Article

Support or Punishment Practices: What Works to Reduce School Violence

Charles Crawford [1],* and Ronald Burns [2]

[1]   Department of Sociology, Western Michigan University, Kalamazoo, MI 49008, USA
[2]   Department of Criminal Justice, Texas Christian University, Fort Worth, TX 76129, USA; r.burns@tcu.edu
*   Correspondence: Charles.crawford@wmich.edu

check for updates

Abstract: School culture and violence have garnered much public and scholarly attention in recent years. Research in the area has focused on the extent to which strict enforcement of school policies and the law results in safer schools. Other research focuses on providing more supportive, less enforcement-oriented environments for students. We advance this work by using a sample of 2092 respondents from public schools in the United States from the 2015–2016 school survey on crime and safety from the Department of Education. There were several statistically significant supportive practices that reduced violent incidents and disciplinary actions for violence, and the findings generally suggest that punitive policies were not effective in increasing campus safety while controlling for relevant security practices and school contextual variables.

Keywords: school culture; school violence; supportive; punitive; school safety; school resource officers

1. Introduction

School climate has garnered much public and scholarly attention in recent years in light of concerns over violence in schools. School safety, a primary component of school climate, is one of the major concerns of school administrators, teachers, students, parents, and others. Creating a safe school environment is essential to the education mission and is associated with the consistent enforcement of policies pertaining to student discipline, caring adults providing a supportive environment, lower levels and perceptions of school violence, and minimal criminal victimization (e.g., Ruiz et al. 2018).

Scholarly attention in the area has, in part, focused on the extent to which strict enforcement of school policies and the law results in safer, less problematic school environments. Zero-tolerance and related efforts emphasizing the enforcement of school rules and regulations to create a safe learning environment have become increasingly common following several high-profile violent events at schools across the United States and elsewhere.

An alternative approach is to provide a more supportive environment for students in efforts to address school violence and disorder in general. This approach relies less on the enforcement of regulations and the law, and more on providing support services for students to address specific needs. This is done through efforts to create a school climate that is supportive of student learning and comfortableness, and is characterized by additional and enhanced opportunities for counseling, positive student-teacher relations, problem identification, intervention, support groups and networks, and related services.

Arguably, a balance of the two approaches is most effective (Cornell and Huang 2016; Fisher et al. 2018; Konold et al. 2014), but each school is unique in the challenges it faces, the mindsets and approaches taken by administrators, and its available resources. The unique challenges faced by schools is of particular concern in relation to school violence.

Context variables such the location of schools and extent to which misbehavior occurs and tensions exist also influence policy and responses to violence and crime on campus (e.g., Crawford and Burns 2015; Jennings et al. 2011). Furthermore, most schools attempt to create a safe environment through the employment of security and crime-prevention practices such as the use of resource officers and metal detectors (e.g., Cornell et al. 2011, 2012, 2018; Nekvasil and Cornell 2015). Variables pertaining to school context and crime-prevention/security measures are used as controls in this study.

School violence has been and remains at the forefront of public concern. Disruptive behavior in schools is regularly at the top of the list of concerns for both teachers and parents with regard to education (Skiba and Sprague 2008). The current study examines punitive and supportive responses to school violence and disorder at schools in the United States. The primary focus is on determining which category is more strongly associated with campus safety while controlling for school context and security measures. Put simply, the study addresses the following questions:

What supportive school responses have significant impacts on school violence?
What punitive school responses have significant impacts on school violence?
Which of the two approaches appears to have the most impact on reducing school violence?
What other factors influence school violence?

This study primarily adds to the research literature in the area through considering the specific impacts of two different approaches to reducing incidents of violence and crime on campus. It also considers additional variables that may influence levels of violence at schools.

2. Review of the Literature

Gallup polls from the past two decades note that an average of 28% of parents worried about their child's safety at school. A 2018 poll noted that 35% of parents worried, which was the among the highest levels since the poll was first conducted in 1998. The same poll found that 20% of parents noted that their children expressed concerns about feeling unsafe at school, which was also among the highest percentages ever recorded (Jones 2018). Concerns regarding school safety are warranted given that students spend much time at school, which would seemingly increase their likelihood of victimization.

Several high-profile incidents at schools across the United States largely beginning in the 1990s and occurring sporadically since have prompted many changes in school policies, procedures, and safety precautions. Mass murders at Columbine High School in 1999, Sandy Hook Elementary School in 2012, and Marjory Stoneman Douglass High School in 2018 are among the more high-profile incidents that generated national attention, concerns, and responses. Aside from these and other tragic events, less serious albeit important victimizations of students occur regularly at schools across the United States.

2.1. School Violence and Victimization

The controlled environment of schools at all levels limits the amount of violence and related harms that occur, and school characteristics influence levels of victimization. Victimization rates for youths both at and away from school have dropped significantly since 1992 (Musu-Gillette et al. 2018), however victimization remains a problem in many schools and for many students. For instance, there were just under 750,000 theft and non-violent victimizations at schools in 2016, which represents a rate of 29 victimizations per 1000 students. Outside of school, the rate was 24 per 1000 students (Musu-Gillette et al. 2018).

Victimization and delinquency rates vary across schools, and researchers have examined the factors that contribute to the variation. Time and Payne (2008) categorized school violence prevention efforts according to physical, legal, and interactionist approaches. Physical approaches involve target hardening and related efforts to discourage and physically prevent crimes. The use of metal detectors and locked doors are examples. Legal remedies largely rely on law enforcement officials and the law to control crime, including the use of school resource officers (SROs). Interactionist approaches include

the creation of a supportive school climate, or culture, in which students have support networks and openly communicate with school officials.

The factors that comprise these three categories alone do not comprehensively address school violence. For instance, the environment in which schools are located has a significant impact on levels of school violence and related problems. Schools in high-crime neighborhoods or urban areas generally have higher rates of crime and victimization (e.g., Jennings et al. 2011; Crawford and Burns 2015). Put simply, schools are not fully insulated from the areas in which they exist.

Aside from the direct effects of feeling unsafe at school and being victimized, there are many negative impacts associated with misbehavior in schools. Among those are attendance at school and academic achievement, as students may be fearful to attend classes or instructional opportunities out of fear of victimization (e.g., Robers et al. 2015). Further, feeling unsafe at school is associated with low academic achievement (Akiba 2010).

2.2. Punitive School Responses

Adopting a more punitive stance to address violence in schools has become quite popular. The arguments supporting stricter enforcement of school policies and the law generally reflect efforts to control behavior outside of school in that there are consequences for not following the rules. Those consequences have increasingly become more punitive in nature, for instance through the use of removal or suspension from school, or referring incidents to legal authorities.

This particular stance involves an enforcement-oriented approach that seeks to deter individuals from violating laws and school policies, and responds punitively to those who do. Much research has focused on security and law enforcement efforts to control student behavior, for instance through the use of law enforcement and security personnel in schools (e.g., SROs) and target hardening approaches such as cameras and metal detectors (e.g., Crawford and Burns 2015; Jennings et al. 2011). Results from these studies are generally inconsistent.

A particularly important aspect of punitive efforts to create more orderly schools involves school policies designed to deter and punish misbehavior. This is reflected in part through the use of removals from school, transfers to specialized schools, and suspensions both in- and out-of-school. Such practices serve two primary purposes: creating a safer, more positive learning environment and punishing those who violate school policies or the law. Suspensions, however, can be more detrimental than helpful to students (e.g., Hemphill et al. 2014).

Removing problematic students from the school is among the most punitive approaches taken by schools to address misbehavior. Support for use of this punishment is based on the belief that removing problematic students from schools will remove the disruptions and problems they cause. Doing so occurs through school exclusionary discipline practices, which include suspending or permanently removing students from school. Suspensions are either in- or out-of-school and involve the short-term removal of the student. Expulsion is more punitive than suspensions and involves the removal of students for a longer period of time, and transfers to home schooling or other schools in the district. Students missed 11 million days of instruction in schools due to out-of-school suspensions in 2015–2016 (Losen and Whitaker 2018).

Support for a more punitive approach centers around the belief that removing problematic students from schools removes the problem, and strict enforcement of policies and the law should deter students from violating either. Zero-tolerance policies targeting disruptive students, the increased presence of law enforcement personnel in schools, and requirements for mandatory reporting of troubling behaviors have increasingly become ingrained in school policies and practices, and contributed to the increased involvement of students in our justice systems (Monahan and Torres 2010). Such policies, which became increasingly popular beginning in the 1990s, lead to more student suspensions and expulsions (e.g., Wald and Losen 2003), and stricter enforcement of the law and school policies throughout the United States.

2.3. Supportive Climate

Some schools seek to ensure safety through promoting a positive school culture, or climate. Safety is an important component of school climate, and encompasses physical, emotional, social, and intellectual safety (Ruiz et al. 2018). Generally, "school culture" refers to unwritten, shared beliefs, norms, and values among students, faculty, and staff. It is related to school climate, which " . . . is based on patterns of people's experience with school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (Cohen et al. 2009, p. 180). A positive school climate or culture is related to both enhanced learning and a safer environment to do so (e.g., Cohen et al. 2009).

Research generally finds that providing a supportive, safe environment in which to learn has many benefits. Within this body of research are studies focused on student perceptions of their learning environment and concerns for safety. For instance, research in the area found that a weak sense of belonging and low academic achievement were the strongest predictors of students' fear of school violence (Akiba 2010). Other research found that students who felt unsupported by teachers and classmates experienced maladjustment at school (Demaray and Malecki 2002), and a lack of school bonding was related to delinquency over time (Liljeberg et al. 2011).

Providing student services and alternatives to punishment for misbehavior assists with creating a supportive school environment. It may involve providing students more opportunities to safely voice concerns and/or enhanced opportunities for counseling and extracurricular activities. Research generally shows that schools that are more communal in nature experience lower rates of delinquency and misbehavior, and have higher levels of academic outcomes (DiPietro et al. 2015). Further, there is evidence that student connectedness to their school and the creation of a positive environment contribute to violence prevention (e.g., Eisenbraum 2007; Greene 2005). Student support and acceptance groups such as those that provide a community and support network for groups of students theoretically should contribute to lower levels of school violence.

The research literature generally suggests that schools that make efforts to provide support networks and a community atmosphere have lower levels of violence. An example of providing support to the often-marginalized groups is the implementation of Gay-Straight Alliances (GSAs) and related support groups. Lesbian, Gay, Bisexual, Transgender, and Questioning or Queer (LGBTQ) students generally face higher levels of bullying and harassment compared to other students (e.g., White et al. 2018) and are at a higher risk for negative emotions and disciplinary actions given their need to protect and defend themselves from hostile situations (Snapp et al. 2014, White et al. 2018). GSAs and related groups have become increasingly common at schools across the United States and, among other benefits, provide a social network of friends and support resources for LGBTQ students (Greytak et al. 2013). The presence of these groups is generally associated with more positive school outcomes for LGBTQ students (Kosciw et al. 2013).

As noted, school context and security/crime-prevention efforts contribute to levels of school violence. Schools are not isolated from the larger society in which they exist, and the cautionary or preventive actions school administrators take to ensure safety warrant mention. For instance, schools located in high-crime areas generally have higher levels of violence and general disorder (e.g., Crawford and Burns 2015, 2016), and protective measures such as a threat response team may contribute to favorable perceptions of school climate and to reducing in- and out-of-school suspensions (Cornell et al. 2011, 2012, 2018; Nekvasil and Cornell 2015). These and related variables pertaining to school security practices and context impact levels of school violence and are considered in the present work.

Ultimately, safety is an integral part of school climate, and the extent to which it is emphasized, recognized, and enforced varies by school. Understanding the factors that influence school violence is a primary step in properly addressing harmful behaviors within academic settings. Accordingly, the present study addresses the impacts of both punitive and supportive measures to address school violence, with consideration of preventive measures and school context.

3. Methods

The data used in this study were part of the School Survey on Crime and Safety (SSOCS) collected in 2016 from 2092 schools. This was the most current publicly available data set at the time this research and analysis began. The sampling frame for SSOCS is based on the most recent Common Core of Data Public Elementary/Secondary School Universe data file available at the time the sample was developed. There have been several notable changes and expansions in the types of information provided by the SSOCS over the years, providing several measures that were previously unavailable in earlier versions. This has allowed for a more nuanced assessment of strategies that provide a foundation for the current study (please see Jackson et al. (2018) for the full discussion of the survey methodology, and new variables).

The SSOCS 2016 sample design was twofold: to obtain overall cross-sectional and subgroup estimates of important indicators of school crime and safety. A stratified sample of 3553 regular public schools in the United States was drawn for SSOCS 2016, including 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. Due to the complex nature of the sample design of the SSOCS survey for 2016, sample weights were used to obtain population-based estimates, minimize bias arising from differences between responding and nonresponding schools, and calibrate the data to known population characteristics to reduce sampling error. The exact weighting procedure is described in detail in Jackson et al. (2018).

The data are useful for assessing various aspects of school safety across the United States. The large number of variables included in the dataset enable researchers to focus on and delve deeper into specific school safety features and practices. For instance, researchers used the 2015–2016 wave of findings in focusing on areas such as the location of schools in relation to the presence of weapons on campus (Peguero et al. 2019), parental involvement, and invasive school security practices (Matthews 2019).

3.1. Dependent Variables

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

Table 1. Summary of data and independent and dependent variables for reducing school violence.

N = 2902	M %	SD	Range
Dependent Variables			
Total number of violent incidents	15.54	26.11	0–279
Number of disciplinary actions	18.16	41.54	1044
Disciplinary actions for attacks and fights	12.29	37.18	0–1044
Independent Variables			
Security and Crime-Prevention Practices			
Total # of full-time security guards, SROs, or sworn law enforcement officers	1.60	3.98	0–80
Students pass through metal detectors	3%		
Security camera(s) monitor the school	87%		
Have a threat assessment team	48%		

Table 1. *Cont.*

N = 2902	M %	SD	Range
Supportive School Responses			
Student involvement in peer mediation	40%		
Community involvement—parent groups	59%		
LGBTQ acceptance group	28%		
Cultural diversity acceptance group	34%		
Disability acceptance group	38%		
Punitive School Responses			
Number of transfers to specialized schools	3.65	11.24	0–174
Outside suspension/no services available	49%		
In-school suspension/no services available	18%		
Total out-of-school suspensions > 5 days but < the remainder of school for specified offenses	6.01	14.76	0–186
School Context			
School located in urban area	27%		
Frequent student racial/ethnic tensions	7%		
Frequent student bullying occurs	37%		
Frequent cyberbullying among students	43%		

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

3.2. Independent Variables

The independent variables selected for the study were grouped into four categories: security and crime-prevention practices, supportive school responses, punitive school responses, and school context. The primary motivation for this study was to assess whether supportive or punitive school responses offer a significant reduction in violence and disciplinary actions while controlling for security and crime-prevention practices and school context. These variables were selected based on a review of the literature. The security and crime-prevention practices included, among others, the use of security resource officers, metal detectors, security cameras, and threat-reporting systems (e.g., Cornell et al. 2011, 2012, 2018; Nekvasil and Cornell 2015). The variables reflecting supportive and punitive school responses reflected, in part, the culture of the school and were of primary research interests for this study. Supportive school responses included variables such as parental involvement, peer mediation, and LGBTQ and cultural diversity acceptance groups (e.g., Eisenbraum 2007; Greene 2005; Greytak et al. 2013). By contrast, punitive school responses included variables such as removals and suspensions (e.g., Hemphill et al. 2014). While there are many other types of supportive and punitive variables, the ones selected for this analysis were reflective of what has been examined in the research literature. Finally, school context measured the influence of the school and community characteristics on school violence and safety, and included variables such as school location, frequent bullying, and racial/ethnic tension (Crawford and Burns 2015, 2016; Jennings et al. 2011; Maskaly et al. 2011). "Frequent activity" was defined as daily, weekly, or monthly incidents.

3.3. Analytic Strategy

The dependent variables in the present study were count-based, therefore a negative binomial regression in the software Statistical Package for the Social Sciences (SPSS) was the analytic technique employed in this research rather than a Poisson regression. Negative binomial regression models are increasingly used in criminological research as sociological data rarely reflect the mean and variance assumptions needed for Poisson regression, and the models are suited for the rare-event nature of

crime data (Piza 2012). Furthermore, 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

Table 2 presents the negative binomial regression results for the dependent variable total number of violent incidents, which is a 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 and disability acceptance groups were associated with decreased numbers of violent incidents. However, the presence of LGBTQ acceptance groups was positively associated with violent incidents. In general, the punitive variables were significantly related to increased numbers of violent incidents. Specifically, the number of transfers to specialized schools, the number of out-of-school suspensions for a limited time, and the use of outside suspension with no services available were associated with increased violent incidents. However, the number of in-school suspensions was associated with reduced numbers of violent incidents.

Table 2. Negative binomial regression results for number of violent incidents.

N = 2092	Beta	S.E.
Security and Crime-Prevention Practices		
Total number of full-time security guards, SROs, or sworn law enforcement officers	0.03	0.02
Students pass through metal detectors	0.38	0.20
Security camera(s) monitor the school	−0.05	0.07
Have a threat assessment team	0.12 *	0.05
Supportive School Responses		
Student involvement in peer mediation	0.09	0.06
Community involvement—parent groups	−0.10	0.05
LGBTQ acceptance group	0.35 **	0.12
Cultural diversity acceptance group	−0.28 **	0.09
Disability acceptance group	−0.15 *	0.07
Punitive School Responses		
Number of transfers to specialized schools	0.05 **	0.01
Outside suspension/no services available	0.41 **	0.06
In-school suspension/no services available	−0.24 **	0.07
Total out-of-school suspensions > 5 days but < the remainder of school for specified offenses	0.04 **	0.01
School Context		
School located in urban area	0.50 **	0.06
Frequent student racial/ethnic tensions	0.71 **	0.11
Frequent student bullying occurs	0.31 **	0.06
Frequent cyberbullying among students	0.41 **	0.07

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

The only statistically significant variable among the security and crime-prevention practices was the presence of a threat assessment team, which was associated with an increase in violent incidents. All of the school context variables were associated with increased numbers of violent incidents.

Table 3 presents the negative binomial regression results for the total number of disciplinary actions in schools. Of note within the supportive school responses are involvement of parent groups,

and disability acceptance groups, which were associated with reduced numbers of disciplinary actions in the school. Student involvement in peer mediation was associated with increased numbers of disciplinary actions. Most of the punitive school responses (suspensions and transfers to specialized schools) were also positively related to the number of disciplinary actions. The use of in-school suspension was again the only variable within this category that was associated with reduced numbers of disciplinary actions.

Table 3. Negative binomial regression results for number of disciplinary actions.

N = 2092	Beta	S.E.
Security and Crime-Prevention Practices		
Total # of full-time security guards, SROs, or sworn law enforcement officers	0.01	0.02
Students pass through metal detectors	0.18	0.19
Security camera(s) monitor the school	0.09	0.07
Have a threat assessment team	0.26 **	0.06
Supportive School Responses		
Student involvement in peer mediation	0.14 *	0.06
Community involvement—parent groups	−0.16 **	0.05
LGBTQ acceptance group	0.20	0.12
Cultural diversity acceptance group	−0.13	0.17
Disability acceptance group	−0.26 **	0.07
Punitive School Responses		
Number of transfers to specialized schools	0.05 **	0.01
Outside suspension/no services available	0.40 **	0.06
In-school suspension/no services available	−0.23 **	0.07
Total out-of-school suspensions > 5 days but < the remainder of school for specified offenses	0.07 **	0.01
School Context		
School located in urban area	0.70 **	0.06
Frequent student racial/ethnic tensions	0.63 **	0.11
Frequent student bullying occurs	0.37 **	0.06
Frequent cyberbullying among students	0.67 **	0.06

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

The only statistically significant finding within the security and crime-prevention practices variables involved having a threat assessment team, which was associated with increased numbers of disciplinary actions. All of the controls for the school context measures were positively associated with increased numbers of disciplinary actions.

Table 4 presents the negative binomial regression results for the number of disciplinary actions for attacks and fights. Generally, the findings closely reflect those for disciplinary actions. Among the supportive actions, parental involvement and the presence of disability acceptance groups were associated with reduced numbers of disciplinary actions for attacks and fights. Student involvement in peer mediation was again associated with increased numbers of disciplinary actions for fights and attacks. With the exception of in-school suspension/no services, all of the punitive responses were associated with increased disciplinary actions for attacks and fights. The security and crime-prevention practices results were similar to the previous results of disciplinary actions, in that the only statistically significant variable was the presences of a threat assessment team which was associated with increased disciplinary actions for fights and attacks. Finally, each of the school context variables was positively associated with increased measures of the dependent variable.

Table 4. Negative binomial regression results for disciplinary actions for attacks and fights.

N = 2902	Beta	S.E.
Security and Crime-Prevention Practices		
Total number of full-time security guards, SROs, or sworn law enforcement officers	0.00	0.02
Students pass through metal detectors	0.31	0.20
Security camera(s) monitor the school	0.01	0.07
Have a threat assessment team	0.28 **	0.06
Supportive School Responses		
Student involvement in peer mediation	0.16 **	0.06
Community involvement—parent groups	−0.21 **	0.06
LGBTQ acceptance group	0.04	0.12
Cultural diversity acceptance group	−0.11	0.09
Disability acceptance group	−0.31 **	0.08
Punitive School Responses		
Number of transfers to specialized schools	0.05 **	0.01
Outside suspension/no services available	0.40 **	0.06
In-school suspension/no services available	−0.26 **	0.07
Total out-of-school suspensions >5 days but <the remainder of school for specified offenses	0.06 **	0.01
School Context		
School located in urban area	0.75 **	0.07
Frequent student racial/ethnic tensions	0.66 **	0.11
Frequent student bullying occurs	0.32 **	0.06
Frequent cyberbullying among students	0.69 **	0.06

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

5. Discussion

Maintaining campus safety is an essential part of student learning and well-being. Public concerns have mounted over violence in schools, resulting in educational administrators attempting to implement policies that provide safe and structured environments. Previous research by Jennings et al. (2011), Crawford and Burns (2015, 2016), and others attempted to assess the efficacy of safety strategies on campuses and often found mixed results. The current study examined the larger structural frameworks of supportive and punitive responses that may reduce violence on campus, which is a key distinction for this research.

The primary focus of this research was on assessing the factors that reduce school violence and disorder and improve campus safety. The primary research questions centered on identifying the supportive and punitive school responses that had significant impacts on school violence and disorder, and determining if one approach seems more beneficial than the other. The research also focused on identifying other potential factors that influence levels of violence and disciplinary actions in schools. This latter approach included consideration of security and crime-prevention practices, as well as variables pertaining to the school context (e.g., location, tension, bullying).

Overall, there were five measures of supportive school responses that yielded nine statistically significant results. Six of these results (67%) were associated with decreased counts of the dependent variables measuring violence or disciplinary actions. One notable variable was disability acceptance groups, which was consistently associated with reduced counts of violence and disciplinary actions across each dependent variable.

There were four measures of punitive school responses that yielded 12 statistically significant results. Nine of these measures (75%) were positively associated with increased counts of the dependent variable measures of violence and disciplinary actions. Only one of the punitive variables, in-school suspensions, was significantly associated with reduced numbers of the dependent measures in three categories.

5.1. Supportive School Responses

Generally, the supportive school responses revealed some promising findings and a larger group of variables that were associated with a reduction in violence and disciplinary actions compared to the more punitive responses. As noted, 67% of the variables in the supportive school response category were associated with reductions in reported violent incidents and disciplinary actions, compared to only one variable (25%) of those associated with a more punitive response. Disability acceptance groups provided the most consistent association with reduced counts of violence and disciplinary actions, followed by school involvement of parent groups. The involvement of parents and presence of acceptance groups are contributors to positive school environments, which have been shown to be related to reduced school violence and disciplinary actions (e.g., Cohen et al. 2009; Ruiz et al. 2018). In light of these findings, future research should examine how acceptance groups are organized and operated, and how to better involve parents in order to create more positive school climates.

Of note with regard to the supportive school responses was the increased likelihood of disciplinary actions in schools that involved students in peer mediation. Research suggests peer mediation showed promise in reducing levels of interpersonal violence in schools (e.g., Lester et al. 2017); thus, it was surprising to find that peer mediation was related to higher levels of discipline. Additional research is needed to better understand the effectiveness of such programs.

5.2. Punitive School Responses

Punitive school responses have been associated with zero-tolerance policies, which have been linked to the school-to-prison pipeline and school dropout rates. However, some officials suggest there may be a place for such approaches in creating a structured environment with discipline and removing problematic students. The findings of this research generally show that compared to supportive actions, punitive responses were typically not associated with reduced counts of violence and disciplinary actions. These findings are consistent with other studies that note the limitations of more punitive approaches to address school disorder (e.g., Mallett 2016). The one variable that was associated with a reduction was in-school suspension with no services.

Significant finding regarding in-school suspension seems logical in the sense that the removal of troublesome students contributes to a less problematic and more comfortable learning environment. However, this suggestion is worth exploring in future research in attempts to understand exactly how it is implemented in the schools where it produced the desired effects of reducing violence, with particular concern for identifying means to ensure that suspended students are not discouraged or prevented from furthering their education. Simply removing students does not necessarily address the bigger picture of why their problems exist and persist, and it increases student likelihood of ending up in our justice systems (e.g., Monahan and Torres 2010). In-school suspension is a less severe punishment than out-of-school suspension, which has been associated with school disengagement and academic failure (e.g., Arcia 2006; Noltemeyer et al. 2015), increased risk of dropping out of school (e.g., Rosenbaum 2018), and increased risk for involvement in our justice systems (Rosenbaum 2018). Perhaps keeping the student in the school environment while suspended has beneficial aspects not recognized when the student is removed from campus.

5.3. Other Impacts on Violence and Discipline

In addition to assessing the efficacy of supportive and punitive responses to school violence, the present study examined the impacts of two other important areas related to school safety: security and crime-prevention practices, and school context. Only one security and crime-prevention variable was related to violence and disciplinary actions. Having a threat assessment team was positively related to school violence. Threat assessment teams have become increasingly common in schools as law enforcement officials and school administrators widely support the institution of such teams as a means of preventing school violence (Fein et al. 2002). Threat assessment is designed to identify

and respond to both serious and non-serious threats. Response plans exist to respond to all threats, including less serious ones which may be viewed as signs of student frustration that could lead to more serious actions. The finding that the presence of such teams is related to increased levels of violence warrants additional scholarly attention in this area.

The measures of school context provided the most consistent statistically significant findings in this study. Issues such as racial and ethnic tensions, frequent bullying, cyberbullying, and the location of the school were all significantly associated with increased incidents of violence and disciplinary actions. These findings are largely in accord with previous research; for instance, the presence of racial tensions has been identified as related to increased levels of school violence (Crawford and Burns 2015, 2016; Maume et al. 2010), as has the presence of schools in urban areas (e.g., Crawford and Burns 2015; Jennings et al. 2011). These positive associations highlight school contexts that may fall within the scope of what officials are able to address through policy and planning. Attempts to improve these contextual problems may help foster a safe and positive school climate.

5.4. 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 cross-sectional and cannot be used to determine cause and effect. For example, consider the positive association between student involvement in peer mediation and increased reports of violence and disciplinary actions. It is possible that peer mediation programs were created to address particular problems within the school at a key timepoint, and it may be too soon to evaluate whether they have an ameliorative effect or not. 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.

Another notable limitation is that the data examined in this research are based on a survey of administrators and their reports of key issues within their schools. Schools and districts may have different policies and cultures, which impact how violent incidents and disciplinary actions are reported and processed both officially and unofficially. This could affect the dependent variables under study. Furthermore, the unique context of each school may impact generalizability to others 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.

6. Conclusions

Beginning in the 1980s the United States largely adopted a "get tough" approach to crime and delinquency that resulted in heavy enforcement of the law and a substantially increased number of people under correctional supervision. Prior to this period (during the 1960s and early 1970s), the country approached crime from a less punitive approach that emphasized assisting and monitoring offenders in the community. The most recent period of cracking down on crime and delinquency reflects the punitive approaches taken by some schools, while the more supportive and therapeutic efforts witnessed in the 1960s and 1970s reflect the more supportive approach taken by others. Both approaches have their strengths and weaknesses, as well as successes and failures. Ultimately, a goal of school administrators in creating safe schools is to identify and use best practices, with particular consideration of school context.

Recent efforts to more strictly enforce discipline and the law in schools is reflected in various legislative acts. For instance, the Safe Schools Act of 1994 has contributed to the punitive approach increasingly seen in schools, as it mandates that public schools keep close relations with law enforcement and juvenile justice agencies in order to qualify for federal funds. Further, the No Child Left Behind Act of 2001 pressures schools to remove disruptive students who may distract other students from improving a school's standardized testing aggregate score (Schept et al. 2015).

Compared to the punitive approaches measured in the present study, the supportive measures were more often associated with reductions in violence and disciplinary actions. These findings do

not suggest that all punitive approaches are unwarranted. Instead, the results provide direction for school administrators who may be seeking effective means to address school violence. Akin to the rehabilitative approaches taken to address crime in society, providing supportive services as opposed to punitive responses may be viewed as "being soft". "Being soft", however, may be a more effective approach to addressing problems in schools as suggested in the present study. "Being effective" should be the primary focus.

Of additional significance are the findings that crime-prevention and security measures had minimal effects on school violence and disciplinary actions. These approaches have been increasingly used to address school disorder. A more directed focus on these approaches could provide better insight regarding their effectiveness. School context variables appear to have the most significant influence on violence and disciplinary actions. Racial and ethnic tensions, bullying, and the location of the school were all related to school violence and disciplinary actions.

Ultimately, there needs to be a balance among the punitive and supportive approaches, with consideration of other factors, including the school context variables measured in the present study. Each school, student, and act of violence or misconduct is unique. A "one size fits all" approach will not work; thus, the onus is on school administrators and other involved parties to consider their respective challenges and available resources, and to respond in a manner that best provides a safe and productive school setting.

References

Akiba, Motoko. 2010. What predicts fear of school violence among U.S. adolescents? *Teachers College Record* 112: 68–102.

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]

Cohen, Johnathan, Elizabeth M. McCabe, Nicholas M. Michelli, and Terry Pickeral. 2009. School climate: Research, policy, practice, and teacher education. *Teachers College Record* 111: 180–213.

Cornell, Dewey, and Francis Huang. 2016. Authoritative school climate and high school student risk behavior: A cross-sectional multi-level analysis of student self-reports. *Journal of Youth and Adolescence* 45: 2246–59. [CrossRef] [PubMed]

Cornell, Dewey, Anne Gregory, and Xitao Fan. 2011. Reductions in long-term suspensions following adoption of the Virginia Student Threat Assessment Guidelines. *Bulletin of the National Association of Secondary School Principals* 95: 175–94. [CrossRef]

Cornell, Dewey, Jennifer L. Maeng, Anna G. Burnette, Yuane N. Jia, Francis Huang, Timothy Konold, Pooja Datta, Marisa Malone, and Patrick Meyer. 2018. Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly* 33: 213–22. [CrossRef] [PubMed]

Cornell, Dewey, Korrie Allen, and Xitao Fan. 2012. A randomized controlled study of the Virginia Student Threat Assessment Guidelines in grades K-12. *School Psychology Review* 41: 100–15. [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 of Police Strategies and Management* 39: 455–77. [CrossRef]

Demaray, Michelle K., and Christine K. Malecki. 2002. The relationship between perceived social support and maladjustment for students at risk. *Psychology in the Schools* 39: 305–16. [CrossRef]

DiPietro, Stephanie M., Lee A. Slocum, and Finn-Aage Esbensen. 2015. School climate and violence. *Youth Violence & Juvenile Justice* 13: 299–322.

Eisenbraum, Kristin D. 2007. Violence in schools: Prevalence, prediction, and prevention. *Aggression and Violent Behavior* 12: 459–69. [CrossRef]

Fein, Robert A., Bryan Vossekuil, William S. Pollack, Randy Borum, William Modzeleski, and Marisa Reddy. 2002. *Threat Assessment in Schools: A Guide to Managing Threatening Situations and Creating Safe School Climates*; Washington: U. S. Department of Education.

Fisher, Benjamin W., Samantha Viano, F. Chris Curran, F. Alvin Pearman, and Joseph H. Gardella. 2018. Students' feelings of safety, exposure to violence and victimization, and authoritative school climate. *American Journal of Criminal Justice* 43: 6–25. [CrossRef]

Garson, G. David. 2012. *Testing Statistical Assumptions*. Asheboro: Statistical Associates Publishing. Available online: http://www.statisticalassociates.com/assumptions.pdf (accessed on 3 November 2020).

Greene, Michael B. 2005. Reducing violence and aggression in schools. *Trauma, Violence, and Abuse* 6: 236–53. [CrossRef] [PubMed]

Greytak, Emily A., Joseph G. Kosciw, and Madelyn J. 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 L. 2005. A primer for using and understanding weights with national datasets. *Journal of Experimental Education* 73: 221–48. [CrossRef]

Hemphill, Sheryl A., Stephanie M. Plenty, Todd I. Herrenkohl, John W. Toumbourou, and Richard F. Catalano. 2014. Student and school factors associated with school suspension: A multilevel analysis of students in Victoria, Australia and Washington State, United States. *Children and Youth Services Review* 36: 187–94. [CrossRef]

Jackson, Michael, Melissa Diliberti, Kemp Jana, 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: U. S. Department of Education and National Center for Education Statistics. Available online: https://eric.ed.gov/?id=ED581663 (accessed on 5 November 2020).

Jennings, Wesley G., David N. Khey, Jon Maskaly, and Christopher M. 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]

Jones, Jeffrey M. 2018. More Parents, Children Fearful for Safety at School. *Gallup*. Available online: https://news.gallup.com/poll/241625/parents-children-fearful-safety-school.aspx (accessed on 5 November 2020).

Konold, Timothy, Dewey Cornell, Francis Huang, Patrick Meyer, Anna Lacey, Erin Nekvasil, Anna Heilbrun, and Kathan Shukla. 2014. Multilevel multi-informant structure of the Authoritative School Climate Survey. *School Psychology Quarterly* 29: 238–55. [CrossRef]

Kosciw, Joseph G., Neal A. Palmer, Ryan M. Kull, and Emily A. 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]

Lester, Soraya, Cayleigh Lawrence, and Catherine L. Ward. 2017. What do we know about preventing school violence? A systematic review of systematic reviews. *Psychology, Health, and Medicine* 22: 187–223. [CrossRef] [PubMed]

Liljeberg, Jenny F., Jenny M. Eklund, Marie V. Fritz, and Britt Klinteberg. 2011. Poor school bonding and delinquency over time: Bidirectional effects and sex differences. *Journal of Adolescence* 34: 1–9. [CrossRef] [PubMed]

Losen, Daniel J., 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 Proyecto Derechos Civiles.

Mallett, Christopher A. 2016. The school-to-prison pipeline: A critical review of the punitive paradigm shift. *Child & Adolescent Social Work Journal* 33: 15–24.

Maskaly, Jon, Christopher M. Donner, Jennifer L. Lanterman, and Wesley G. Jennings. 2011. On the association between SROs, private security guards, use-of-force capabilities, and violent crime in schools. *Journal of Police Crisis Negotiations* 11: 159–76. [CrossRef]

Matthews, Elizabeth. 2019. Invasive security practices in secondary public schools and the role of school-based parent involvement. *Education and Society* 37: 25–43. [CrossRef]

Maume, Michael O., Yeoun S. Kim-Godwin, and Caroline M. Clements. 2010. Racial tensions and school crime. *Journal of Contemporary Criminal Justice* 26: 339–58. [CrossRef]

Monahan, Torin, and Rodolfo D. Torres. 2010. *Schools under Surveillance: Cultures of Control in Public Education*. Piscataway: Rutgers University Press.

Musu-Gillette, Lauren, Anlan Zhang, Ke Wang, Jizhi Zhang, Jana Kemp, Melissa Diliberti, and Barbara A. Oudekerk. 2018. *Indicators of School Crime and Safety: 2017 (NCES 2018-036/NCJ 251413)*. Washington: National Center for Education Statistics.

Nekvasil, Erin, and Dewey G. Cornell. 2015. Student threat assessment associated with positive school climate in middle schools. *Journal of Threat Assessment and Management* 2: 98–113. [CrossRef]

Noltemeyer, Amity L., Rose M. Ward, and Caven Mcloughlin. 2015. Relationship between school suspension and student outcomes: A meta-analysis. *School Psychology Review* 44: 224–40. [CrossRef]

Peguero, Anthony A., Lisa Yost, Melissa Ripepi, and Kecia Johnson. 2019. Weapons at school: Examining the significance of place. *Journal of School Violence* 19: 77–92. [CrossRef]

Piza, Eric L. 2012. Using Poisson and negative binomial regression models to measure theinfluence of risk on crime incident counts. *Rutgers Center on Public Security*. Available online: https://pdfs.semanticscholar.org/087c/ea2406c9ea6e26d2c8c1b77617da75b0e9c9.pdf (accessed on 7 November 2020).

Robers, Simone, Anlan Zhang, Rachel E. Morgan, and Lauren Musu-Gillette. 2015. *Indicators of School Crime and Safety: 2014 (NCES 2015-072. NCJ 248036)*. Washington: 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 D., Susan D. McMahon, and Leonard A. Jason. 2018. The role of neighborhood context and school climate in school-level academic achievement. *American Journal of Community Psychology* 61: 296–309. [CrossRef] [PubMed]

Schept, Judith, Tyler Wall, and Avi Brisman. 2015. Building, staffing, and insulating: An architecture of criminological complicity in the school-to-prison pipeline. *Social Justice* 41: 96–115.

Skiba, Russell, and Jeffrey Sprague. 2008. Safety without suspensions. *Educational Leadership* 66: 38–43.

Snapp, Shannon D., Jennifer M. Hoenig, Amanda Fields, and Stephen T. Russell. 2014. Messy, butch, and queer: LGBTQ youth and the school-to-prison pipeline. *Journal of Adolescence Research* 30: 57–82. [CrossRef]

Swartout, Kevin M., Martie P. Thompson, Mary P. 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]

Time, Victoria, and Brian K. Payne. 2008. School violence prevention measures: School officials' attitudes about various strategies. *Journal of Criminal Justice* 36: 301–6. [CrossRef]

Wald, Johanna, and Daniel J. Losen. 2003. Defining and redirecting a school-to-prison pipeline. In *Deconstructing the School-to-Prison Pipeline: New Directions for Youth Developments*. Edited by Johanna Wald and Danial J. Losen. San Francisco: Josey-Bass, vol. 99, pp. 9–15.

White, Arielle E., Julia Moeller, Zorana Ivcevic, Marc A. Brackett, and Robin Stern. 2018. LGBTQ adolescents positive and negative emotions and experiences in U.S. high schools. *Sex Roles* 79: 594–608. [CrossRef]