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School Culture, Racial Composition, and Preventing Violence: Evaluating Punitive and Supportive Responses to Improving Safety

Charles Crawford ^{1,*} and Ronald Burns ²¹ Department of Sociology, Western Michigan University, Kalamazoo, MI 49008, USA² Department of Criminal Justice, Texas Christian University, Fort Worth, TX 76129, USA; r.burns@tcu.edu

* Correspondence: charles.crawford@wmich.edu

Abstract: Research on the impact of school climate and culture on campus violence has yielded some promising responses for improving school safety. Evaluations of school policies and practices have shown that strict discipline and enforcement may have negative consequences and a disparate impact on students of color. Using a sample of 2092 respondents from the 2015–2016 School Survey on Crime and Safety from the Department of Education, the present research assessed the effectiveness of supportive programs and the impact of punitive responses to school violence within predominantly minority schools. Results from this study found that there were more statistically significant supportive policies that were associated with reductions in serious violence and disciplinary actions in predominately minority schools as compared to predominately white schools. Policy and research implications are discussed.

Keywords: school safety; school violence; race and school policy; supportive vs. punitive; school culture and climate



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1. Introduction

Each school is unique in many ways. They differ in terms of their culture or climate, methods of instruction, location, demographics, level of student engagement, and safety, among other factors. Such differences encourage various avenues of research, with the primary goal of understanding what factors best promote student learning and well-being. The present study adds to the growing body of literature through assessing the extent to which various security-related approaches work in schools with different demographics.

School safety is of notable concern to many parents, teachers, school administrators, and students. The negative effects of students feeling unsafe at school include students avoiding school, feeling a decreased sense of belonging at school, and having limited relationships with teachers (Williams et al. 2018). Several high-profile shootings beginning around the turn of the century have generated much attention toward providing safe school environments, as do the many less serious yet also important daily incidents that decrease school safety. Mass shootings at various levels of schools in the United States, including those at Robb Elementary School in 2022, Sandy Hook Elementary School in 2012, Marjory Stoneman Douglas High School in 2018, and Virginia Polytechnic Institute and State University in 2007, for example, have demonstrated that students at all levels of education are susceptible to serious harm. The various levels of safety in schools warrant consideration of the characteristics and practices of safe schools in relation to less-safe schools.

Determining what approaches work best in different schools is necessary for student safety. School culture is important with regard to effective school functioning and of particular significance with regard to school safety (Crawford and Burns 2020). School officials, teachers, and students significantly impact school culture and more specifically

school safety; for instance, administrators may seek to promote a more punitive approach to misconduct, or they may wish to create a more supportive environment. Arguably, a combination of both approaches works best, although determining how much to emphasize one over the other is debatable and influenced by many factors.

Existing research has highlighted the extent to which student demographics are related to differences in levels of school violence and perceptions of safety on campus. Minoritized students' experiences with school violence, perceptions of safety, and discipline vary widely and interact in complex ways with race, ethnicity, school composition, and immigration generation. For example, [Peguero \(2009\)](#) found that first-generation Latino and Asian American youth attended schools they feel to be unsafe, and third-generation Latino and first- and second-generation Asian American students were at higher risk of victimization. Additionally, [Lacoe \(2015\)](#) found that after controlling for relevant school characteristics such as location and climate, Black students reported feeling less safe at school. Furthermore, these works suggest that there are indeed differences in the responses to violence and discipline on campus. For instance, schools with larger proportions of minority students are likelier to employ punitive practices compared to their counterparts ([Welch 2018](#)). Students may perceive the fairness of these disparate discipline practices differently by race, which has been correlated with achievement gaps and feelings of safety for minority students ([Skiba et al. 2002](#)). Furthermore, even when controlling for school context and demographics, in schools with greater discipline gaps and risks between Black and white students, Black students generally maintain less favorable perceptions of fair treatment by adults at schools, which was associated with increased adjustment problems ([Bottiani et al. 2017](#)). The disproportionality generally affects the perceptions of connectedness to adults for all students ([Anyon et al. 2016](#)).

The present work adds to this important and expanding body of literature through considering the relationships between supportive approaches and punitive approaches with regard to school violence and disciplinary actions. This research focuses on public schools in the United States, including primary, middle, high, and combined schools, and expands on previous works through considering the effectiveness of these approaches as they apply to schools with predominantly minority or non-minority (white) students (e.g., [Crawford and Burns 2016](#); [Homer and Fisher 2020](#)). There are many groups that may be viewed as being minoritized in American society and in schools (e.g., LGBTQ students, differently abled students, etc.). In the context of the current study, the term minority refers to racial and ethnic minorities or students of color. Among other contributions, identifying the approaches that work best with varied student populations helps school administrators consider approaches that may be most effective with regard to their student bodies and contributes toward ensuring that students from different demographic backgrounds are treated equally.

2. Literature Review

Rates of school violence and disciplinary actions have decreased steadily in the past three decades. For instance, the total victimization rate in schools decreased about 80 percent from 1992 to 2018, going from 181 to 33 victimizations per 1000 students ([Wang et al. 2020](#)). These numbers reflect, in part, the overall decreased rate of juvenile victimization in society at large witnessed since the 1990s. Nevertheless, parents, teachers, students, school administrators, and others worry about school safety, and understandably so. Schools are expected to be safe places, where students are expected to grow and learn in harm-free environments.

Despite the recent decreases in victimizations, school safety remains a concern given the levels of harm and disorder that regularly occur at school. These issues are particularly problematic at some schools, leading some school districts to create their own police department. Decreased levels of victimization offer hope and promise for the establishment of safe learning environments for all students; however, a report from the U.S. Department of Education (DOE) highlights that not all schools are safe, and much work remains in

determining how to best protect students. The DOE regularly sponsors the *Indicators of School Crime and Safety* report, which assesses school safety and safety-focused responses to disorder. Among the key findings from the 2019 report were (Wang et al. 2020):

- Physical conflicts among students and bullying were the two most commonly reported school problems.
- There were 66 reported school shootings in school year 2018–2019.
- The victimization rate for students ages 12–18 was 33 per 1000 students at school (836,100 total victimizations), compared to 16 victimizations per 1000 students away from school.
- Eighty percent of public schools recorded one or more crimes, amounting to 1.4 million incidents.

These and other findings in the report highlight that schools may be safer, but they are not necessarily safe. They are certainly not as safe as they could be. A growing body of research has focused on the factors that influence school violence and disorder, including works that consider supportive approaches designed to enhance a school's culture (e.g., through the use of student support groups) and those that focus on a more punitive approach (e.g., through the more frequent use of suspensions from school).

2.1. Supportive and Punitive Approaches

School climate encompasses physical, emotional, social, and intellectual safety (Ruiz et al. 2018). Supportive school approaches place a greater emphasis on the latter three forms of safety compared to punitive approaches. Schools vary in their approach to providing supportive services to students. However, the general idea behind such efforts is to provide enhanced opportunities for students to feel comfortable, be safe, and have resources at their quick disposal to address concerns they may have.

Support services help create safer environments that are more conducive to learning and general well-being. Research in the area suggests that a weak sense of belonging is among the strongest predictors of students' fear of school violence (Akiba 2010), and levels of school violence are lower in schools in which the majority of students feel that school is important (Crawford and Burns 2015). Students feeling a sense of school belonging demonstrate higher levels of academic competence and efficacy and lower levels of academic skepticism (Morris et al. 2020). Further, students who feel they lack support from teachers and classmates more often experience maladjustment at school (Demaray and Malecki 2002), and a lack of school bonding is positively related to delinquency (Liljeberg et al. 2011). The importance of school climate is not restricted to student levels of comfort, as it can also contribute to higher levels of academic outcomes (DiPietro et al. 2015).

Support services for students exist in many forms, including various acceptance groups. These groups assist students by providing resources for them to address issues pertaining to acceptance by other students, or the challenges associated with being in often-marginalized groups. For instance, Gay–Straight Alliances (GSAs) and related support groups assist LGBTQ students by providing a network of friends and resources (Greytak et al. 2013), which is particularly important given that these students are more likely than others to be harassed and bullied (e.g., White et al. 2018). Such support groups generally provide more positive school outcomes for LGBTQ students (Kosciw et al. 2013).

Disability support groups assist a different group of students who are also at a greater risk of victimization, as students with disabilities are roughly twice as likely as their counterparts to be bullied (e.g., Malecki et al. 2020). School administrators also offer support services in schools with racial inequality and tension, which is particularly important given that these characteristics appear to be positively related to school crime (e.g., Crawford and Burns 2015; Jennings et al. 2011; Maume et al. 2010). Not all schools provide such support services. For instance, only 28% of schools in the current data set offered LGBTQ acceptance groups, 34% provided support services to address racial tension, and 38% provided support groups for students with disabilities.

Other efforts to provide a supportive school environment include the existence of peer-mediation programs and parental involvement. Peer-mediation programs provide a less threatening alternative to conflict resolution, which historically has involved a school authority figure (e.g., an assistant principle) imposing discipline. It is a cost-effective, seemingly useful process that often leaves participants feeling satisfied and respected. Peer mediators listen to complaints, ask questions, and offer suggestions in resolving conflict. Those involved in the mediation often feel more comfortable speaking to peers as opposed to school officials, and the safe, supportive environment is conducive to conflict resolution (Angaran and Beckwith 1999). Generally, support systems in school may be particularly important for minority students (Demaray et al. 2005), for instance, as the relationships between African American students and their teachers assist greatly with positive school adjustment (McKown and Weinstein 2002). Research suggests that the involvement of parents in schools is related to lower levels of delinquency, and may offer a preventive measure that relies less on strict punishments (e.g., Bower 2020).

Schools that take a more punitive approach to student misconduct generally adopt the approach that discipline, including strict discipline, is most effective. The use of suspensions (both within- and out-of-school), transfers to other schools, and zero-tolerance policies are characteristics of schools that seek to instill discipline in students. Schools across the United States and elsewhere have generally become increasingly punitive in response to several high-profile incidents (e.g., school shootings) that have led to questions regarding the safety of students on school grounds. The general idea behind these school-based “get tough” approaches is that physically removing misbehaving students or deterring them through punishment helps protect others.

More punitive approaches to controlling student behavior have become increasingly popular since the 1990s, as more schools have implemented zero-tolerance approaches, emphasized crime prevention and law-enforcement-based practices, and relied more on suspensions and expulsions to address problematic behavior (e.g., Dunbar et al. 2019). These more punitive approaches have disproportionately impacted students and youth of color (e.g., Fabelo et al. 2011; Skiba et al. 2014). Gage et al. (2021) examined data from the U.S. Department of Education’s Civil Rights Office and found that Latinx students with and without disabilities were significantly more likely to receive exclusionary discipline as compared to white students but less likely than Black students. The implications for getting tough on problematic student behavior are both short-term and long-term.

Researchers have examined the complex interaction of race, discipline, and academic achievement and found different results for Black and Latinx students. Pearman et al. (2019) found there was a discipline gap between Hispanic and white students, and Black and white students, which was correlated with the achievement gap. However, once community-level variables such as segregation and poverty were introduced, the achievement gap between Hispanic and white was statistically insignificant, but it remained for Black and white. This finding is further supported by Morris and Perry (2016), who found that school suspensions explained roughly one-fifth of the differences between Black and white students, and noted that “school punishment hinders academic growth and contributes to racial disparities in achievement” (p. 68).

Both in- and out-of-school suspensions seek to address problematic student behavior through physically removing the misbehaving student. They are among the most punitive approaches taken by school officials, along with removals from school without services for the remainder of the school year, and transfers to other school. In 2017–2018, 35% of public schools (roughly 28,700 schools) imposed at least one out-of-school suspension, removal, or transfer to a specialized school for problematic students. Roughly 291,000 serious disciplinary actions were taken during this period, most often in response to physical attacks or fights (Wang et al. 2020). Nationally, students in 2015–2016 missed over 11 million days of instruction in schools due to out-of-school suspensions, with Black students facing higher rates of suspension than others (Losen and Whitaker 2018).

Zero-tolerance and related policies have increasingly become incorporated in school policies and practices, as school administrators seek means to create safer school environments. Such practices became more common beginning in the 1990s and contributed to increased levels of student suspensions and expulsions (e.g., Wald and Losen 2003). There are costs associated with more punitive approaches to school safety, including the use of suspensions. For instance, strict discipline through the use of suspensions removes the problematic student, but it appears to be related to negative outcomes for the student. Among the harmful consequences associated with out-of-school suspensions are increased risks of academic failure and school disengagement (e.g., Arcia 2006; Noltemeyer et al. 2015), dropping out of school (e.g., Rosenbaum 2018), and involvement in the justice systems (Rosenbaum 2018).

The use of alternative schools is another means to address school disorder, primarily through removing disruptive and dangerous students. These schools propose to provide alternative learning environments for students struggling in conventional schools, ensure safety at conventional schools, and address juvenile delinquency. Limited research, however, suggests that these schools have met their objectives (Vanderhaar et al. 2014).

2.2. Other Considerations

Levels of school violence and general disorder are not solely influenced by supportive and punitive approaches. Other factors, such as school context and law-enforcement-based/crime prevention approaches, also impact safety in schools. Schools have increasingly adopted various crime prevention and law enforcement approaches in response to concerns about school violence and disorder. Primary among these efforts are the use of school resources officers (SROs), threat-assessment teams, metal detectors, and cameras (e.g., Crawford and Burns 2015; Jennings et al. 2011). The increased use of SROs (Justice Policy Institute 2011), for instance, occurred in response to increased federal funding for greater security in schools in light of concerns about victimization in schools and increased rates of delinquency in the 1980s (Na and Gottfredson 2013).

Although law enforcement and crime prevention approaches have become increasingly popular, results from evaluations of these approaches are generally inconsistent (e.g., Tanner-Smith et al. 2018). For instance, research suggests that SROs and other forms of crime prevention and enforcement actions can assist with bullying, racial tensions, gang problems, and student disrespect (Jennings et al. 2011). In addition, uniformed SROs and security personnel may also contribute to decreased levels of school suspension and violence in schools (Jennings et al. 2011). Other studies, however, have found that SROs and other forms of school security personnel have limited or counterproductive effects on student safety. Security personnel may be ineffective in reducing student victimization (e.g., Burrow and Apel 2008; Schreck et al. 2003; Tillyer et al. 2011), and students may be at greater risk of theft in schools with security personnel (Burrow and Apel 2008) and have poorer relationships with teachers (Fisher et al. 2019). Homer and Fisher (2020) noted a positive relationship between police presence in schools and arrest rates, with Black students and males being notably influenced.

Crosse et al. (2022) suggest that Critical Race Theory may offer insight into the racialized nature of SRO presence and arrests. SROs may perceive and interpret students of color's behaviors as more problematic and needing a formal response as compared to white students, which may in turn give the appearance of a more serious crime problem among minoritized students within the school. Research suggests that strict enforcement practices such as zero-tolerance policies, the increased use of law enforcement personnel, and the implementation of policies requiring the mandatory reporting of problematic behavior are related to increased levels of criminalization of students, especially racial and ethnic minorities (e.g., Alexander 2012; Monahan and Torres 2010).

Schools are not isolated from the communities in which they exist, and as such are not immune to the larger problems faced in some communities. For instance, schools located in high crime areas generally experience higher rates of violence and disorder (e.g., Augustine

et al. 2002; Chen 2008; Crawford and Burns 2015; George and Thomas 2000; Jennings et al. 2011; O'Neill and McGloin 2007; Robers et al. 2013). School context also includes racial and ethnic tensions and the frequency of bullying (as well as other harmful characteristics) that, when present, result in schools facing higher levels of violence and general disorder (e.g., Crawford and Burns 2015; Jennings et al. 2011; Maume et al. 2010). As noted throughout this review and the research literature in general, school violence and discipline are related in various ways to student demographics.

2.3. Student Demographics

The racial and ethnic composition of schools is seemingly also related to school safety and the associated reactions. Of particular interest to the current study are the levels of violence and general disorder in schools in which the student body is predominantly minority in relation to schools that are predominantly white. For example, Thibodeaux (2013) found that while being in a mostly same-race high school predicted students' feelings of safety, this correlation was dependent on the student race, with Hispanic and Black students reporting feeling less safe in a same-race school. According to the author, this suggests a complex interaction of community context and stereotypes applied to place. Student demographics are significant in the sense that schools with higher levels of racial and ethnic homogeneity generally have lower rates of student victimization (e.g., Felix and You 2011), minority students face higher rates of discipline in schools (Townsend 2000), Black students feel less safe than white and Asian students at school (Lacoe 2015), and African American and Hispanic students are suspended and expelled at a higher rate than white students (Cruz and Rodl 2018; Shirley and Cornwell 2011; United States Department of Education 2010; Pesta 2018; Vanderhaar et al. 2014; Welsh and Little 2018). African American students are also more likely to be placed in alternative schools (Vanderhaar et al. 2014).

Much of the existing research regarding school violence and minoritized groups focuses on African Americans. Evidence suggests, however, that other minoritized groups certainly face differential treatment in schools. For instance, Peguero et al. (2016) noted that enhanced school punishments contribute to Hispanic students dropping out of school, although improvements to school fairness and justice could reduce the likelihood of them leaving school. Relatedly, schools with higher percentages of Latinx students were more likely to favor certain punitive responses (out-of-school suspension) and less likely to favor particular mild responses such as the loss of privileges and probation (Welch and Payne 2018). Further, it is argued that Native American students receive more frequent and harsher discipline than white students (Ko et al. 2021).

Relatedly, schools in which there is racial inequality and tension generally experience higher rates of school crime, including violent crime (e.g., Crawford and Burns 2015; Jennings et al. 2011; Maume et al. 2010), and schools with proportionately more minority students have higher levels of victimization (Chen 2008; George and Thomas 2000). Schools with higher proportions of racial and ethnic minorities are generally more punitive compared to others (e.g., Welch and Payne 2010). These findings demonstrate the need for additional study in this area, with a primary goal of understanding why demographics are so strongly related to levels of school disorder and the associated responses.

The relationship between student demographics and approaches to controlling student behavior is particularly important in the sense that each school is different, and what works in one setting may not somewhere else. These and related findings highlight the significance of understanding what school-safety approaches work best in schools with different characteristics, and, more generally, what can be done to improve school safety in all schools. In response, this study focused on the extent to which a supportive school environment and punitive approaches impact school violence and discipline, with particular consideration of school demographics.

3. Methods

The data analyzed in this study were part of the School Survey on Crime and Safety (SSOCS) collected in 2016 from 2092 schools. There have been several notable changes and improvements in the types of information provided by the SSOCS over the years, which allow assessment of the climate and of new programs that are in place (please see *2015–16 School Survey on Crime and Safety (SSOCS): Public-Use Data File User’s Manual* [2018] for the full discussion of the new variables and procedures). A stratified sample of 3553 regular public schools in the United States was drawn for the SSOCS 2016, which included 849 primary schools, 1230 middle schools, 1347 high schools, and 127 combined schools. The response rate was 59%, resulting in a final sample of 2092 schools.

The primary focus of this research was assessing the impact of supportive and punitive policies on school violence and disciplinary actions, with consideration of the racial composition of schools. Accordingly, the current study examines the racial composition of each school, determining if it is 51 percent or more white or minority based on information recorded in the SSOCS data. This is not a precise measure, but detailed information on the racial composition of schools was not disclosed in the public data set. Given the context of education in the United States, “predominately minority” in this study refers to schools that are comprised of mostly students of color, or BIPOC. This division resulted in 1214 schools (58%) that were predominately white and 878 schools (42%) that were predominately minority.

Sample weights were used in the SSOCS data to obtain population-based estimates to minimize bias in results from differences between school responses and to adjust the data to known population characteristics to reduce sampling errors. The exact weighting procedure is described in detail in [Jackson et al. \(2018\)](#).

3.1. Dependent Variables

The dependent variables for the study are based on school administrator reports of the number of violent incidents and number of disciplinary actions from the SSOCS. The three dependent variables measured are total number of violent incidents, total number of disciplinary actions (which included responses to violent incidents, weapons, drugs, and alcohol possessions), and disciplinary actions for attacks and fights. These three measures were chosen to capture both incidents of violence and general official responses to these types of occurrences. Disciplinary actions were used instead of incident counts, as the counts of events such as number of weapons violations were only available in the restricted data file. Table 1 presents the summary of the data for the study.

Table 1. Summary of Data, Independent, and Dependent Variables for Preventing School Violence.

	<i>Predominately White</i>			<i>Predominately Minority</i>		
	<i>N = 1214</i>			<i>N = 878</i>		
<i>N = 2092 Schools</i>	<i>Mean or %</i>	<i>SD</i>	<i>Range</i>	<i>Mean or %</i>	<i>SD</i>	<i>Range</i>
<i>Dependent Variables</i>						
Total Number of Violent Incidents Recorded	7.74	15.40	0–184	13.94	26.99	0–279
Total Number of Disciplinary Actions	6.66	12.84	0–177	14.86	39.81	0–1044
Total Number of Disciplinary Actions for Attacks and Fights	4.74	9.49	0–167	11.71	36.54	0–1044
<i>Independent Variables</i>						
<i>Security and Crime Prevention Practice</i>						
Total number of security guards, SROs, or law enforcement officers	0.51	2.41	0–80	1.19	2.93	0–42
Students pass through metal detectors	less than 1%			4%		
Security camera(s) monitor the school	83%			77%		
Have a threat assessment team	41%			42%		

Table 1. Cont.

N = 2092 Schools	Predominately White N = 1214			Predominately Minority N = 878		
	Mean or %	SD	Range	Mean or %	SD	Range
<i>Supportive School Responses</i>						
Student involvement in peer mediation	32%			43%		
Community involvement—parent groups	61%			58%		
LGBTQ acceptance group	12%			13%		
Cultural diversity acceptance group	17%			27%		
Disability acceptance group	27%			27%		
<i>Punitive School Responses</i>						
Number of transfers to specialized schools	1.12	4.71	0–156	2.47	9.77	0–174
Outside suspension/no services available	53%			45%		
In-school suspension/no services available	22%			16%		
Total out-of-school suspensions > 5 days < remainder of school	1.91	5.86	0–97	3.61	12.94	0–186
<i>School Characteristics</i>						
School located in urban area	11%			49%		
Frequent student racial/ethnic tensions	3%			10%		
Frequent student bullying occurs	29%			32%		
Frequent cyberbullying among students	28%			26%		

Data summary is unweighted. Frequent defined as daily, weekly, or monthly incidents.

3.2. Independent Variables

The impetus for this study was to assess whether supportive or punitive school responses offer a significant reduction in violent incidents and disciplinary actions while controlling for security practices and school context. Based on a review of the literature, the independent variables for this study were grouped into four categories: security and crime prevention practices, supportive school responses, punitive school responses, and school context. The security and crime prevention practices include the deployment of law enforcement and security officers, metal detectors, security cameras, and threat-reporting systems. The variables categorized as either supportive or punitive school responses reflect, in part, the culture of the school. Supportive school responses include variables such as parental involvement, peer mediation, and LGBTQ and cultural-diversity-acceptance groups. Conversely, punitive school responses include variables such as removals and suspensions from school. While there are many other types of supportive and punitive variables, the ones selected for this analysis are based on a review of the research literature. Finally, school context measured the influence of school and community characteristics on violent incidents and disciplinary actions, and included variables such as school location, frequent bullying, and racial/ethnic tension. The location of the school is an important contextual variable, and it is measured here in terms of whether the school is in an urban location or not. More detailed geographic information was not available in the public data set. Frequent activity was defined as daily, weekly, or monthly incidents.

3.3. Analytic Strategy

The dependent variables in the present study are count-based; therefore, a negative binomial regression model is the analytic technique employed in this research rather than a Poisson regression. This approach was taken given that sociological data rarely meet the mean and variance assumptions needed for Poisson regression, and the models are suited for the rare-event nature of crime data (Piza 2012). In addition, negative binomial regression models have been demonstrated to outperform Poisson models on several criteria (Swartout et al. 2015).

The sampling-weight variable included in the SSOCs was normalized for this analysis by dividing the sample weight by its own mean to create a new weight mean of one.

Normalized weight data address the issues of sample size and ensure the standard errors are correct given the sample (Hahs-Vaughn 2005). All models were estimated after adjusting for the sample weight. Multicollinearity can be an issue in social science research, as independent variables may be intercorrelated. Bivariate correlations were examined for all variables, with no coefficient approaching 0.8, a frequently accepted level indicative of multicollinearity (Garson 2012).

4. Findings

Several significant findings emerged with regard to the comparison of punitive and support-based approaches in predominantly minority and white schools. Table 2 presents the negative binomial regression results for the dependent variable *total number of serious violent incidents*, which is composed of eight violent crimes including sexual assault, attacks with and without weapons, and robbery. Among the supportive school responses, the presence of cultural diversity acceptance groups was associated with decreased numbers of violent incidents for both predominantly white and minority schools. The presence of LGBTQ acceptance groups was positively associated with violent incidents in white schools. Community involvement in the form of parent groups was related to increased levels of violence in white schools but decreased levels of violence in minority ones.

Table 2. Negative Binomial Regression Results for Total Number of Serious Violent Incidents.

N = 2092 Schools	Predominately White N = 1214		Predominately Minority N = 878	
	Beta	SE	Beta	SE
<i>Security and Crime Prevention Practice</i>				
Total number of security guards, SROs, or law enforcement officers	0.42	0.31	0.03	0.02
Students pass through metal detectors	0.33	1.06	0.15	0.21
Security camera(s) monitor the school	−0.25 **	0.09	0.18	0.10
Have a threat assessment team	0.49 **	0.73	−0.13	0.08
<i>Supportive School Responses</i>				
Student involvement in peer mediation	−0.10	0.08	0.06	0.08
Community involvement—parent groups	0.24 **	0.07	−0.30 **	0.11
LGBTQ acceptance group	1.01 **	0.18	−0.24	0.16
Cultural diversity acceptance group	−0.31 *	0.13	−0.33 **	0.11
Disability acceptance group	−0.14	0.10	−0.14	0.10
<i>Punitive School Responses</i>				
Number of transfers to specialized schools	0.09 **	0.02	0.29 **	0.01
Outside suspension/no services available	0.52 **	0.07	0.40 **	0.08
In-school suspension/no services available	−0.32 **	0.09	−0.27 *	0.12
Total out-of-school suspensions > 5 days < remainder of school	0.68 **	0.01	0.24 **	0.01
<i>School Characteristics</i>				
School located in urban area	0.43 **	0.13	0.37 **	0.80
Frequent student racial/ethnic tensions	1.04 **	0.24	0.37 **	0.14
Frequent student bullying occurs	0.35 **	0.08	0.40 **	0.09
Frequent cyberbullying among students	0.28 **	0.88	0.57 **	0.10

* $p < 0.05$. ** $p < 0.01$.

The findings for punitive responses with regard to school violence were consistent among the predominantly minority and white schools. All of the four measures of punitive responses were statistically significant, and the direction of the relationship was consistent for both groups. Particularly, the numbers of transfers to specialized schools, outside suspensions with no services available, and out-of-school suspensions greater than five days yet less than the remainder of school were significantly related to increased numbers of violent incidents for both predominantly white and minority schools. However, the

number of in-school suspensions was associated with reduced numbers of violent incidents for both comparison groups.

The only statistically significant variables among the security and crime prevention practices were found in predominantly white schools, where the presence of a threat-assessment team was associated with an increase in violent incidents, and the use of security cameras was associated with a decrease in violence. All of the school context variables were associated with increased numbers of violent incidents for both groups, and the relationships were consistently in the same direction.

Table 3 presents the negative binomial regression results for the total number of disciplinary actions in both predominantly minority and white schools. There were several notable differences between the comparison schools with regard to the supportive measures. To begin, the involvement of parent groups was associated with decreased levels of disciplinary actions in predominantly minority schools; however, there was no statistically significant relationship in predominantly white schools. Further, the presence of LGBTQ acceptance groups was associated with increased disciplinary actions, yet cultural diversity acceptance groups were associated with decreased actions in predominantly white schools. The presence of disability acceptance groups was associated with reduced numbers of disciplinary actions across both groups.

Table 3. Negative Binomial Regression Results for Number of Disciplinary Actions.

<i>N</i> = 2092 Schools	<i>Predominately White</i>		<i>Predominately Minority</i>	
	<i>N</i> = 1214		<i>N</i> = 878	
	<i>Beta</i>	<i>SE</i>	<i>Beta</i>	<i>SE</i>
<i>Security and Crime Prevention Practice</i>				
Total number of security guards, SROs, or law enforcement officers	0.01	0.02	0.13	0.02
Students pass through metal detectors	−1.26	1.01	0.23	0.20
Security camera(s) monitor the school	−0.27 **	0.09	0.44 **	0.10
Have a threat assessment team	0.41 **	0.08	0.19 *	0.09
<i>Supportive School Responses</i>				
Student involvement in peer mediation	0.04	0.08	0.15	0.08
Community involvement - parent groups	0.03	0.07	−0.29 **	0.08
LGBTQ acceptance group	0.54 **	0.19	−0.19	0.16
Cultural diversity acceptance group	−0.28 *	0.14	−0.71	0.11
Disability acceptance group	−0.25 *	0.10	−0.26 *	0.11
<i>Punitive School Responses</i>				
Number of transfers to specialized schools	0.08 **	0.02	0.04 **	0.01
Outside suspension/no services available	0.54 **	0.08	0.41 **	0.09
In-school suspension/no services available	−0.26 **	0.09	−0.25 *	0.12
Total out-of-school suspensions > 5 days < remainder of school	0.13 **	0.01	0.03 **	0.01
<i>School Characteristics</i>				
School located in urban area	0.36 **	0.13	0.63 **	0.09
Frequent student racial/ethnic tensions	0.19	0.25	0.52 **	0.14
Frequent student bullying occurs	0.38 **	0.09	0.48 **	0.09
Frequent cyberbullying among students	0.58 **	0.09	0.82 **	0.10

* *p* < 0.05. ** *p* < 0.01.

There were consistent findings with regard to the punitive responses and number of disciplinary actions across the comparison groups. All of the punitive school responses were statistically significant, and the directions of the relationships were consistent. Only one of the punitive responses (in-school suspension with no services available) was related to a decrease in disciplinary actions in both schools, while all other punitive variables (both types of out-of-school suspension and transfers to other schools) were associated with increases.

The only notable differences among the comparison groups with regard to the security and crime prevention practices pertained to security cameras, which seemingly reduce the number of disciplinary actions in predominantly white schools yet increase the number of actions in predominantly minority schools. The presence of a threat assessment team was related to increases in disciplinary actions in both schools. There was again consistency among the comparison groups with regard to the measures of school characteristics. Specifically, almost all of the factors were positively related to increases in disciplinary actions in both schools. The sole exception was the lack of relationship between frequency of student racial/ethnic tensions and disciplinary actions in predominantly white schools.

Table 4 presents the negative binomial regression results for the number of disciplinary actions for attacks and fights. The findings for the punitive school responses and the school characteristics largely resemble the earlier, more general findings regarding disciplinary actions (Table 3). Similar to the previous findings, the only notable difference between the comparison groups in these categories was the negative relationship between frequent student racial/ethnic tensions and disciplinary actions. The presence of tensions was related to increased levels of disciplinary actions for attacks and fights (and disciplinary actions in general) in predominantly minority schools but not in predominantly white schools.

Table 4. Negative Binomial Regression Results for Number of Disciplinary Actions for Attacks and Fights.

	<i>Predominately White</i>		<i>Predominately Minority</i>	
	<i>N = 1214</i>		<i>N = 878</i>	
<i>N = 2092 Schools</i>	<i>Beta</i>	<i>SE</i>	<i>Beta</i>	<i>SE</i>
<i>Security and Crime Prevention Practice</i>				
Total number of security guards, SROs, or law enforcement officers	0.01	0.02	−0.00	0.02
Students pass through metal detectors	−0.61	1.07	0.34	0.20
Security camera(s) monitor the school	−0.36 **	0.09	0.36 **	0.10
Have a threat assessment team	0.48 **	0.08	0.17	0.09
<i>Supportive School Responses</i>				
Student involvement in peer mediation	0.04	0.08	0.20 *	0.09
Community involvement - parent groups	0.03	0.08	−0.34 **	0.09
LGBTQ acceptance group	0.49 **	0.19	−0.42 **	0.16
Cultural diversity acceptance group	−0.25	0.14	−0.07	0.11
Disability acceptance group	−0.29 **	0.10	−0.26 *	0.11
<i>Punitive School Responses</i>				
Number of transfers to specialized schools	0.06 **	0.02	0.04 **	0.01
Outside suspension/no services available	0.57 **	0.08	0.38 **	0.09
In-school suspension/no services available	−0.35 **	0.10	−0.27 *	0.12
Total out-of-school suspensions > 5 days < remainder of school	0.11 **	0.01	0.03 **	0.01
<i>School Characteristics</i>				
School located in urban area	0.38 **	0.13	0.69 **	0.08
Frequent student racial/ethnic tensions	0.15	0.25	0.55 **	0.14
Frequent student bullying occurs	0.33 **	0.09	0.44 **	0.09
Frequent cyberbullying among students	0.57 **	0.09	0.85 **	0.10

* $p < 0.05$. ** $p < 0.01$.

There were several noteworthy differences between comparison groups in the other categories, including among the supportive responses. For instance, parental involvement and the presence of LGBT acceptance groups were associated with reduced numbers of disciplinary actions for attacks and fights in predominantly minority schools, yet there was no relationship involving parental involvement in predominantly white schools, where the presence of LGBT acceptance groups was positively related to disciplinary actions for attacks and fights. The presence of disability acceptance groups in both schools was

significantly related to decreases in the number of disciplinary actions for attacks and fights.

Several differences between the groups emerged with regard to the security and crime prevention practices results; for instance, the use of school security cameras was related to a decrease in disciplinary actions for attacks and fights in predominantly white schools but an increase in predominantly minority schools. Further, the use of threat-assessment teams appears to increase the likelihood of disciplinary actions for attacks and fights in predominantly white schools but not in predominantly minority ones, where no relationship was found.

5. Discussion

Results from the present study shed light on the similarities and differences between predominantly minority and predominantly white schools with regard to violence and disorder, and responses to them. Particularly, a series of punitive and supportive variables were measured, as were various control variables pertaining to crime prevention/safety and school characteristics. Among other contributions, these findings highlight proposed courses of action (or inaction) for school administrators in schools with predominantly one group or the other.

To begin, many similarities between the comparison groups were noted with regard to punitive responses and school characteristics in relation to all three dependent variables. In fact, the findings were very similar across all variables (including significance and direction) with regard to all but one independent variable. Frequent student racial/ethnic tensions was related to increased levels of serious violent incidents in both schools, yet only related (positively) to the number of disciplinary actions in predominantly minority schools. These findings suggest that there are minimal differences with regard to the effectiveness of punitive school responses, school characteristics, and the demographics of students.

There were also many similarities with regard to the descriptive statistics displayed in Table 1. The percentages of schools with the various supportive, punitive, and other features were similar in many instances. There were, however, several notable differences that warrant mentioning. Particularly, the average number of disciplinary actions (both types) and incidents of serious violence were notably higher in predominantly minority schools, as were the average number of transfers to specialized schools and out-of-school suspensions for more than five days but less than the remainder of the school year. This finding is consistent with the research literature, which suggests that disciplinary actions are associated with schools attended by higher percentages of minoritized groups (e.g., Cruz and Rodl 2018; Shirley and Cornwell 2011; United States Department of Education 2010; Vanderhaar et al. 2014; Welsh and Little 2018). As Welch (2018) pointed out, minority students are more frequently exposed to the most severe school penalties (e.g., expulsion). Hispanic students are generally punished more than white students, yet less than Black students. These findings also support the claim that “Excessive use of exclusionary school discipline with Black students is a persistent, systemic problem in U.S. schools with potential to affect students’ perceptions of their school” (Larson et al. 2019, p. 152). Longitudinal studies and follow-up research on how these policies are implemented and their future consequences are warranted. The one punitive policy that was consistently associated with reduced numbers of serious violence and disciplinary actions was in-school suspension/no services available. This response should also be further explored, and the findings here suggest reducing violence and disciplinary actions need not warrant pushing students out of the school system.

Predominantly minority schools were also more likely to be located in an urban area (49% compared to 11%) and have frequent racial/ethnic tensions. To their benefit, however, predominantly minority schools were more likely to have student involvement in peer mediation and cultural-diversity-acceptance groups. It is well established that crime is concentrated in urban cities, and school resources are generally lower in these areas compared to other areas (e.g., Bottiani et al. 2019). Combined, these factors likely contribute

to a more punitive approach in minority schools that reflects the more general response to high crime rates in urban areas. School administrators may be more apt to allocate their limited resources to enforcement as opposed to supportive efforts. What needs to be considered in these situations is that many supportive functions appear cost-effective. Creating student groups and generating parental involvement, for example, are relatively low-cost investments that appear promising in many respects.

The category of variables constituting the supportive school responses was far more likely than the other categories of variable (i.e., punitive responses, crime prevention/security, and school characteristics) to be associated with reductions in serious violence and disciplinary actions. This finding is supported in previous research, which examined supportive and punitive practices targeting school violence (Crawford and Burns 2020). Further, the variables within this category also demonstrated more notable differences between the predominantly minority and predominantly white schools.

Two supportive school response variables in particular highlighted differences between schools. The first, community involvement in the form of parent groups, was associated with reductions in all measures of school violence and disciplinary actions in predominantly minority schools. This finding supports earlier research that demonstrates the importance of increased parental involvement in schools to help reduce delinquency (e.g., Bower 2020). In predominantly white schools, however, it was positively related to the number of serious violent incidents and unrelated to any type of disciplinary actions. The second, the presence of LGBTQ acceptance groups, was related to increased levels of serious violence and both measures of disciplinary actions in predominantly white schools. However, it was unrelated to the number of serious violent incidents and disciplinary actions and negatively related to the number of disciplinary reports for attacks and fights in minority schools. Palmer and Greytak (2017) suggest that not only do LGBTQ students experience higher rates of victimization in school, but this victimization may lead to greater contact with school authorities, which in turn increases the risk of school discipline and involvement in the justice system. While there is very little research on this topic and little official data collection, the findings here suggests that there may be a racialized context. These and related inconsistent findings highlight the importance of considering the two types of schools, and offer direction for additional research.

Several differences between predominantly white and predominantly minority schools also emerged with regard to the security and crime prevention practices variables. The results suggest that security cameras may be more effective in predominantly white schools compared to predominantly minority ones. The variable was related to reductions in violence and disciplinary actions in predominantly white schools and positively related to both measures of disciplinary actions in predominantly minority schools. Further, the presence of a threat-assessment team was positively related to all three dependent variables in predominantly white schools; however, it was only related to one dependent variable (number of disciplinary actions) in predominantly minority schools. Of consideration with regard to these and other security practices are the means by and rigor with which they are used. For instance, cameras in some schools may serve more as a visual deterrent than for monitoring purposes, and threat-assessment teams undoubtedly vary in the extent to which they meet, prepare, and assess.

Combined, the results suggest that there are many similarities with regard to the relationships within the comparison schools in relation to punitive school responses and school characteristics, along with discipline and incidents of serious violence. Several inconsistencies emerged with regard to several supportive responses and security/crime prevention practices. For example, the use of security cameras appears to decrease the likelihood of disorder in predominantly white schools yet generally has the opposite effect in predominantly minority ones. While it is difficult to specifically identify why this is the case, the results could be related to the higher levels of serious violence in predominantly minority schools, with a greater likelihood of disorder being recorded. This suggestion is

speculative, of course, and further research is needed to better understand why cameras have different impacts in the two categories of schools.

Another notable inconsistency between the schools appeared with regard to community involvement in the form of parent groups. A consistent negative relationship was identified between parent involvement and disciplinary actions and incidents of violence in predominantly minority schools. The presence of parent groups, however, was positively related to the number of serious violent incidents in predominantly white schools and unrelated to the measures of disciplinary actions. This finding provides important guidance for school administrators in predominantly minority schools in particular, where family bonds between minority students and their parents are perhaps stronger than they are with white students and their parents. Again, further research should investigate if this is the case and/or what other factors may explain the differences.

Limitations

There are several limitations that must be considered when interpreting the findings and recommendations of this research. The data set used in this study is from 2015–2016. As we began the research for this study, it was the most current public data set available, and we continued with it as we asked more questions. As of the writing of this manuscript, new data sets have been made available for the public. We will explore the new information and encourage other researchers in this area to do the same. Nonetheless, we feel the data analyzed here offer insight into the outcomes of supportive and punitive programs and school violence. Additionally, this study is cross-sectional and cannot be used to determine cause and effect or the long-term effectiveness of either supportive or punitive programs. Both the supportive and punitive responses contain several different programs and approaches, but it is not possible to assess how they were implemented and supported within the schools.

Furthermore, the issues of race, class, education, and discipline are a complex mix that is difficult to untangle in this limited research. Much of the research literature regarding school violence and the associated responses addresses African American students or combines racial and ethnic minoritized groups. The negative impacts of enhanced enforcement efforts at schools appear to impact Black students the most, followed by Hispanic and white students, respectively. This does not detract from the fact that there are indeed differences among the groups and associated life-outcome effects upon each group (e.g., [Pesta 2018](#)). The exact demographic profiles of the school, levels of poverty, and other key factors were not available in the public data set.

Another notable limitation is that the data are based on a survey of administrators and their reports of the key issues that were analyzed in this research. Administrators, schools, and districts may have different official and unofficial policies and cultures, which impact how violent incidents and disciplinary actions are reported and processed. This could affect the dependent variables under study. Finally, each school, district, and region has a unique context, which may impact generalizability to schools across the nation. Nonetheless, the findings of this study offer some insight into possible approaches to school safety, particularly the supportive responses and their effectiveness within the context of the racial composition of schools.

6. Conclusions

Much has been written about the school-to-prison pipeline and how the enhanced enforcement efforts in schools have contributed to students, particularly those from racial and ethnic minority groups, becoming increasingly involved in the justice systems. Enhanced zero-tolerance policies and police officers in schools have “exponentially increased arrests and referrals to the juvenile courts”, even though relatively few of the juveniles involved pose dangers to their schools or communities ([Mallett 2016](#), p. 15). The findings from the present work by no means dispute these claims. Instead, the findings shed light on differences between predominantly white and minority schools with regard to the factors

related to disciplinary actions and incidents of serious violence. They are offered with the goal of assisting school administrators and other involved parties in making schools safer for all students.

The results from this study are that there were more statistically significant supportive policies that were associated with reductions in serious violence and disciplinary actions in predominately minority schools as compared to white schools. The most striking result among the supportive policies was parental involvement in predominately minority schools. This had a consistent negative association with each of the dependent measures of violence. Parental involvement did not have the same impact in predominately white schools, and this is worth exploring in future research to uncover what this involvement looks like in this racial context. The most consistent result for both groups was the presence of disability acceptance groups and its association with reduced numbers of disciplinary actions. This is worthy of deeper investigation in future research.

The punitive policies revealed different outcomes. With the exception of in-school suspension/no services available, the punitive policies were all associated with increased numbers of serious violence and disciplinary actions. This may be an attempt to gain control of breaches in school safety; however, it appears these policies could be counterproductive at this juncture. Although consistent significant positive associations were found in both predominately white and minority schools, in light of how minority students are disproportionality penalized in school settings, these responses should be questioned and analyzed.

This current study compared schools based on the unique dimension of racial composition. While there are similarities, key differences did emerge, and they show the importance of recognizing how race impacts life, safety, and policy responses in education. The results of this study offer direction for improvement and possible avenues to explore to create contextually aware and sensitive policies that make all schools a place where students can learn free from victimization, disruption, and exclusionary discipline.

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References

- Akiba, Motoko. 2010. What predicts fear of school violence among US adolescents. *Teachers College Record* 112: 68–102. [CrossRef]
- Alexander, Michelle. 2012. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: The New Press.
- Angaran, Sally, and Kathy Beckwith. 1999. Elementary school peer mediation. *The Education Digest* 65: 23–25.
- Anyon, Yolanda, Duan Zhang, and Cynthia Hazel. 2016. Race, exclusionary discipline, and connectedness to adults in secondary schools. *American Journal of Community Psychology* 57: 342–52. [CrossRef]
- Arcia, Emily. 2006. Achievement and enrollment status of suspended students: Outcomes in a large, multicultural school district. *Education and Urban Society* 38: 359–69. [CrossRef]
- Augustine, Michelle, Pamela Wilcox, and Graham Ousey. 2002. Opportunity theory and adolescent school-based victimization. *Violence & Victims* 17: 233–35.
- Bottiani, Jessika, Chelsea Duran, Elise Pas, and Catherine Bradshaw. 2019. Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology* 77: 36–51. [CrossRef]
- Bottiani, Jessika, Catherine Bradshaw, and Tamar Mendelson. 2017. A multilevel examination of racial disparities in high school discipline: Black and white adolescents' perceived equity, school belonging, and adjustment problems. *Journal of Educational Psychology* 109: 532–45. [CrossRef]

- Bower, Erica. 2020. It takes a village: Examining social capital effects of parental and community agency involvement on school delinquency. *The Social Science Journal*, 1–14. [CrossRef]
- Burrow, John, and Robert Apel. 2008. Youth behavior, school structure, and student risk of victimization. *Justice Quarterly* 25: 349–80. [CrossRef]
- Chen, Greg. 2008. Communities, students, schools, and school crime: A confirmatory study of crime in U.S. high schools. *Urban Education* 43: 301–18. [CrossRef]
- Crawford, Charles, and Ronald Burns. 2015. Preventing school violence: Assessing armed guardians, school policy, and context. *Policing: An International Journal of Police Strategies & Management* 38: 631–47.
- Crawford, Charles, and Ronald Burns. 2016. Reducing school violence: Considering school characteristics and the impacts of law enforcement, school security, and environmental factors. *Policing: An International Journal* 39: 455–77.
- Crawford, Charles, and Ronald Burns. 2020. Support or punishment practices: What works to reduce school violence. *Social Sciences* 9: 220. [CrossRef]
- Crosse, Scott, Denise Gottfredson, Erin Bauer, Zhiqun Tang, Michele Harmon, Carol Hagen, and Angela Greene. 2022. Are effects of school resource officers moderated by student race and ethnicity? *Crime & Delinquency* 68: 381–408.
- Cruz, Rebecca, and Janelle Rodl. 2018. Crime and punishment: An examination of school context and student characteristics that predict out-of-school suspension. *Children and Youth Services Review* 95: 226–34. [CrossRef]
- Demaray, Michelle, and Christine Malecki. 2002. The relationship between perceived social support and maladjustment for students at risk. *Psychology in the Schools* 39: 305–16. [CrossRef]
- Demaray, Michelle, Christine Malecki, Lisa Davidson, Kelly Hodgson, and Jacob Rebus. 2005. The relationship between social support and student adjustment: A longitudinal analysis. *Psychology in the Schools* 42: 691–706. [CrossRef]
- DiPietro, Stephanie, Lee Slocum, and Finn-Aage Esbensen. 2015. School climate and violence. *Youth Violence & Juvenile Justice* 13: 299–322.
- Dunbar, Adam, Aaron Kupchik, Cresean Hughes, and Raven Lewis. 2019. Fear of a black (and poor) school: Race, class, and school safety policy preferences. *Race and Justice* 12: 344–67. [CrossRef]
- Fabelo, Tony, Michael Thompson, Martha Plotkin, Dottie Carmichael, Miner Marchbanks, and Eric Booth. 2011. *Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement*. New York: Council of State Governments Justice Center.
- Felix, Erica, and Sukkyung You. 2011. Peer victimization within the ethnic context of high school. *Journal of Community Psychology* 39: 860–75. [CrossRef]
- Fisher, Benjamin, Joseph Gardella, and Emily Tanner-Smith. 2019. Social control in schools: The relationships between school security measures and informal social control mechanisms. *Journal of School Violence* 18: 347–61.
- Gage, Nicholas, Antonis Katsiyannis, Kelly Carrero, Rhonda Miller, and Danielle Pico. 2021. Exploring disproportionate discipline for Latinx students with and without disabilities: A national analysis. *Behavioral Disorders* 47: 3–13.
- Garson, David. 2012. *Testing Statistical Assumptions*. Asheboro: Statistical Associates Publishing, Available online: <http://www.statisticalassociates.com/assumptions.pdf> (accessed on 20 June 2022).
- George, Rani, and George Thomas. 2000. Victimization among middle and high school students: A multilevel analysis. *High School Journal* 84: 48–57.
- Greytak, Emily, Joseph Kosciw, and Madison Boesen. 2013. Putting the “T” in “resource”: The benefits of LGBT-related school resources for transgender youth. *Journal of LGBT Youth* 10: 45–63. [CrossRef]
- Hahs-Vaughn, Debbie. 2005. A primer for using and understanding weights with national datasets. *Journal of Experimental Education* 73: 221–48. [CrossRef]
- Homer, Emily, and Benjamin Fisher. 2020. Police in schools and student arrest rates across the United States: Examining differences by race, ethnicity, and gender. *Journal of School Violence* 19: 192–204. [CrossRef]
- Jackson, Michael, Melissa Diliberti, Jana Kemp, Steven Hummel, Christina Cox, Komba Gbondo-Tugbawa, and Dillon Simon. 2018. 2015–16 School Survey on Crime and Safety (SSOCS): Public-Use Data File User’s Manual. NCES 2018-107. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Available online: <https://eric.ed.gov/?id=ED581663> (accessed on 10 January 2021).
- Jennings, Wesley, David Khey, Jon Maskaly, and Christopher Donner. 2011. Evaluating the relationship between law enforcement and school security measures and violent crime in schools. *Journal of Police Crisis Negotiations* 11: 109–24. [CrossRef]
- Justice Policy Institute. 2011. Education Under Arrest: The Case Against Police in Schools. Available online: https://justicepolicy.org/wp-content/uploads/justicepolicy/documents/educationunderarrest_fullreport.pdf (accessed on 20 June 2022).
- Ko, Dosun, Aydin Bal, Aaron Bear, Annalisa Sannino, and Yrjö Engeström. 2021. Transformative agency for justice: Addressing racial disparity of school discipline with indigenous learning lab. *Race Ethnicity and Education* 26: 1–24. [CrossRef]
- Kosciw, Joseph, Neil Palmer, Ryan Kull, and Emily Greytak. 2013. The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school support. *Journal of School Violence* 12: 45–63. [CrossRef]
- Lacoe, Johanna. 2015. Unequally safe: The race gap in school safety. *Youth Violence and Juvenile Justice* 13: 143–68. [CrossRef]
- Larson, Kristine, Jessika Bottiani, Elise Pas, Joseph Kush, and Catherine Bradshaw. 2019. A multilevel analysis of racial discipline disproportionality: A focus on student perceptions of academic engagement and disciplinary environment. *Journal of School Psychology* 77: 152–67. [CrossRef]

- Liljeberg, Jenny, Jenny Eklund, Marie Fritz, and Britt Klinteberg. 2011. Poor school bonding and delinquency over time: Bidirectional effects and sex differences. *Journal of Adolescence* 34: 1–9. [\[CrossRef\]](#)
- Losen, Daniel, and Amir Whitaker. 2018. *11 Million Days Lost: Race, Discipline, and Safety at U.S. Public Schools*. Los Angeles: The Center for Civil Rights Remedies at the Civil Rights/Project Proyectos Derechos Civiles.
- Malecki, Christine, Michelle Demaray, Thomas Smith, and Johnathan Emmons. 2020. Disability, poverty, and other risk factors associated with involvement in bullying behaviors. *Journal of School Psychology* 78: 115–32. [\[CrossRef\]](#)
- Mallett, Christopher. 2016. The school-to-prison pipeline: A critical review of the punitive paradigm shift. *Child and Adolescent Social Work Journal* 33: 15–24. [\[CrossRef\]](#)
- Maume, Michael, Yeoun Soo Kim-Godwin, and Caroline Clements. 2010. Racial tensions and school crime. *Journal of Contemporary Criminal Justice* 26: 339–58. [\[CrossRef\]](#)
- McKown, Clark, and Rhona Weinstein. 2002. Modeling the role of child ethnicity and gender in children's differential response to teacher expectations. *Journal of Applied Social Psychology* 32: 159–84. [\[CrossRef\]](#)
- Monahan, Torin, and Rodolfo Torres. 2010. *Schools under Surveillance: Cultures of Control in Public Education*. Piscataway: Rutgers University Press.
- Morris, Edward, and Brea Perry. 2016. The punishment gap: School suspension and racial disparities in achievement. *Social Problems* 63: 68–86. [\[CrossRef\]](#)
- Morris, Kamryn, Eleanor Seaton, Masumi Iida, and Sarah Johnson. 2020. Racial discrimination stress, school belonging, and school racial composition on academic attitudes and beliefs among Black youth. *Social Sciences* 9: 191. [\[CrossRef\]](#)
- Na, Chongmin, and Denise Gottfredson. 2013. Police officers in schools: Effects on school crime and the processing of Offending Behaviors. *Justice Quarterly* 30: 619–50. [\[CrossRef\]](#)
- Noltmeyer, Amity, Rose Ward, and Caven Mcloughlin. 2015. Relationship between school suspension and student outcomes: A meta-analysis. *School Psychology Review* 44: 224–40. [\[CrossRef\]](#)
- O'Neill, Lauren, and Jean Marie McGloin. 2007. Considering the efficacy of situational crime prevention in schools. *Journal of Criminal Justice* 35: 511–23. [\[CrossRef\]](#)
- Palmer, Neil, and Emily Greytak. 2017. LGBTQ student victimization and its relationship to school discipline and justice system involvement. *Criminal Justice Review* 42: 163–87. [\[CrossRef\]](#)
- Pearman, Francis, Chris Curran, Benjamin Fisher, and Joseph Gardella. 2019. Are achievement gaps related to discipline gaps? Evidence from national data. *AERA Open* 5: 1–18. [\[CrossRef\]](#)
- Peguero, Anthony. 2009. Victimized the children of immigrants: Latino and Asian American student victimization. *Youth & Society* 41: 186–208.
- Peguero, Anthony, Jennifer Bondy, and Zahra Shekarkhar. 2016. Punishing Latina/o youth: School justice, fairness, order, dropping out, and gender disparities. *Hispanic Journal of Behavioral Sciences* 39: 98–126. [\[CrossRef\]](#)
- Pesta, Racheal. 2018. Labeling and the differential impact of school discipline on negative life outcomes: Assessing ethno-racial variation in the school-to-prison pipeline. *Crime & Delinquency* 64: 1489–512.
- Piza, Eric. 2012. *Using Poisson and Negative Binomial Regression Models to Measure the Influence of Risk on Crime Incident Counts*. Newark: Rutgers Center on Public Security.
- Robers, Simone, Jana Kemp, Jennifer Truman, and Thomas Snyder. 2013. *Indicators of School Crime and Safety: 2012*. NCJ 241446. Washington, DC: U.S. Department of Education, U.S. Department of Justice, Office of Justice Programs, National Center for Education Statistics.
- Rosenbaum, Janet. 2018. Educational and criminal justice outcomes 12 years after school suspension. *Youth & Society* 52: 512–47.
- Ruiz, Linda, Susan McMahon, and Leonard Jason. 2018. The role of neighborhood context and school climate in school-level academic achievement. *American Journal of Community Psychology* 61: 296–309. [\[CrossRef\]](#)
- Schreck, Christopher, Mitchell Miller, and Chris Gibson. 2003. Trouble in the school yard: A study of the risk factors of victimization at school. *Crime & Delinquency* 49: 460–84.
- Shirley, Erica, and Dewey Cornwell. 2011. The contribution of student perceptions of school climate to understanding the punishment of African American students in a middle school. *School Psychology International* 33: 115–34. [\[CrossRef\]](#)
- Skiba, Russell, Choong-Geun Chung, Megan Trachok, Timberly Baker, Adam Sheya, and Robin Hughes. 2014. Parsing disciplinary disproportionality: Contributions of infraction, student, and school characteristics to out-of-school suspension and expulsion. *American Educational Research Journal* 51: 640–70. [\[CrossRef\]](#)
- Skiba, Russell, Ruth Michael, Abra Nardo, and Reece Peterson. 2002. The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review* 34: 317–42. [\[CrossRef\]](#)
- Swartout, Kevin, Martie Thompson, Mary Koss, and Nan Su. 2015. What is the best way to analyze less frequent forms of violence? The case of sexual aggression. *Psychology of Violence* 5: 305–13. [\[CrossRef\]](#)
- Tanner-Smith, Emily, Benjamin Fisher, Lynn Addington, and Joseph Gardella. 2018. Adding security, but subtracting safety? Exploring schools' use of multiple visible security measures. *American Journal of Criminal Justice* 43: 102–19. [\[CrossRef\]](#)
- Thibodeaux, Jarrett. 2013. Student perceptions of safety in perceived similar and nonsimilar race high schools. *Journal of School Violence* 12: 378–94. [\[CrossRef\]](#)
- Tillyer, Marie, Bonnie Fisher, and Pamela Wilcox. 2011. The effects of school crime prevention on students' violent victimization, risk perception, and fear of crime: A multilevel opportunity perspective. *Justice Quarterly* 28: 249–77. [\[CrossRef\]](#)

- Townsend, Brenda. 2000. Disproportionate discipline of African American children and youth: Culturally-responsive strategies for reducing school suspensions and expulsions. *Exceptional Children* 66: 381–91. [[CrossRef](#)]
- United States Department of Education, National Center for Educational Statistics. 2010. *The Condition of Education*. Washington, DC: United States Department of Education.
- Vanderhaar, Judy, Marco Munoz, and Joseph Petrosko. 2014. Reconsidering the alternatives: The relationship between suspension, disciplinary alternative school placement, subsequent juvenile detention, and the salience of race. *Journal of Applied Research on Children* 5: 14.
- Wald, Johanna, and Daniel Losen. 2003. Defining and redirecting a school-to-prison pipeline. In *Deconstructing the School-To-Prison Pipeline: New Directions for Youth Development*, No. 99. Edited by Johanna Wald and Daniel J. Losen. San Francisco: Josey-Bass, pp. 9–15.
- Wang, Ke, Yongqiu Chen, Jizhi Zhang, and Barbara Oudekerk. 2020. *Indicators of School Crime and Safety: 2019*. NCES 2020-063/NCJ 254485. Washington, DC: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.
- Welch, Kelly. 2018. The effect of minority threat on risk management and the “new disciplinology” in schools. *Journal of Criminal Justice* 59: 12–17. [[CrossRef](#)]
- Welch, Kelly, and Allison Ann Payne. 2010. Racial threat and punitive school discipline. *Social Problems* 57: 25–48. [[CrossRef](#)]
- Welch, Kelly, and Allison Ann Payne. 2018. Latino/a student threat and school disciplinary policies and practices. *Sociology of Education* 91: 91–110. [[CrossRef](#)]
- Welsh, Richard, and Shafiqua Little. 2018. The school discipline dilemma: A comprehensive review of disparities and alternative approaches. *Review of Educational Research* 88: 752–94. [[CrossRef](#)]
- White, Arielle, Julia Moeller, Zorana Ivcevic, Marc Brackett, and Robin Stern. 2018. LGBTQ adolescents’ positive and negative emotions and experiences in U.S. high schools. *Sex Roles* 79: 594–608. [[CrossRef](#)]
- Williams, Susan, Mallory Schneider, Cory Wornell, and Jenna Langhinrichsen-Rohling. 2018. Student’s perceptions of school safety: It is not just about being bullied. *Journal of School Nursing* 34: 319–30. [[CrossRef](#)] [[PubMed](#)]