



Student Crime and School Suspensions in Five Different School Types in an Entire U.S. State

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Abstract

The purpose of this study was to compare five different types of school organization and the effects that such structure had on (a) 16 different types of student crime committed at school, and (b) subsequent school-related short-term student suspensions. The data originated with all the public schools (n = 2,590) in North Carolina during the 2015-2016 school year: traditional public schools (n = 1,838), charter public schools (n = 157), and other public schools with one of three levels of implementation of Positive Behavior Intervention and Support (PBIS) programming (Green Ribbon schools, n = 269; Model schools, n = 211; Exemplar schools n = 115). Results showed that charter schools experienced significantly lower school-related crime than did traditional public schools—but not all PBIS schools—in five of the 16 different types of school crime measured. Moreover, charter schools demonstrated significantly lower short-term suspension rates of any type of school organization. School crime implications will be provided.

Keywords: *crime, violence, schools, suspensions.*

Without crime-free school environments students cannot learn as they should, and school staff are likely to be distracted away from their duty to deliver effective instruction. Given the recent school shootings in the United States and the aftermath in Santa Fe, Texas, and Parkland, Florida (among many other locations in the U.S.), ensuring the well-being of students at school continues to receive substantive attention. In today's schools effective student protection and crime reduction provisions have never been more important and they are assumed to be the bedrock of school success [1].

Arguably, one method of changing the classroom and school crime “culture” is for schools to implement Positive Behavior Intervention and Support (PBIS) programming. Positive Behavior Intervention and Support is a tiered school organization system to assist in classroom and schoolwide-related behavior management. It includes “an ongoing process of research-based assessment, intervention, and data-based decision making focused on building social and other functional competencies, creating supportive contexts, and preventing the occurrence of problem behaviors” [2, p. 71]. From its beginning in the 1980s, properly delivered PBIS includes (a) defining for students the observable and measurable classroom and school-wide behavioral expectations (i.e., rules), (b) teaching and providing students examples of what the PBIS desired behaviors are in all school environments, (c) providing students with recurrent positive reinforcement when behavioral expectations are demonstrated, (d) describing to students the consequences of not following behavioral expectations in school, and (e) constantly collecting data on student responses to the behavioral procedures used to assist pupils in orderly conduct [3].

Since 2005-2006 the North Carolina Department of Public Instruction (NCDPI) has sub-categorized the schools employing PBIS into three levels of implementation, “Green Ribbon,” “Model School,” and “Exemplar School” (the highest level of implementation). These three types of PBIS implementing schools presently comprise roughly 23% of all public schools in the state. The requirements for each PBIS implementation level are extensive and are found here:

<https://drive.google.com/file/d/1o9srvNCBoHyfXhNyj0AEa32yvBhecc5l/view>.

An additional method of changing the crime culture of public schools to the benefit of students is for districts to implement charter schools. Charter schools operate outside traditional public school practices in that they have a level of independence separate from state educational rules and regulations, and oftentimes have strict admission requirements. Charter schools provide a different school structure that does not include a unified bureaucracy at the district level and, in so doing, allows such schools to pursue an educational treatment method unique to each charter. Nationwide, there are over 7,000 public charter schools in the U.S. that educate over 3.2 million students.



One important question still remains, however, related to school structure and its effect on school-related crime and violence committed by students in attendance. That is, are PBIS and charter schools more successful than traditionally organized public schools in attaining lower incidence rates of student crime and violence at school?

The purpose of the present study was to examine reported acts of student crime and violence, and other related educational factors, in five types of schools of a state during school year 2015-2016 (the most recent time period available to the researchers). The major dependent variables were specific recorded acts of student crime and violence (SCV) committed at school ($n = 16$, see below) in all traditional public schools, charter public schools, and schools that had “Green Ribbon,” “Model,” and “Exemplar” status of PBIS implementation. The above five public school types educated over 1.53 million students in the state during the school year of interest. Supplementary, related dependent variables included rates of short-term suspensions (STSs) in the five school organizational types.

The following research questions guided the investigation: (a) What SCV rate differences exist (if any) in the five types of schools in the state during the 2015-2016 school year? And (b) Do STS (i.e., 10 or fewer days per incident) differences exist across the five types of schools in the state?

Method

Data source

Data analyzed in this multi-year, grant-supported research project originate with annual school statistics in North Carolina, a Southeastern U.S. state which is the 9th largest (i.e., in terms of population) in the country.

Sample

During school year 2015-2016, a total of 2,592 schools submitted the study-related school data to the DPI. Type of school (i.e., PBIS school implementation level, traditional public, public charter) was compared on the variables of interest without emphasis on *individual* students.

Dependent variables

The following measures were assessed across the five school types during school year 2015-2016 in the state: (a) reported acts of SCV (per 1,000 students in each school), and (b) rate of STSs (per 100 students) as well as number of days assigned to each STS incident. By law, acts of SCV were classified into 16 different categories by the DPI and are found at

<http://www.ncpublicschools.org/research/discipline/offenses/>

Data analyses

Preliminary data evaluation led to using nonparametric, Kruskal-Wallis statistical tests in the analyses. The Kruskal-Wallis tests were conducted to test for differences among (a) SCV rates, and (b) STSs across the five school categories. Post hoc testing using the Dwass, Steel, Critchlow, and Fligner method (see [4]) was also conducted. Bonferroni adjustments of probability levels were also applied to correct for the multiple comparisons across variables. Pearson product-moment correlations were performed to determine the linear relationships between school size (i.e., n of students) and levels of (a) SCV, and (b) STSs.

Results

SCV comparisons

The school types differed significantly in SCV rates (per 1,000 students) pertaining to Assault on school personnel (AP) ($\chi^2(4) = 17.96, p = 0.0013$), Possession of an alcohol beverage ($\chi^2(4) = 27.82, p < .0001$), Possession of a firearm ($\chi^2(4) = 16.51, p = 0.0024$), Possession of a control substance ($\chi^2(4) = 60.39, p < .0001$), and Possession of a weapon ($\chi^2(4) = 37.93, p < .0001$). Charter schools showed the lowest AP rate among all school types.



STS comparisons

The school types differed significantly in both STS rate per 100 students ($\chi^2(4) = 48.41, p < .0001$), and STS days assigned per incident ($\chi^2(4) = 46.33, p < .0001$). Post hoc testing showed significant differences in days per short-term suspension incident in traditional versus charter schools (the latter group was lower); in STS rate per 100 students, charter schools demonstrated the lowest rate of all school types except for Exemplar PBIS schools.

Correlational findings

The linear relationship findings showed that as school size increased, so too did the number of STS days per incident. Very low correlations produced significant statistical results and the practical significance of such low relationship values, however, need to be considered.

Odds ratios

Regarding both SCV and STSs, charter schools were found to be superior in odds ratios when compared with both PBIS (i.e., all three types combined) and traditional public schools in the state. When traditional public schools were compared with PBIS schools (i.e., all three types combined) in STS days per incident, the odds favored PBIS schools to be lower in the construct.

Discussion

This study compared five different types of school organization and the effects that such educational models had on student crime and behavioral outcomes. Keeping in mind that the present large sample of schools had numerous exceptions, it appears that charter schools had more positive outcomes in comparison to other types of schools in this one U.S. state.

When traditional schools were compared with charter schools on SCV the latter group demonstrated significantly lower rates on 25% of the variables examined. Likewise, PBIS schools did not fare as well in terms of SCV in comparison to charter schools in the state. Given today's prominence of school-related student crime and violence, and while the implications of these study findings can be explicated in different ways, perhaps the school administration policies of charter schools related to student crime need to be further examined in order to replicate on a larger scale.

Limitations

The social validity of this research must be viewed through its shortcomings in order to judge its contribution. Differences across the dependent variables could have existed across school levels (e.g., elementary, middle, high schools) which were not separated in this study. The effect that school organization type had on student academic outcomes was also not examined herein and is worthy of additional scrutiny. Lastly, the results of this one state examination of the variables of interest may not generalize easily to other localities.

Conclusions

It is not recommended that traditional public education, and PBIS implementation in schools, should be shelved in light of the results shown herein. Charter schools, too, have problems, and skepticism of their efficacy exists in the U.S. (see [5]). It also appears that students in urban charter schools appear to obtain more academic benefit in comparison to students who attend charters in non-urban schools [6]. Nevertheless, according to the present findings charter schools appear to have some school-related crime and STS benefits in comparison to other types of school organization, and such information should be disseminated.



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