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Can private schools improve school climate? Evidence from a nationally representative sample

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ABSTRACT

A safe school environment is essential for effective learning and the inculcation of civic values. The article presents a comparative analysis of school climate and safety in private and public schools using nationally representative data from the Schools and Staffing Survey (SASS) 2011–2012. Ordinal logistic regressions are used to study differences in self-reported school climate and safety related information by public and private school principals. Comparisons are also done based on school locality, between public charter and traditional public schools, and between Catholic, other religious, and nonsectarian private schools. We find that principals in private schools are much less likely to report the presence of strict school safety practices than their public school counterparts; also, due to lower likelihood of crime-related incidences at their campuses, we conclude that private schools may offer a school environment that is more suitable for long-term success.

KEYWORDS

character education; private school; public education; school choice; school climate

Introduction

Schools not only act as venues for developing cognitive skills; they are also supposed to nurture civic values and attributes of good citizenship in children (Mann, 1855). A strong moral education likely leads to a safer school environment and less criminal activity in the long run. A disruptive and unsafe school environment reduces the likelihood that child learning occurs (Brookmeyer, Fanti, & Henrich, 2006; Goldstein, Young, & Boyd, 2008). This likely disrupts instruction, reduces student motivation, and harms school image. Furthermore, an instance of crime or violence at school not only affects the alleged perpetrator, but also the peers and bystanders. Because an unstable learning environment reduces the ability of other students to focus on their education, the rest of the student population is negatively affected by the uncertain school climate (Cornell & Mayer, 2010).

Although crime and safety together affect school climate, they slightly differ. For example, bullying is not a crime but it may affect the safety of

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children in school. It is important to regularly update and monitor indicators of school climate as they provide information concerning relative quality levels (Zhang, Musu-Gillette, & Oudekerk, 2016). Such information may help policymakers, school staff, and leadership identify the causal mechanism of such incidents. Moreover, parents might be able to use such information to select better institutions in a school choice environment, especially if the problems do not diminish over time at a particular school.

Defenders of both traditional public schools and private schools argue theoretically and empirically that either school type creates a common good for society (McTighe, 2017; Powers & Potterton, 2017). Researchers continue to debate the evidence on outcomes such as student achievement, attainment, and civic values (Berner, 2017; Gutmann, 1999; Shakeel, Anderson, & Wolf, 2016; Wolf, 2007). An understudied area in school choice is school climate. School climate is likely to differ across private and public institutions due to their distinct characteristics concerning competitive pressures, degree of family involvement, and degree of principal autonomy. Private schools are more likely to have a higher degree of family involvement (Hiatt-Michael, 2017) and face competitive pressures, as their customers have a much lower transaction cost associated with exit (Chubb & Moe, 1990; DeAngelis & Holmes Erickson, 2018). Increased family involvement in private schools may also be due to student selection or due to the religious nature of a majority of private schools. Since most private schools use religion as a guiding principle, it may incentivize them to convince children that morality is necessary for long-term success (Berner, 2017; Glenn, 1989; Wolf, 2007). Private school leadership exhibits more autonomy in decision making than public school leadership (Chubb & Moe, 1988; Shakeel & DeAngelis, 2017). Because of the additional autonomy to shape school-level policies, private institutions may have an advantage with fostering a strong culture and limiting behavioral disturbances. It could also be that private schools engage in strict discipline policies such as student expulsions and suspensions to maintain a better school climate.

Existence of systematic differences in school climate across public and private schools should draw the interest of policymakers who are interested in school choice interventions. School choice and competition are expected to enhance school discipline due to stronger incentives for schools to improve overall quality (Garen, 2014). Increased parental involvement and the competitive environment that private schools operate in incentivize institutions to shape character skills necessary for children to grow up as law-abiding citizens (DeAngelis, 2017; DeAngelis & Shakeel, 2017). If an individual goes through their K–12 educational experience having to walk through metal detectors, undergo random dog sniffs, use clear backpacks, and be subject to random searches for contraband, their expected cost of engaging in crime-related incidences may be lower than if they had not been

subject to a strict custodial environment every day at school (Payne, 2008). Experimental studies on vouchers reveal significantly less crime and increased safety in private schools (Greene, 2000; Peterson, Howell, Wolf, & Campbell, 2003; p. 129).

Various national surveys collect information on crime and violence in schools (Zhang et al., 2016). Ideally, one could analyze the surveys across grade levels and school sectors to understand the role played by type of school sector in relation to crime and safety at schools. The surveys are often limited to only public schools, but some nationally representative surveys collect school crime and safety related information across school sectors. The Schools and Staffing Survey (SASS) conducted on private and public school principals asks several questions related to private and public school climate. We examine whether schooling sector explains variation in school climate, student discipline, and frequency of problems occurring at schools. Additionally, within-sector differences are analyzed by comparing public charter schools, traditional public school (TPS), Catholic, other religious and nonsectarian schools. The private versus public comparison is also done by locality (i.e., city, suburban, town, and rural). Lastly, the role of possible mediators of school climate, such as number of student expulsions and suspensions, degree of parental involvement, use of religion as a guide to building school climate in private schools, and principal autonomy is examined. Because of stronger competitive pressures and more principal autonomy, we hypothesize that students in private schools experience a better school climate and less behavioral problems. We empirically examine these differences using controls for school and student characteristics.

Literature review

A bad school climate may negatively affect student learning in the short-run, (Macmillan & Hagan, 2004; Wei & Williams, 2004) and increase students' proclivity to commit crimes as adults. School crime can range from bullying to physical assaults, and may lead to depression, which can make it even more difficult for an individual to adjust to negative environments (Nansel et al., 2001; Prinstein, Boergers, & Vernberg, 2001; Storch, Nock, Masia-Warner, & Barlas, 2003).

Earlier research finds that, in comparison to private schools, the public school environment promotes increased fear of crime in students (Alvarez & Bachman, 1997). Conversely, private schools are found to promote an improved school climate, especially for low-income minority students (Bryk, Lee, & Peter, 1993; Coleman & Hoffer, 1987; Peterson & Hassel, 1998). Lleras (2008) finds that private school climate reduces student misbehavior and fear of physical abuse relative to public schools. Private schools also experience less physical bullying (Gerlinger & Wo, 2016), lower rates of

disciplinary problems, and increased school safety than public schools (Fan, Williams, & Corkin, 2011; Henkel & Slate, 2013).

Access to school choice programs substantially reduces the likelihood that students will commit crimes as adults (Dills & Hernández, 2011; DeAngelis & Wolf, 2016; Deming, 2011; Dobbie & Fryer, 2015) and become pregnant as teenagers (Dobbie & Fryer, 2015), while increasing the likelihood of graduating from high school (Cowen, Fleming, Witte, Wolf, & Kisida, 2013; Wolf et al., 2013). Studies also find that school choice interventions are associated with increased political participation, volunteering, charitable activity, and tolerance of others (Bettinger & Slonim, 2006; Campbell, 2008; Fleming, 2014; Fleming, Mitchell, & McNally, 2014).

An National Center for Education Statistics (NCES) report on “Indicators of School Crime and Safety: 2015” (Zhang et al., 2016) uses a variety of nationally representative surveys and reveals the relative prominence of crime and safety in schools across the United States. Some surveys contain data on responses from teachers and students in public and private schools—an opportunity that we exploit to highlight the systemic differences across school sectors.

In the 2011–2012 academic year, fewer private school teachers than public school teachers reported being threatened with injury (3% vs. 10%) or being physically attacked (3% vs. 6%) by a student in their school. A lower percentage of private school teachers than public school teachers reported interference in teaching because of student misbehavior (22% vs. 41%), and student tardiness and skipping class (19% vs. 38%). In 2013, fewer private school students than public school students reported presence of gangs at their institutions (2% vs. 13%) and avoiding one or more places in their school (1% vs. 4%). For each survey year between 1999 and 2013, a lower percentage of private school students than public school students reported seeing hate-related graffiti at their schools (for 2013, the statistics were 13% vs. 26%). Thus, the differences in school climate, as reported by teachers and students, seem systematic across school sectors, with a private school advantage.

The NCES report does not highlight systematic differences across school sectors based on school principals’ responses. The report also does not account for student selection and school level controls. For example, it may be that public schools have a less favorable climate simply because they are larger in size, or serve less privileged students. SASS asks questions that are more detailed to principals concerning school safety practices, school crime, and safety in comparison to questions answered by teachers. Principals’ responses are likely to be more comprehensive in nature as they know what happens across a school on a daily basis.

We provide an empirical test of the hypothesis that private schooling allows for better school climate and safety by using nationally representative survey data of principals in the United States for the 2011–2012 school year from the School and Staffing Survey. We compare responses of principals across school sectors, using school-level controls to test our hypothesis.

Data

Our data come from the SASS 2011–2012 questionnaire. The principals in the public and private schools are asked to self-report on surveys developed by the NCES. We use the latest results—from the SASS 2011–2012 survey. Tables 1–4 list the question categories and what they measure. Responses are available from 1,720 private school principals (440 Catholic, 860 other religious, and 420 nonsectarian) and 7,510 public school principals (7,040 TPS and 470 public charters).

We examine three sets of dependent variables capturing school climate, safety, problems, and discipline from SASS 2011–2012. The first set of binary dependent variables come from questions 23-A through 23-K on the principals' self-reported school safety related practices. The second category of dependent variables is from questions 21 and 22 and capture the number

Table 1. Summary statistics for principals' self-reported school safety-related practices.

Measure	Other						
	Public	Private	TPS	Charter	Catholic	religious	Nonsectarian
Control access to school buildings during school hours	88.24	80.09	88.43	84.65	93.02	78.27	69.99
Control access to school grounds during school hours	44.13	42.07	43.7	52.38	45.96	38.65	44.7
Require students to pass through metal detectors each day	2.68	0.4	2.65	3.25		0.17	1.28
Perform one or more random metal detector checks on students	5.04	1.19	4.99	6.02	0.25	0.73	3.11
Close the campus for most or all students during lunch	61.08	44.42	61.11	60.49	52.75	44.25	35.93
Use one or more random dog sniffs to check for drugs	24.01	4.1	24.51	14.3	6.18	2.87	4.31
Perform one or more random sweeps for contraband, but not including dog sniffs	12.13	7.52	11.81	18.31	2.63	8.43	10.93
Require students to wear uniforms	19.33	56.86	17.16	60.8	90.88	53.88	26.7
Enforce a strict dress code	49.12	71.33	47.95	71.59	92.92	75.74	39.74
Require clear book bags or ban book bags on school grounds	5.71	1.72	5.69	6.11	1.47	1.31	2.8
Require students to wear badges or picture IDs	7.43	2.71	7.16	12.6	4.4	1.93	2.45
N	7,510	1,720	7,040	470	440	860	420

Note. TPS = traditional public school. Summary statistics presented using population weighted percentages for each category.

of student expulsions and suspensions. Our third set contains questions 25-A through 23-M and measures the occurrence of problems at school using a 5-point Likert scale (from “*happens daily*” to “*never happens*”). We focus on the final response category in the scale; in other words, we examine the likelihood that school leaders report that certain problems never occur at their institutions.

The survey items include presence of school safety practices such as controlling access to school buildings and requiring that students wear badges or photo IDs. Tables 1 and 2 list the population-weighted summary statistics expressed as percentages for the measures reported by the principals in the school sectors.

Public school principals are six times more likely to report that their schools perform random dog sniffs on their children. Overall, public school principals report more presence of school safety related measures than private school principals. However, private schools are more likely to require students to wear uniforms and enforce a strict dress code. This is consistent with the emphasis on uniforms establishing a common culture in private schools, most of which are religious (Bryk et al., 1993; p. 129; Berner, 2017). These differences between public and private schools hold across school locale (city, suburban, town, and rural). Within school type, comparisons generally show a larger presence of school safety related practices for public charter relative to TPS, and for Catholic private

Table 2. Summary statistics for principals’ self-reported school safety-related practices (by locale).

Measure	City		Suburban		Town		Rural	
	Public	Private	Public	Private	Public	Private	Public	Private
Control access to school buildings during school hours	88.51	87.19	90.46	87.41	87.36	84.3	86.56	59.51
Control access to school grounds during school hours	54.92	55.59	46.35	42.11	36.85	40.88	36.77	24.31
Require students to pass through metal detectors each day	5.24	0.8	1.82	0.19	1.65	0.3	1.8	0.19
Perform one or more random metal detector checks on students	8.28	1.18	3.85	1.36	5.08	3.6	3.44	
Close the campus for most or all students during lunch	59.68	49.07	60.33	46.22	63.07	44.8	61.97	35.73
Use one or more random dog sniffs to check for drugs	13.35	4.83	17.79	3	32.43	7.01	34.12	3.32
Perform one or more random sweeps for contraband, but not including dog sniffs	11.04	4.09	8.64	6.08	14.29	15.84	14.99	10.55
Require students to wear uniforms	39.95	65.77	16.13	61.98	12.13	55.58	8.61	38.9
Enforce a strict dress code	56.48	74.23	47.95	75.43	45.95	66.93	45.57	64.03
Require clear book bags or ban book bags on school grounds	5.99	0.75	4.33	2.3	6.55	1.23	6.29	2.5
Require students to wear badges or picture IDs	11.81	3.06	7.66	3.83	4.58	0.92	4.94	1.55
N	1,560	620	1,900	580	1,270	140	2,800	380

Note. Summary statistics presented using population weighted percentages for each category.

schools relative to other religious and nonsectarian schools. This is consistent with research that shows public charter and Catholic schools serving a larger proportion of disadvantaged families (Bryk et al., 1993; Finn, Manno, & Wright, 2016; pp. 29–32). Incidence of school crime may be positively correlated with disadvantaged status of families (Chen, 2007; Chen & Weikart, 2008), thus demanding increased school safety practices in public charter and Catholic schools.

Tables 3 and 4 list the population-weighted summary statistics expressed as percentages for principals reporting that a given problem never happens at their school. Survey items to school principals ranged from occurrence of physical conflicts among students to occurrence of gang activities.

Private school principals are much more likely to report that crime-related incidences never occur at their school. For example, private school principals are five to six times as likely as public school leaders to report that student bullying and physical conflict never occurs in their institutions. The differences remain across locale. Within school type, comparisons generally show an increased likelihood for problems to never occur at public charter versus TPS and for other religious versus Catholic and nonsectarian schools.

Table 5 shows a greater degree of parental involvement in private schools in last year in comparison to public schools. Questions 26-A through 26-I ask what percentage of students (0%–25%, 26%–50%, 51%–75%, 76%–100%, or not applicable) had at least one parent or guardian participating in school events.

Table 3. Summary statistics for principals' self-reported occurrence of problems (never happens) at school.

Measure	Public	Private	TPS	Charter	Catholic	Other religious	Nonsectarian
Physical conflicts among students	4.71	27.25	4.2	14.4	22.95	29.82	26.74
Robbery or theft	16.17	52.48	16.05	18.35	49.2	54.42	52.12
Vandalism	20.43	54.44	20.06	27.52	42.03	61.21	54.22
Student use of alcohol	69.44	85.28	69.39	70.28	85.87	88.28	78.75
Student use of illegal drugs	63.44	86.1	63.54	61.61	87.56	89.38	78.06
Student possession of weapons	58.16	93.5	57.56	69.61	94.22	95.09	89.58
Physical abuse of teachers	79.62	93.67	79.28	86.13	97.23	97.85	81.63
Student racial tensions	54.76	78.83	54.29	63.72	76.23	83.04	73.28
Student bullying	3.66	19.01	3.29	10.73	5.08	24.06	23.79
Student verbal abuse of teachers	31.24	71.04	30.79	39.92	74.45	74.79	60.03
Widespread disorder in classrooms	72.24	85.33	72.56	66.11	88.2	85.28	82.4
Student acts of disrespect for teachers	12.38	36.02	12.15	16.8	38.47	31.32	42.73
Gang activities	80.41	97.66	80.35	81.59	99.25	98.8	93.71
N	7,510	1,720	7,040	4,70	440	860	420

Note. TPS= traditional public school. Summary statistics presented using population weighted percentages for each category.

Table 4. Summary statistics for principals' self-reported occurrence of problems (never happens) at school (by locale).

Measure	City		Suburban		Town		Rural	
	Public	Private	Public	Private	Public	Private	Public	Private
Physical conflicts among students	5.03	23.68	4.47	26.7	3.79	22.66	5.03	34.64
Robbery or theft	12.81	45.73	19.3	54.54	15.11	45.78	16.66	61.71
Vandalism	16.64	49.07	18.87	52.02	17.36	54.24	26.03	64.83
Student use of alcohol	73.89	82.85	70.6	86.52	68.49	89.54	65.32	85.22
Student use of illegal drugs	66.69	85.02	66.75	84.89	60.66	88.94	59.28	87.91
Student possession of weapons	55.64	94.18	55.86	94.02	54.29	91.22	63.68	92.84
Physical abuse of teachers	72.58	95.27	78.71	92.02	78.46	88.99	86.46	95.54
Student racial tensions	51.64	75.51	52	78.76	54.42	77	59.66	84.15
Student bullying	4.51	15.43	3.15	14.79	3.78	15.92	3.34	30.44
Student verbal abuse of teachers	28.35	67.55	33.36	72.7	26.97	75.07	33.55	71.98
Widespread disorder in classrooms	63.41	85.37	76.04	86.45	74.04	82.53	75.35	85.02
Student acts of disrespect for teachers	11.5	37.81	14.21	37.65	8.91	29.13	13.02	34.39
Gang activities	69.14	98.11	82.19	97.43	82.05	98.37	87.2	97.05
N	1,560	620	1,900	580	1,270	140	2,800	380

Note. Summary statistics presented using population weighted percentages for each category.

Table 5. Summary statistics for parental involvement in school (very involved last year).

Measure	Public	Private
Open house or back-to-school night	44.14	69.41
Parent-teacher conferences	48.84	75.33
Special subject-area events	28.17	57.74
Education workshops	5.13	19.54
School-parent compact	65.4	88.47
Volunteer	6.09	29.09
Instructional issues	2.83	13.64
Governance (e.g. PTA)	4.75	17.92
Budget	1.93	9.28

Note. Summary statistics presented using population weighted percentages for each category.

Research design

We employ three empirical models to study the differences in school principals' self-reported responses to school climate and safety-related measures. We first predict the likelihood of a principal reporting the presence of school safety related practices such as the presence of metal detectors and random dog sniffs while controlling for vector X of school-level characteristics: school size, school level (indicator variables for elementary, secondary, and combined), total school enrollment, number of full-time teachers, student-teacher ratio, percent of minority teachers, percent of minority students, urbanicity (indicator variables for city, suburban, town, and rural) and percentage of enrolled students approved for the National School Lunch Program. Our explanatory variable of interest, *School Type*, is an indicator variable taking on the value of one if a given school, i , is private, and zero if the school is public. The variable is recoded for three other comparisons: public charter relative to TPS, Religious schools (Catholic and other-religious) relative to nonsectarian private, and Catholic

private schools relative to all other private schools. The coefficient of interest, β_1 , measures the difference in likelihood in principals' self-reported measures related to school safety practices (SSP) across the school sectors after controlling for school-level characteristics. In other words, in our base estimation of private versus public schools, β_1 captures whether private school leaders are more or less likely than public school leaders to report the presence of given safety practices at their institutions, on average. The unobserved error term is contained in μ .

$$SSP_i = \alpha + \beta_1 School\ Type_i + \beta_2 X_i + \mu_i \quad (1)$$

Second, we study student expulsion and suspension across school types using OLS regression. The dependent variable for student discipline (*SD*) is continuous and we use the same vector of controls (*X*) employed in equation (1). The coefficient of interest, β_1 , captures the number of expulsions and suspensions reported by a given sector's school principals relative to those in other sectors after controlling for school-level characteristics. The unobserved error term is contained in μ .

$$SD_i = \alpha + \beta_1 School\ Type_i + \beta_2 X_i + \mu_i \quad (2)$$

In the final model, we use an ordinal logistic regression to study the effect of school sector and safety related practices on the probability of occurrence of problems such as physical conflicts, robbery, and vandalism at schools. The dependent variable for measures related to school problems (*SP*) has five categories (from "Happens daily" to "Never happens"). We focus on the last category—never happens—and run a model first controlling for school-level characteristics (vector *X*) and then also add controls for school safety practices (SSP).

$$SP_i = \alpha + \beta_1 School\ Type_i + \beta_2 X_i + SSP_i + \mu_i \quad (3)$$

The coefficient of interest, β_1 , captures the likelihood of private school principals to report that problems never occur at their schools relative to their public sector counterparts after controlling for school-level characteristics and school safety practices (SSP). The unobserved error term is contained in μ .

In equation 3, we conduct an analysis for studying the role of possible mediators in reducing school problems. Hence, for private versus public schools we separately control for student expulsions and suspensions (*SD*), degree of parental involvement (a factor analysis loads the variables onto two factors with Cronbach's alpha = 0.8509) and level of self-reported principal autonomy over setting the school's discipline policy (recoded for 0 = no influence to 4 = major influence). We report average marginal effects for equations 1 and 3. The restricted use data provided by NCES are imputed and adjusted for survey nonresponse. As the sampling strategy used by NCES in the SASS survey is based on the stratified probability proportionate to size,

we employ the balance repeated replication bootstrap methodology. This methodology reflects the true population values and not just the sampled units. Use of the bootstrap strategy allows correct calculation of the standard errors and the final estimates are not affected.

Results

As suggested from [Tables 1](#) and [2](#), the results in [Table 6](#) indicate that private schools are more likely than public schools to require that students wear uniforms, follow a strict dress code, and that schools control access to school grounds. Conversely, private schools are less likely to control access to school buildings during school hours, require students to pass through metal detectors, close the campus for all students during lunch, use random dog sniff checks for drugs, perform one or more random sweeps for contraband, require clear book bags (or ban book bags), and require students to wear badges or photo IDs, after controlling for school size and other covariates. The effects are generally statistically significant. We propose two possible mechanisms to explain these findings. The first is that competitive pressures incentivize private schools to foster a culture that keeps students engaged and satisfied. Second, public schools are more likely to follow administrative requirements laid down by central authorities (Chubb & Moe, 1988; Shakeel & DeAngelis, 2017).

The directionality and statistical significance generally hold across schools in city, suburban, and rural areas. After controlling for school level characteristics, the differences between public charter and TPS are statistically significant only for four outcomes. Public charter schools are more likely than TPS to require students to wear uniforms, enforce a strict dress code, and are less likely to perform metal detector checks and use random dog sniffs to check for drugs. Religious versus nonsectarian and Catholic versus other schools are more likely to enforce requirements concerning uniforms, dress code, and controlling access to school buildings during school hours.

[Table 7](#) shows that private schools are more likely to expel students in comparison to public schools. However, this effect is small, as the difference is only one half of a student per year. Private schools are less likely to suspend students; although the relationship loses statistical significance in the overall model. However, our model shows that private schools located in cities suspend 31 fewer students per year, on average. The significant effects for student expulsion are mainly present in rural areas while they are negative for schools in cities and positive for schools in towns. The coefficient for student expulsions and suspension between public charter versus TPS, between religious versus nonsectarian, and between Catholic versus

Table 6. Results (school safety).

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Control access to school buildings during school hours	Control access to school grounds during school hours	Require students to pass through metal detectors each day	Perform one or more random metal detector checks on students	Close the campus for most or all students during lunch	Use one or more random dog sniffs to check for drugs
Private (n = 9,230)	-0.025 (0.018)	0.057** (0.023)	-0.059*** (0.012)	-0.067*** (0.017)	-0.090*** (0.026)	-0.199*** (0.015)
City (n = 2,180)	0.035 (0.035)	0.092** (0.038)	-0.064** (0.029)	-0.093*** (0.035)	-0.044 (0.054)	-0.114*** (0.021)
Suburban (n = 2,480)	0.037 (0.028)	0.064 (0.040)	-0.045*** (0.016)	-0.040** (0.019)	-0.080* (0.041)	-0.143*** (0.031)
Town (n = 1,410)	-0.033 (0.053)	0.076 (0.077)	-0.030 (0.033)	-0.036 (0.053)	-0.072 (0.078)	-0.213*** (0.058)
Rural (n = 3,170)	-0.136*** (0.032)	-0.030 (0.040)	-0.058** (0.026)		-0.165*** (0.040)	-0.354*** (0.045)
Charter (n = 7,510)	0.004 (0.023)	0.003 (0.037)	-0.022 (0.022)	-0.026** (0.011)	-0.013 (0.046)	-0.073** (0.033)
Religious (n = 1,720)	0.126*** (0.028)	-0.035 (0.038)	-0.011* (0.005)		0.083** (0.035)	-0.019 (0.015)
Catholic (n = 1,720)	0.149*** (0.036)	-0.002 (0.042)			0.029 (0.040)	0.024* (0.012)
		(7)	(8)	(9)	(10)	(11)
Variables	Perform one or more random sweeps for contraband, but not including dog sniffs	Require students to wear uniforms	Enforce a strict dress code	Require clear book bags or ban book bags on school grounds	Require students to wear badges or picture IDs	
Private (n = 9,230)	-0.070*** (0.016)	0.400*** (0.017)	0.398*** (0.023)	-0.066*** (0.013)	-0.021 (0.013)	
City (n = 2,180)	-0.097*** (0.026)	0.497*** (0.039)	0.399*** (0.038)	-0.108*** (0.028)	-0.060** (0.027)	
Suburban (n = 2,480)	-0.061*** (0.020)	0.514*** (0.026)	0.530*** (0.033)	-0.033* (0.017)	0.031 (0.022)	
Town (n = 1,410)	-0.023 (0.057)	0.315*** (0.048)	0.336*** (0.084)	-0.103** (0.047)	-0.031 (0.032)	
Rural (n = 3,170)	-0.075** (0.033)	0.230*** (0.029)	0.302*** (0.047)	-0.060* (0.034)	-0.027 (0.029)	
Charter (n = 7,510)	0.016 (0.021)	0.181*** (0.026)	0.187*** (0.037)	-0.018 (0.020)	0.017 (0.013)	
Religious (n = 1,720)	-0.017 (0.021)	0.319*** (0.032)	0.308*** (0.021)	-0.005 (0.008)	0.002 (0.017)	
Catholic (n = 1,720)	-0.058** (0.026)	0.418*** (0.036)	0.269*** (0.043)	0.008 (0.010)	0.020** (0.010)	

Note. Table reports average marginal effects of school type on the dichotomous category, estimated after running ordered logit models. Dummies for urban-centric school locale are included as controls. Estimates use balanced repeated replication (BRR) bootstrap population weights. Standard errors in parentheses.

***p < 0.01. **p < 0.05. *p < 0.1.

other private schools are negative but only statistically significant for student expulsion in Catholic versus other private schools.

Table 8 explore whether the differences in school climate and safety related practices translate into fewer school problems. We run the 13 dependent

Table 7. Results (school discipline).

Variables	(1)	(2)
	Total students expelled	Total students suspended
Private (n = 9,230)	0.501*** (0.190)	-1.109 (5.717)
City (n = 2,180)	0.343 (0.517)	-31.159*** (9.156)
Suburban (n = 2,480)	0.597 (0.416)	14.384 (10.002)
Town (n = 1,410)	0.349 (0.248)	21.570** (9.287)
Rural (n = 3,170)	0.500*** (0.158)	6.006 (8.278)
Charter (n = 7,510)	-0.271 (0.476)	-6.908 (8.838)
Religious (n = 1,720)	-0.046 (0.110)	-0.429 (0.637)
Catholic (n = 1,720)	-0.227** (0.098)	-1.015 (0.683)

Note. Table reports regression coefficients. Dummies for urban-centric school locale are included as controls. Estimates use balanced repeated replication (BRR) bootstrap population weights. Standard errors in parentheses.

***p < 0.01. **p < 0.05. *p < 0.1.

variables from Tables 3 and 4 with and without controlling for the school climate and safety related practices from Tables 1 and 2. A consistent picture emerges from these ordinal logistic regressions. The coefficient on private school is positive and statistically significant at the 99% level of confidence in all cases except one (i.e., the student use of alcohol) where it loses statistical significance after adding controls for SSP. The general shrinking of the coefficients on the private school variable after adding controls for school climate and safety related practices implies that the school safety and climate related practices may be necessary in public schools to help them effectively control their environments. However, the existence of statically significant coefficients—even after adding controls for SSP—implies that school climate and safety related practices employed by public schools still might not allow them to achieve an overall reduced crime environment similar to private schools. The results generally hold across school locale. Overall, private schools are more likely than public schools to have an environment where school-related problems never occur.

For example, private schools are about 8 percentage points more likely than public schools to never experience physical conflicts among students, even after controlling for school-level characteristics. Student possession of weapons is a negative signal for quality learning and is likely to make the school environment unsafe. Private schools are about 28% points more likely than public schools to never experience student possession of weapons after controlling for school-level characteristics. While private school skeptics often claim that private schools do not lead to racial integration (Gutmann, 1999),



Table 8. Results (school problems).

Variables	(1) Physical conflicts among students	(2) Robbery or theft	(3) Vandalism	(4) Student use of alcohol	(5) Student use of illegal drugs	(6) Student possession of weapons	(7) Physical abuse of teachers
Private (n = 9,230)	0.078*** (0.010)	0.107*** (0.017)	0.113*** (0.020)	0.068*** (0.016)	0.124*** (0.018)	0.277*** (0.028)	0.150*** (0.018)
Private (control for SSP) (n = 9,230)	0.065*** (0.011)	0.071*** (0.019)	0.083*** (0.021)	0.015 (0.017)	0.056*** (0.020)	0.229*** (0.028)	0.108*** (0.022)
City (n = 2,180)	0.098*** (0.019)				0.138*** (0.035)		
Suburban (n = 2,480)	0.084*** (0.017)				0.078*** (0.029)		
Town (n = 1,410)	0.036 (0.027)				0.125** (0.053)		
Rural (n = 3,170)	0.068*** (0.018)				0.180*** (0.030)		
Charter (n = 7,510)	0.023*** (0.009)	0.011 (0.026)	0.042 (0.036)	0.019 (0.063)	0.016 (0.065)	0.095*** (0.033)	0.074** (0.034)
Religious (n = 1,720)	0.083*** (0.031)				0.067*** (0.019)		
Catholic (n = 1,720)	0.032 (0.029)				0.047* (0.024)		
Private (control for SD) (n = 9,230)	0.079*** (0.010)	0.108*** (0.017)	0.114*** (0.020)	0.067*** (0.016)	0.121*** (0.018)	0.272*** (0.027)	0.150*** (0.018)
Private (control for principal autonomy) (n = 9,230)	0.078***	0.105***	0.112***	0.068***	0.125***	0.276***	0.149***
Private (control for parental involvement) (n = 3,080)	0.010 (0.013)	0.017 (0.026)	0.020 (0.030)	0.016 (0.032)	0.018 (0.032)	0.028 (0.058)	0.018 (0.046)
	0.059***	0.096***	0.099***	0.073**	0.240***		0.142***

	(8)	(9)	(10)	(11)	(12)	(13)
Variables	Student racial tensions	Student bullying	Student verbal abuse of teachers	Widespread disorder in classrooms	Student acts of disrespect for teachers	Gang activities
Private (n = 9,230)	0.128*** (0.024)	0.043*** (0.007)	0.247*** (0.020)	0.076*** (0.022)	0.110*** (0.014)	0.179*** (0.021)
Private (control for SSP) (n = 9,230)	0.076*** (0.026)	0.037*** (0.008)	0.187*** (0.022)	0.043* (0.023)	0.084*** (0.015)	0.125*** (0.019)
City (n = 2,180)		0.054*** (0.014)	0.279*** (0.034)		0.159*** (0.028)	0.333*** (0.049)
Suburban (n = 2,480)		0.011 (0.011)	0.271*** (0.032)		0.110*** (0.023)	0.156*** (0.031)
Town (n = 1,410)		-0.000 (0.022)	0.281*** (0.076)		0.074* (0.038)	0.142 (0.328)
Rural (n = 3,170)		0.083*** (0.014)	0.197*** (0.054)		0.071** (0.028)	0.081* (0.041)
Charter (n = 7,510)	0.085 (0.053)	0.004 (0.010)	0.060 (0.059)	-0.008 (0.042)	0.004 (0.025)	0.097*** (0.030)
Religious (n = 1,720)		-0.003 (0.025)	0.153*** (0.029)		0.000 (0.035)	0.026* (0.015)
Catholic (n = 1,720)		-0.063*** (0.023)	0.014 (0.037)		0.051 (0.031)	0.015 (0.053)
Private (Control for SD) (n = 9,230)	0.127*** (0.024)	0.043*** (0.007)	0.248*** (0.020)	0.076*** (0.022)	0.112*** (0.014)	0.177*** (0.021)
Private (control for principal autonomy) (n = 9,230)	0.124*** (0.024)	0.042 (0.007)	0.246*** (0.020)	0.071*** (0.022)	0.109*** (0.014)	0.173*** (0.021)
Private (control for parental involvement) (n = 3,080)	0.089* (0.051)	0.025*** (0.009)	0.180*** (0.036)	0.025 (0.046)	0.054** (0.024)	0.109** (0.050)

Note. Table reports average marginal effects of school type on the “never happens” category, estimated after running ordered logit models. Dummies for urban-centric school locale are included as controls. Estimates use balanced repeated replication (BRR) bootstrap population weights. Standard errors in parentheses. ***p < 0.01. **p < 0.05. *p < 0.1.

we find that private schools are about 13% points more likely than public schools to never experience student racial tensions. This is in line with the seven studies that indicate that private school choice programs in the United States improve school racial integration overall (Swanson, 2017). Moreover, a study by Greene and Mellow (1998) finds that private school students are more likely to be integrated within their schools' lunchrooms.

Similar positive and statistically significant coefficients emerge for physical abuse of teachers, student bullying, student verbal abuse of teachers, and widespread disorder in classrooms. These results signal that, on average, private schools enjoy a superior school environment than do public schools. While we are not able to test whether better school environments in private schools translates to greater learning; based on evidence from experimental studies on school vouchers (Greene, 2000; Peterson et al., 2003) we theorize that the effect is likely to be positive.

The coefficient for public charter versus TPS is generally positive and in few cases statistically significant. Coupled with the results for private schools, the results for public charter schools offer support to our hypothesis that competitive pressures may incentivize schools to shape effective school climate. Our results accord with Garen (2014), who posits that competition and school choice could improve school discipline. Next, we discuss the role of possible mediators. Religious schools generally have higher likelihood of never experiencing school problems in comparison to nonsectarian schools. When the variable *School Type* is recoded to Catholic versus other schools, it is seen that some outcome categories lose statistical significance and also the size of coefficient shrinks. The results support our hypothesis that use of religion at private schools may incentivize the schools in shaping effective school climate. Interestingly, we find increased presence of bullying for Catholic versus other private schools.

Even after controlling for student expulsions and suspensions, the coefficients for private school's effects on school problems remains unchanged. A similar pattern is seen when we control for principal's self-reported control over setting the school's discipline policy. Overall, we do not find evidence for the role of mediators associated with student discipline and principal's control over setting school's discipline policy. Lastly, controlling for parental involvement generally yields statistically significant and positive coefficients. However, as the sample size is reduced by one third, we cannot draw a comparison with our original estimates.

The SASS data allow us to draw conclusions that may be correlational. Parental school selection is likely to affect school discipline policies and overall environment differently than residentially assigned school selections. Of course, while our models control for a variety of observable characteristics such as school size, teacher and student racial composition, and urbanicity, we are unable to account for unobservable characteristics

such as the motivation level of the parents. Parental reasons for selecting private schools related to increased safety and better environment (Goldring & Phillips, 2008; Schneider, Marschall, Teske, & Roch, 1998) may be related to their increased family involvement, socioeconomic characteristics, and religious preferences. Although our results use nationally representative data, the results are cross sectional and should not be assigned a causal interpretation. However, earlier experimental studies on private school vouchers (Greene, 2000; Peterson et al., 2003) show that private schools do better at improving safety and reducing crime than public schools. Future research may explore the role played by discipline policies and parental involvement in this area.

Conclusion and policy implications

We present a national level comparison of school climate and safety across public and private schools. A cross-sectional comparison of self-reported survey questions asked to public and private school principals reveals that private schools may have systematic advantage over public schools. One systematic advantage for private schools comes in the form of fewer restrictions related to school climate and safety that might make students feel more comfortable and trustworthy. We find some evidence for the moderating role of religious schools associated with a lower likelihood of crime related incidence in campus. No evidence was found for principal's control over setting the school's discipline policy and student expulsions and suspensions. Our sample did not allow us to compare results controlling for the role of the degree of parental involvement as a possible mediator. The results of our article mirrors earlier research finding increased school safety and lower rates of discipline problems in private schools (Andrade, 2013; Valois, Thatcher, Drane, & Reininger, 1997; Waasdorp, Berg, Debnam, Stuart, & Bradshaw, 2018). Public schools appear to need strict custodial environments, such as random dog sniffs, metal detectors, and clear backpacks to keep the school environment in order. Private schools, on the other hand, enjoy fewer incidences of crime and less strict school safety and climate practices than public schools.

Our policy recommendations are two-fold. First, future research should explore if our findings translate into better student learning in private schools over time. Findings from a recent first year evaluation of District of Columbia Opportunity Scholarship Program (DC OSP) show that low-income parents expressed satisfaction with safety of their children even though the impact on test scores was negative (Dynarski, Webber, Gutmann, & Bachman, 2017). Further research should determine if later years of evaluation of the DC OSP follow an increasing trend as shown by a recent meta-analysis on school vouchers (Shakeel et al., 2016). The

observation of a positive trend in test scores over time, along with parental satisfaction, would strengthen the hypothesis that school choice may benefit participants in the long term academically through an improved school environment. Availability of data connecting principal surveys to school graduation rates and test scores may offer opportunities for further research.

Second, policymakers should further consider the role of school choice in reducing crime-related incidence at schools. Although we hypothesize that our findings may be stable over time, are likely to result in improved academic outcomes in the short-run and a lower likelihood of committing crimes in the long-run, a causal interpretation cannot be assigned from our study alone.

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