) males are less likely to drop out. As for the interaction between perceptions of school disorder, race/ethnicity, and the likelihood of males dropping out, the main effect of perceptions of school disorder ($\beta = 0.081$, $p \leq .05$) remains significantly related to male school dropout. Our analysis shows that perceptions of school disorder leads to greater levels of dropping out among all male racial/ethnic groups. As for the interaction between school physical disorder, proportion of racial/ethnic minorities, and the likelihood of male dropping out, as school physical disorder and the proportion of Latina/o American ($\beta = 0.412$, $p \leq .05$) and Asian American ($\beta = 1.525$, $p \leq .01$) increase, so does the likelihood of dropping out. As for the interaction between school social disorder, proportion of racial/ethnic minorities, and the likelihood of male dropping out, the main effect of social disorder ($\beta = 0.158$, $p \leq .01$) remains significantly related to the increased likelihood of dropping out.

Discussion

The current study is consistent with the school climate perspective in that it emphasizes the importance of shared beliefs, values, and attitudes that shape school interactions and have implications for adolescent development and the educational process (Chen, 2007; Koth et al., 2008; Peguero & Bracy, 2015). This study builds on research on the antecedents of school dropout, which is crucial, given that school dropout is linked to negative developmental outcomes, such as adverse psychological well-being, lower earning potential, reliance on public welfare, and involvement in the juvenile and criminal justice system in late adolescence and later (Chen, 2007; Koth et al., 2008; Peguero & Bracy, 2015). This study aimed to address whether adolescents' perceptions of school disorder as well as actual school-level physical and social disorder increased the likelihood of dropping out. The results suggest that both perceptions and reality of school disorder may contribute to the likelihood of dropping out of school. Our results confirm a recent study by Peguero and Bracy (2015) that found adolescent perceptions of school disorder as well as school-level disorder are aspects of a detrimental school environment and can contribute to the likelihood of dropping out of school. In this aforementioned study, however, they did not explore the gender and racial/ethnic disparities that could be evident in the relationship between school

disorder and dropping out. Therefore, this study extended their analysis by investigating whether the school disorder and dropout association vary by gender and race/ethnicity.

Second, we examined whether the relationship between adolescents' perceptions of school disorder, school-level physical and social disorder, and dropping out is moderated by gender and race/ethnicity. We found that gender and racial/ethnic disparities are associated with the relationship between school disorder and dropping out. Scholars have noted the ways in which adolescents construct their identities in response to social stereotypes in school to explain the intersection of the gender and racial/ethnic educational achievement gap (Jethwani, 2015; Way, Hernandez, Rogers, & Hughes, 2013). During adolescence, social feedback from peers, parents, teachers, and schools can play a role in the construction of the self. For example, boys are often viewed as deficient in terms of school behavior and academic achievement relative to girls (Glasser, 2012; Jethwani, 2015). This social feedback often rewards and discourages different behaviors for girls and boys. As adolescents' cognitive abilities develop, they become more sensitive to the gendered cultural expectations that are valued in different contexts (Glasser, 2012). Within schools, boundaries are constructed that define which behaviors, characteristics, or expectations reify as appropriate for boys and girls.

The extent to which boys and girls experience differential treatment in school is complicated by the intersection of gender and race. Schools shape the educational outcomes of youth and influence racial/ethnic gaps in achievement. Opportunities to learn are inequitably distributed across racial/ethnic groups and that African Americans and Latina/o Americans are systematically disadvantaged by these disparities. Moreover, African Americans and Latino Americans are more likely to find themselves in isolated schools with inadequate resources, particularly less rigorous courses and lower quality teachers (Crenshaw et al., 2015; Kozol, 2005, 2012; Noguera, 2008). Our findings suggest that the intersection of gender and race/ethnicity in schools influences gender-specific as well as race/ethnic-specific perceptions of schooling and teacher–student relationships and the effects on educational progress. In addition, these perceptions shape students' attitude toward education and consequently may affect whether they will drop out of school.

Limitations

There are limitations that need to be noted, which primarily relate to the available data in the ELS. The measures of variables, such as perceptions of school disorder, school-level physical disorder, and victimization were derived exclusively from students' reports. Likewise, school-level social disorder and

school security were measured using school administrators' responses, which might have introduced unmeasured biases. Moreover, the low reliability of the school disorder scale used is another limitation. Furthermore, students' educational achievement was measured by reading and math composite scores on standardized tests, rather than other relevant measures (e.g., grades). And finally, because many of the study variables were only available in the first wave, we were unable to make stronger causal inferences or to investigate developmental trajectories that may lead to school dropout.

Implications and Future Research

Findings from this study have major research implications. First, school climate, particularly social and physical disorder, matters toward racial/ethnic minority students' educational progress. Research suggests that school disorder is often interpreted by students as symbols of the "devalued" aspect on education and their own school success or pursuits, especially racial/ethnic minority students (Crenshaw et al., 2015; Durán, 2013; Kozol, 2005, 2012; Rios, 2011), which should be considered in future research.

Second, community factors, such as neighborhood violence and disorder could undermine adolescent development and contribute to negative behavioral and educational outcomes, particularly for racial/ethnic minority adolescents (Durán, 2013; Kozol, 2005, 2012; Rendón, 2014; Rios, 2011). For instance, Rendón (2014) found that urban violence has a profound impact on racial/ethnic minority boys, especially regarding their educational progress and success. "youth get 'caught up' having to fulfill a set of expectations (hanging out) and obligations (backing up) with these peers that ultimately prove to be counterproductive to school completion" (Rendón, 2014, p. 76). Resilience is critical for adolescent development (Fergus & Zimmerman, 2005); it is also imperative that researchers identify protective mechanisms, such as social supports from families, friends, peers, and teachers, and whether they might amplify the relationship between school disorder and school dropout.

Third, there are increasing social, educational, and policy concerns regarding "school-to-prison pipeline," a trend wherein students are being funneled out of public school system and into the juvenile and criminal justice systems (Crenshaw et al., 2015; Durán, 2013; M. W. Morris, 2016; Rios, 2011). Although most of the emerging research about the school-to-prison pipeline has focused on arrests within schools, there may be other safety policies unintentionally funneling students out of the educational system. Some researchers have denoted that school surveillance and security practices may be conditioning youth to interpret surveillance, law enforcement presence, and juvenile and criminal justice system interventions as a "normal" part of the

school environment or experience (Crenshaw et al., 2015; Durán, 2013; M. W. Morris, 2016; Rios, 2011). Although much of the research has highlighted the associated risk for racial/ethnic minority boys, Crenshaw and colleagues (2015) provided evidence of the disproportionate discipline that Black/African American and Latina American girls are receiving.

These concerns about the school discipline of students of color are founded in prior research that demonstrates that students who are disciplined in schools are often placed on path toward school disengagement, social isolation and exclusion, as well as educational failure. Although many have argued that school climates have shifted from one of learning environment to one of a prison due to high levels of social control, security measures, and presence of law enforcement (Crenshaw et al., 2015; M. W. Morris, 2016; Peguero & Bracy, 2015; Rios, 2011), future research should consider how school social and physical disorder may also contribute to the school-to-prison pipeline. In summary, findings from the current study provide avenues for future research that can contribute to knowledge on gender and racial/ethnic differences in school dropout, which can have implications for practitioners in enhancing adolescent development.

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