

TRUANCY PREVENTION IN THE DISTRICT OF COLUMBIA: IS IT EFFECTIVE OR IS IT JUST ANOTHER
DISCRETIONARY PRACTICE FOR SCHOOLS TO ADMINISTER SUSPENSIONS?

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By

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ABSTRACT

Truancy prevention in the District of Columbia was an issue taken up after a tragic event among teenagers that resulted in multiple deaths and due to behavior related to truancy. The law was finally enacted in D.C. in 2013. Truancy, or an unexcused absence, was rampant with over 4,000 D.C. students missing 10-20 school days in 2012, without having a valid excuse. The law places accountability with the home of the student, with consequences resulting in fines and referrals to a Student Support Team or Court Social Services. This gives schools alternative tools in keeping students in the class for instruction and deter youth violence as a result. However, students who are chronically absent and chronically disruptive maybe more inclined to receive school administered suspensions. As such, those students would receive little classroom instruction or school time. Using pooled cross sectional data collected from oversight hearings from the Office of the State Superintendent of Education, and Ordinary Least Square (OLS) regression models, this paper gives insight on how the truancy prevention law in D.C. has impacted suspensions subsequently, before and after the law was enacted. The findings of this analysis suggest that the law has none or minimal impact on suspensions, but has reduced the rate of unexcused absences occurring since the law's implementation. Thus, D.C. policymakers would be advised to consider further studies, including consistent data collection, to reform the law to better assist schools in reducing suspensions for those students who are both chronically disruptive and chronically absent and thereby maximize class time for those students.

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INTRODUCTION

Truancy is when a student is absent from a school without a legitimate excuse or reason. For many cities including the District of Columbia, (D.C.), the automatic policy has been to get parents and guardians involved and make them aware that the child is considered truant. In 2012, 3000 D.C. students missed more than a month of school without an excuse, while another 4,000 D.C. students missed 10-20 school days without a valid excuse.¹ As a result, D.C. has initiated several anti-truancy policies, taskforces and pilot programs to increase student attendance in D.C. schools and reduce violence. However, individual school administered suspensions also keep students away from class instruction but are not addressed by truancy prevention laws.

This thesis evaluates unexcused absences, and suspensions before the truancy prevention law was enacted and after it was enacted in D.C. The law operates by designating certain thresholds for chronic absences in which truant students are referred to Student Support Services (SST) and/or Court Social Services (CSS). On the other hand, by law, suspensions are not counted as unexcused absences (absences). Furthermore, prior to the truancy prevention law, schools may have had the incentive to simply suspend a student that is chronically absent and chronically disruptive.

Thus, given that suspensions do not count as an unexcused absence, even after the enactment of the truancy prevention law, schools, as a discretionary practice, may still administer suspensions for students who are both chronically absent and disruptive and who reach the truancy thresholds for unexcused absences. Therefore, such a student could experience both referrals to court social services and out of school suspensions.

As a result, I hypothesize that there is a statistical relationship between unexcused absences and suspensions. This law may give teachers and individual school administrators

additional reason to suspend students and have a biased negative influence on absences rate going down. Thus, the study here is 1) whether the rate of absences decreased since enactment of the law and 2) how the change in the law has impacted suspensions. From this, we can attempt to ascertain a relationship, if any between absences and suspensions as a result of the law.

In certain cases, a student that is chronically absent and is disruptive or has been suspended for disruption is preconceived to be more likely to miss class and be disruptive. Subsequently, when that student returns to school, he or she may be suspended again for disruption or disciplinary matters, if a behavior problem occurs again afterwards. This logic can also be in the reverse. A student who has been suspended several times for disruptive behavior maybe more likely to be absent chronically and still face more disciplinary action in the form of suspensions. Under this latter logic, this may also result in students being suspended without being assessed for chronic absences. In that case, the anti-truancy policy would have failed that student since the child was not referred through the proper anti-truancy measures.

Even though the law is newly enacted, a statistical analysis may serve the purpose in providing a potential association between absences and suspensions by regressing each in separate Ordinary Least Square (OLS) models as dependent variables with the same key variables. This, in turn, may provide insight on the effectiveness of the truancy prevention in DCPS.

If suspensions increase or even remain at the same rate, then it may indicate that the truancy prevention law has just created another way of allowing schools to remove students from the school, permanently. While the basis of this thesis is not about the aftermath of removing a student, it does provide another insight on how DCPS and DC Charter schools may avoid

students who may in fact need the support from the school instead, such as free lunches and having a place to be during the day time and above all proper in-class instruction time.

Motivation for Analysis

Education attainment is important to a person's livelihood, health and stability. Education, regardless of its style or content, has been a form of passing knowledge from person to person. However, in today's day in age, relative to world economy and increased global access and technology, an education allows a certain understanding of the changes in the world and maintain a decent livelihood. A person who is absent from learning or absent from engaging in various enriching activities does not. Opinions will also vary on how to provide access to education, especially those who are at risk from disengaging from learning. However, most scholars and policy-makers alike understand that there is a need to provide access to education.

There are similar models of truancy prevention programs in San Francisco, California and in New York City, New York targeting absenteeism. New York, for example has provided a program that includes all absences and track that data on a weekly basis which allows for earlier intervention before the chronic absence turns into chronic truancy. (Brown and Alexander, 2014). San Francisco, has teamed up with the District Attorney's office to fine parents with students who are chronically truant.² (Harris and Hamilton, 2009).

D.C.'s Attendance Amendment Act of 2013, heavily refers, cites and relies on literature and studies that provide indicators of truancy and how truancy is an indicator for children and their families may need assistance to address truancy.³ However, what I have experienced as a teacher and have also seen as a substitute teacher in DCPS, is that teachers and administrators discretionarily exercise suspension for students who are both truant and disruptive. Thus, it begs

the question on whether the truancy prevention law holds the school accountable for excessive administration of suspensions.

LITERATURE REVIEW AND INSTITUTIONAL BACKGROUND

Descriptive Papers

Econometric studies of education are limited for truancy prevention and matters of discipline. Truancy prevention in particular is more recent occurrence and the effects of the law are by state and are not consistent. The enforcement of the law vary by city and county and may not enact a uniform policy for truant behavior. I have provided a review of papers focused on education using a variety of regression modeling as possible methods in measuring the relationship between absence and suspension. In this instance, many of the models require a treatment and control group of a particular sample size. The following briefly discusses the model used in this thesis, followed by a discussion of other potential models as applicable to truancy prevention laws based on studies using those models. Lastly, I provide a brief legislative history on the truancy prevention law in D.C.

If truancy, denoted as absences, decrease, then suspension rates may also decrease as there are reasons for students to stay in school and follow school rules to avoid suspensions and there by avoid consequences of the truancy prevention laws. Likewise, if suspensions decrease, then absences may decrease because students are following school rules and there by avoid behaviors associated with truancy. In another instance, if suspension increases are linked to an increase in the number of absences a student has in a school year, then statutory consequences and caps on unexcused absences may induce increased suspensions for students who are both chronically absent and chronically disruptive. Or in the alternative, if absences decrease, it may also induce increased suspensions.

Likewise, if the law addresses behavior and truancy, then the general association, between the two dependent variables of chronic absenteeism (absences) and suspensions, is that the number of absences by law should also have a link to reducing the number of suspensions.

For this study, there may be dual causality between the independent x-variable and the dependent y-variable. This is when the causality runs both from the x-variable to the y-variable and from the y-variable to the x-variable. This results in a simultaneous causality bias, which a standard multiple regression cannot eliminate. For instance, a model with absences regressed on suspensions or referrals and a model regressed with suspensions on absences would result in dual causality. Thus, I would not be able to regress both absences and suspensions in one model and instead require two separate models with each of those key variables as dependent variables.

On the other hand, an instrumental variable regression (IV regression) would address omitted variable bias (OVB) as well as the issue of having causality run both from the key x-variable and the dependent y-variable. This process will allow me to obtain a consistent estimate of the unknown coefficients of the population regression function where the key regressor, absenteeism, has two parts. One part is correlated with the error term and the other part of that same regressor is not related to the error term. The latter part, through the IV regression will allow me to isolate that uncorrelated part of the regressor in a consistent and more accurate manner. This IV estimator used in the regression would allow us to address those issues of the simultaneous causality and omitted variable bias. Thus, simultaneous causality bias can be eliminated by finding a suitable IV that is correlated with absenteeism and uncorrelated with the error term.

For the IV regression, there must be two assumptions that must be met for a consistent regression and to explain the variation in the x-variable. The first assumption is that the IV is

relevant. The more relevant the IV, the more the IV explains the variation and produce more information to use in the IV regression model. A more relevant IV also produces a more accurate estimator as mentioned above. Weak or less relevant IV, tend to be a problem because it would provide a poor estimation to the sampling distribution even if the sample size is large. On the other hand, a weak IV could include the difficult to measure variables but also could also include a variable that is measureable but is either correlated to the y-variable or the error term. The second assumption is that the IV is exogenous. This requires the IV to be uncorrelated to the error term in the number of suspensions regression model of interest.

In this case, a relevant and exogenous IV that is correlated to absences, but uncorrelated with omitted determinants (error term) of suspensions such as class room size or capacity, quality of teachers and school facilities, or learning opportunities outside the classroom. A large class is related to absenteeism where a student may not attend because of the student to teacher ratio and not be given the attention a student needs.

The potential instrumental would be to study a variable that varies from one year to the next due to random fluctuations. In this case, enrollment numbers maybe a potential variable. Hoxby (2000) uses the number of potential number of children entering kindergarten as random fluctuations in birth dates that would produce “short-term spikes” in potential enrollment. The spikes in the study were used to satisfy the criterion for instrument relevance and the validity of the IV, with an F-test. Hoxby (2000) used panel data for schools in Connecticut during the 1980s and 1990s. The panel data enabled Hoxby to use fixed effects and instrumental variables to address omitted variable bias to suggest the effect on test scores by class size. The estimates were small and statistically insignificant.

Another model that could be relevant to this study would be regression discontinuity. Using the enactment of the policy as the threshold, a study could be done to compare the effect of the policy for those students with absences just below and just above the threshold. Gormley and Gayer (2005) assessed the effect of Head Start program, universal pre-k program on school readiness. That study was limited to children above a certain specified age cutoff to compare children who have gone through pre-kindergarten with those who have not. Their results suggest big effects on test scores and motor skills and were statistically significant from zero.

However, regression discontinuity requires treatment group and another control group with a sample of students. In this case, attaining school level data is difficult, or either not released or would require lengthier studies, which is beyond the scope of this thesis. Ideally, the treatment group would be D.C. who has enacted the anti-truancy policy and the control group with be a school district or city that has not enacted an anti-truancy policy. Nevertheless, the potential study is there and requires a more in depth data collection that is consistent across the years.

Legislative History

A brief legislative history is provided for a substantive framework with regard to truancy in the District of Columbia (D.C.) and whether there is an impact on suspensions or in the reverse, whether absenteeism has a relationship with the level of suspensions in the District of Columbia Public Schools (DCPS).

For D.C. the passage of the Public Education Reform Amendment Act of 2007 (PERAA),⁴ and the South Capitol Street Memorial Amendment Act of 2013 (SCSMAA)⁵ heavily shaped the education system present today. This latter law was later amended to heavily

focus on the truancy prevention in D.C. under the Attendance Accountability Act of 2013.⁶

Combined these three acts are the foundation for truancy prevention in D.C.

PERAA changed the landscape of how education is administered in D.C. by giving the Mayor control of D.C.'s education system and by providing a more local authority over the previous elected school board governance. But since then nearly 40% of the city's students missed at least 18 days of school in DCPS in 2013. Half of those students were absent for nearly seven weeks, out of the 36 weeks that is in a given academic school year.⁷ This change further moved policy decisions from the board to multiple offices created as a result of PERAA. However, a report evaluating PERAA since its enactment, recommends that there be a single governing body.⁸

SCSMAA, specifically enacted D.C. law and policy on "Compulsory School Attendance and Expulsion," which provides school administrations guidelines for attendance matters. The enactment of SCSMAA requires the Mayor to report on and enhance early childhood school-based behavioral services along with providing, and reporting on compulsory school attendance and creating school-based support teams and creating a guide for parents and legal guardians and regulations related to absenteeism and truancy.⁹

The Attendance Accountability Act of 2013¹⁰ amends the District's Compulsory School Attendance law (D.C. Official Code §38-201 thru §38-241) to increase inter-agency collaboration and coordination between D.C. public schools, Metropolitan Police Department (MPD), Child and Family Services Agency, Court Social Services (CSS) and the Office of the Attorney General (OAG).¹¹ The bill ensured that "parents are made aware of when their child is considered truant and know the consequences of continued truancy... The bill would require the OSSE (the Office of the State Superintendent of Education) to reduce or eliminate the use of out

of school suspensions as well as expulsions, except in the most extreme cases.¹² The bill referring to the South Capitol Street murders in 2010, explicitly states that SCSMAA did not “fully address the current truancy crisis” and that had not the five convicted men responsible for the murders had “their truancy been used to identify them as being at risk and had they received services and interventions earlier on, their actions in March 2010 may have been avoided.”¹³ The bill further identifies how truancy indicates children at risk for juvenile justice issue and that children fail to attend school because of issues dealing with bullying, learning disabilities, domestic violence, and access to transportation as well as problems at home.

The Council agreed that litigation and prosecution of role of the OAG should be limited as a last resort after exhausting all other means.¹⁴ Moreover, prosecuting truancy cases involving 14 to 17 year olds would not solve the problem since parental neglect for that age group is often not the reason why children fail to attend schools.

Current Legislation

Figure 1 summarizes the steps for the different absence ranges and when a student is referred to Student Support Team (SST) and to Court Social Services (CSS). A student with 10 or more unexcused absences is considered “chronically truant” and the school based student support team should advise the school administrator, assess student’s needs and refer students ages five through thirteen to Child and Family Services Agency. (Title 5 D.C.Mun.Reg. §2103.5(a)). Students over the age of 14 and under 17, with 15 unexcused absences in the school year (SY) 2013-14 and 20 unexcused absences in the SY 2014-15 are referred by a local education agency (LEA) to the Court Social Services Division of the Superior Court of the

District of Columbia and to the Office of Attorney General Juvenile Section. (D.C. Act; 60 D.C.Reg. §7 (c)(1)(B)).^a

Terms for charter schools, absences (excused/unexcused), discipline, suspension, expulsion and other pertinent terms related to truancy are defined in Appendix A. For this paper and according to the D.C. truancy prevention program, a truant is a “school age child who is absent from school without a legitimate excuse for an absence.”¹⁵

The enforcement penalties of the truancy laws provide that the responsible party for the student in violation of failing to keep a minor in regular attendance will be held guilty of a misdemeanor and may be fined not less than \$100 or imprisoned for not more than 5 days or both for each offense. (D.C. Official Code §38-203 (d)(e),(h)). As such, MPD is to establish truancy centers in D.C. and take any child to this center, whom they believe is truant from a public or public charter school. (§38-207(a)(1)-(3)). A child who accrues 10 or more unexcused absences during a SY, the LEA is required to notify MPD and OSSE. OSSE will also send a letter out to the parents/guardian of the student. (§38-208(a)-(c)). Figure 1 summarizes these steps.

Demographic Background

Demographically, this analysis is also important because D.C. operates in both capacities as a city and as a state. In particular, D.C. has eight Wards, representing eight political districts in which each elect a representative to the D.C. Council. (See Figure 2). D.C. also, as of 2013-14, serves approximately 83,000 students (Table 2).

Of those Wards, the percentage of children classified as living in or near poverty or below the 185 percent of the poverty level in the District of Columbia are shown in Table 1. The

^a The original number of absences in tit. 5 D.C.Mun.Reg. §A2103.5(b) listed absences to 25 unexcused absences for the 2013-14SY, this was modified later D.C. by D.C. Act; 60 D.C.Reg. §7(c)(1)(B) to 15 unexcused absences.

levels overall show that they have stayed relatively stable in the last 14 years. Of most notable are demographically, is Ward 8, which has a 36% poverty rate, while 49% of the children live in poverty where as Ward 3 has a 7.9% poverty rate, while 1.9% of the children live in poverty.¹⁶ However, the fluctuation is also not large enough to explain the reported differences by OSSE. The OSSE reported that D.C.'s percentage of all public school students eligible for reduced-price or free-lunches increased from 45% to 66% between 2006-07 and 2013-14.¹⁷ (See Table 2). But D.C. also changed its eligibility for free and reduced lunches where “in public schools in which 40% or more of the student body is defined at risk,^b all students are automatically eligible for free or reduced-price lunch, regardless of family income.¹⁸

In 2013, the committee report for the Attendance Accountability Act of 2013, provided that schools with the highest level of truancy also showed low proficiency and graduation rates. In Roosevelt High School in 2012, for instance, 214 out of 461 students (46%) had more than 20 unexcused absences, and only 17% of the Roosevelt student body had a score of “proficient” on the annual academic assessment exam administered in D.C.^c

It is also important to note that in general obtaining counts and data for D.C. is fairly difficult and inconsistent. Most recently, the National Academy of Sciences reported an evaluation of D.C. schools and administration in evaluating the progress of PERAA. Many of the tables and figures regarding demographics are from that report.¹⁹

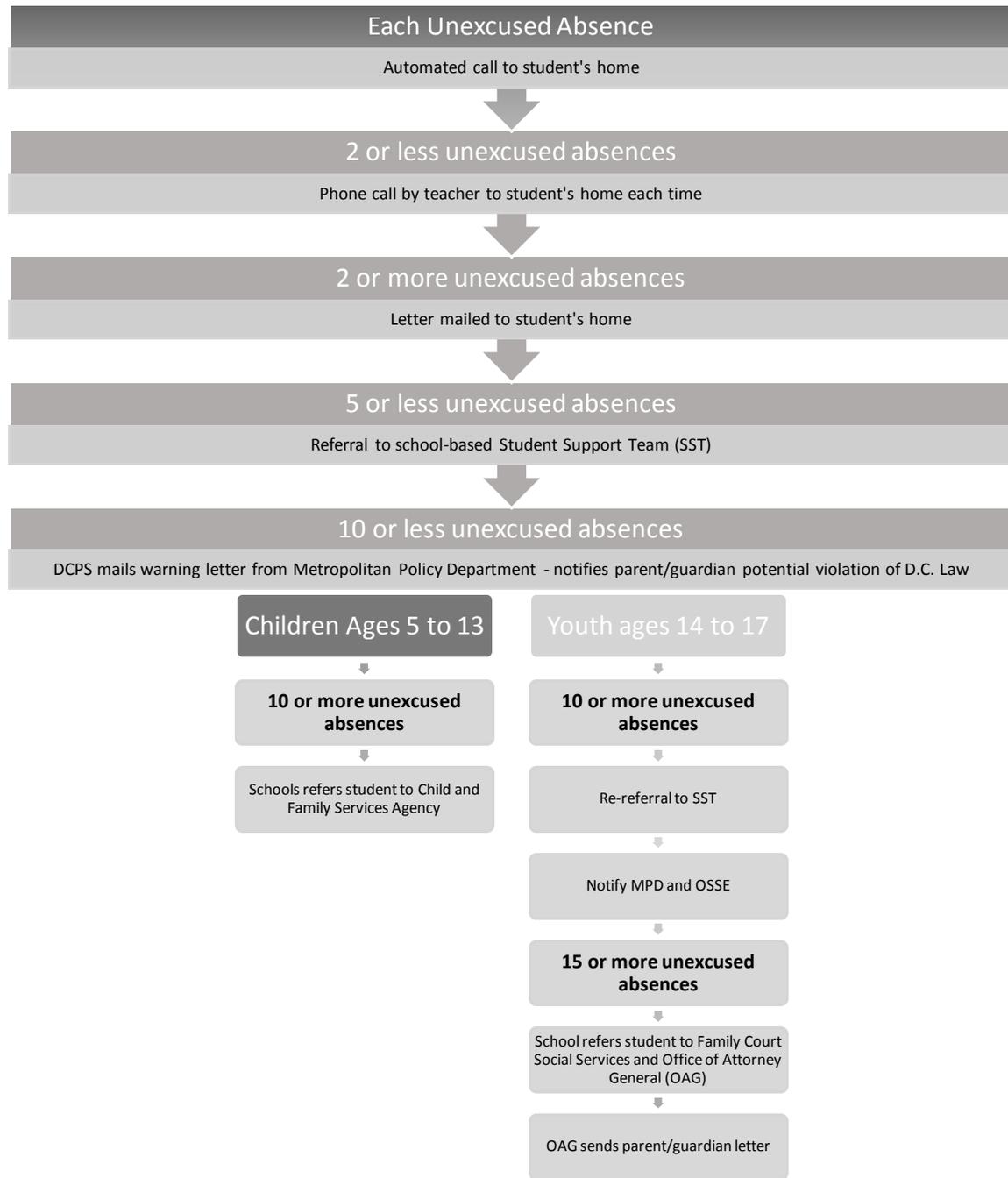
The District of Columbia, in general, serves students of all incomes and backgrounds, Table 3 and Table 4 provide the percentage of population and race and ethnicity by ward and the socio-economic demographics, respectively. Interestingly enough, Wards 5, 7 and 8 have the

^b Students were defined as at risk if they were, for example, homeless, in foster care, or receiving federal food aid; see <http://feedmoreforless.com/community-eligibility/> [November 2015].

^c Appendix B shows the chart used in the committee report from the Attendance Accountability Act.

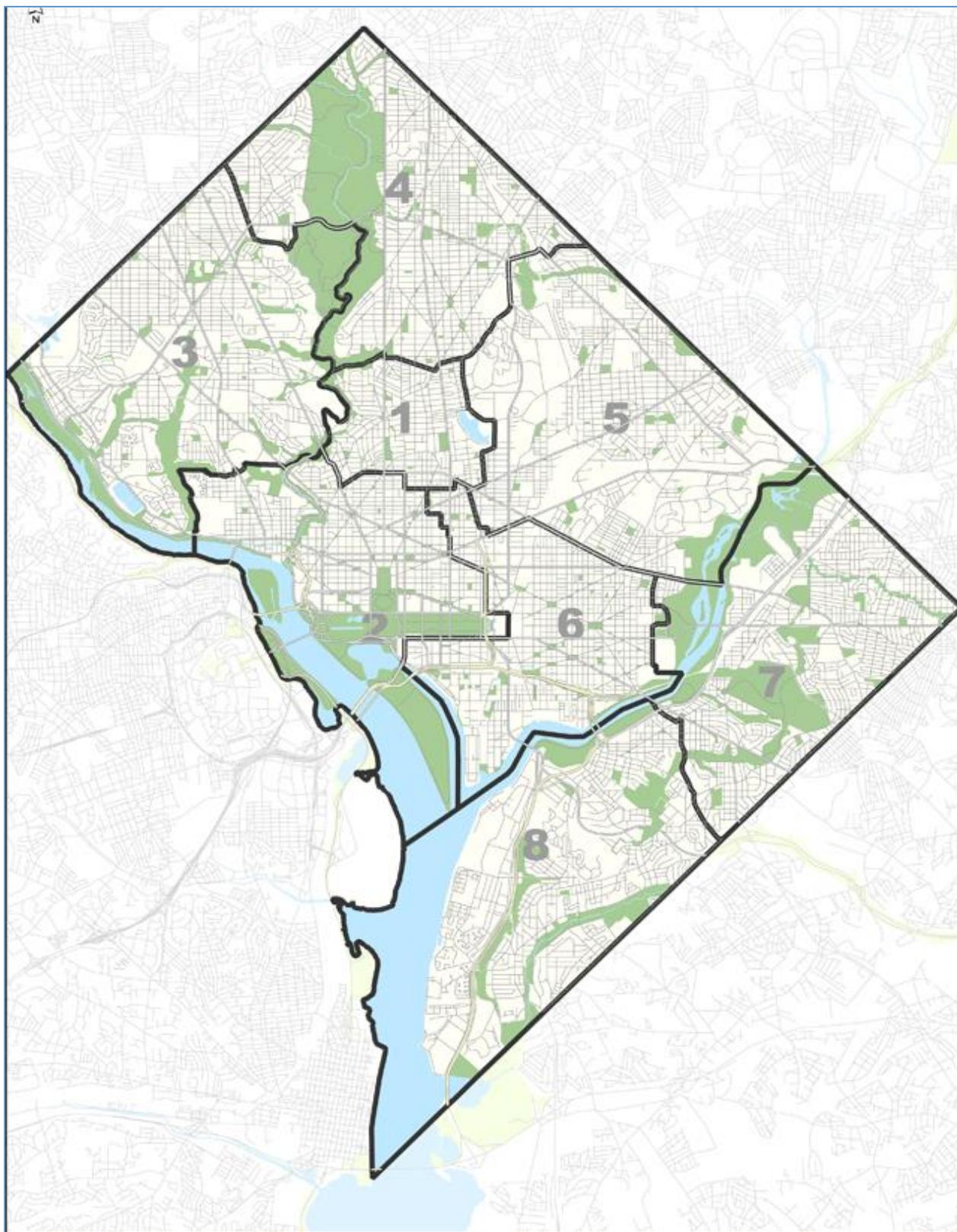
highest percentage of African American populations, with Ward 8 having the highest percentage of unemployment among adults and poverty among adults and children. Ward 8 also has the highest number of schools and enrollment followed by ward 6. Wards 1-4 and 6 have the highest average family incomes, and low unemployment rates. Wards 1-3 are predominantly White, Non-Hispanic and Ward 4, 7 and 8 are predominantly Black, Non-Hispanic and Ward 6, race is relatively even between Whites at 47% and Blacks at 43%. Lastly, Table 5 provides the number of D.C. public schools (DCPS) by Ward and enrollment.

Figure 1: Summary of Different Absence Ranges and Student Referrals



Source: Attendance Matters Truancy Prevention Guide: A Resource Guide for Parents and Legal Guardians, 35–36; *see also* Peerman, Alex, Brink, Rebecca, & Ferrer, Eduardo, “How DC’s Truancy Policy Fails Students, and Steps to Turn it Around,” DC Lawyers for Youth and Children’s Law Center, March 2015, at 9.

Figure 2: D.C. Ward Locations



Source: Data from National Research Council, “An Evaluation of the Public Schools of the District of Columbia: Reform in a Changing Landscape,” Committee for the Five-Year (2009-2013) Summative Evaluation of the District of Columbia’s Public Schools, National Academies Press, Washington D.C., 2015, at 24.

Table 1: Percentage of Children Classified as Living in or Near Poverty in the District of Columbia

Year	In Poverty			At or Below 185% of the Poverty Level		
	All Children Ages 5-18	Public/Charter Ages 5-18	Public/Charter Wards 7-8 Ages 5-18	All Children Ages 5-18	Public/Charter Ages 5-18	Public/Charter Wards 7-8 Ages 5-18
2000	35.0	36.9	42.8	53.0	57.2	64.1
2001	32.0	37.3		54.9	62.4	
2002	28.3	32.1		51.9	58.4	
2003	36.8	41.8		53.1	60.6	
2004	35.6	38.2		53.3	58.3	
2005	31.5	36.0	43.7	53.1	53.1	70.4
2006	37.9	40.2	43.3	55.7	61.8	76.0
2007	28.0	29.2	35.0	46.2	49.2	57.6
2008	33.5	33.1	40.3	51.7	54.5	68.5
2009	38.0	36.9	45.2	52.7	52.9	64.9
2010	39.1	36.5	49.3	58.0	59.4	72.9
2011	36.1	34.9	51.9	48.6	49.6	66.9
2012	35.5	33.1	54.6	52.8	53.4	67.6
2013	38.5	35.5	48.2	54.6	56.7	69.6

SOURCE: Values calculated using microdata available at the website for the Integrated Public Use Microdata Series, see <http://usa.ipums.org> [November 2015].

Table 2: Characteristics of Students Enrolled in All D.C. Public Schools

Characteristic	2006-2007						2013-2014					
	DCPS	%	Charters	%	Total Across Schools	Total% Across Schools	DCPS	%	Charters	%	Total Across Schools	Total% Across Schools
Number of Students	52,632	73	19,388	27	72,020	100	46,393	56	36,564	44	82,957	100
Female	26,713	51	10,193	53	36,906	51	22,975	50	18,865	52	41,840	50
Male	25,921	49	9,197	47	35,118	49	23,418	50	17,688	48	41,106	50
African American	42,835	81	16,285	84	59,120	82	32,884	71	28,801	79	61,685	74
White	8,769	17	2,823	15	11,592	16	10,753	23	5,461	15	16,214	20
Hispanic	5,895	11	2,456	13	8,351	12	7,477	16	5,933	16	15,410	16
Other Race	1,027	2	279	1	1,306	2	2,756	6	2,302	6	5,058	6
English-Language Learners	3,978	8	1,047	5	5,025	7	4,716	10	2,615	7	7,331	9
Special Education Students	7,091	13	2,178	11	9,269	13	6,614	14	4,429	12	11,043	13
Free or Reduced-Lunches	24,596	47	7,853	41	32,449	45	26,177	56	19,597	54	44,774	55

NOTE: The information in this table does not exactly match the information that is available on the DCPS website (see <http://dcps.dc.gov/DCPS/About+DCPS/DCPS+Data/DCPS+at+a+Glance> [June 2015]) and the Public Charter Schools Board website (see <http://focusdc.org/data> [June 2015]).

SOURCE: Information provided by Office of the State Superintendent of Education and available at <http://osse.dc.gov/sites/default/files/dc/sites/osse/publication/attachments/SY13-14%20Enrollment%20Audit%20Overview%20%282.26.2014%29%2015.pdf> [February 2015].

Table 3: Percentage of Population and Race and Ethnicity by Ward, 2010

Ward	Total Population	Black Non-Hispanic	White Non-Hispanic	Hispanic	Asian
1	74,462	33.0	40.0	21.0	5.0
2	76,883	9.8	70.0	9.5	10.0
3	78,887	5.6	78.0	7.5	8.2
4	75,773	59.0	20.0	19.0	2.0
5	74,308	77.0	15.0	6.3	1.7
6	76,000	43.0	47.0	4.8	5.1
7	71,748	95.0	1.5	2.7	0.3
8	73,662	94.0	3.2	1.8	0.5

SOURCE: Data from website of Neighborhood DC, a project of the Urban Institute and Washington DC Local Initiatives Support Corporation; see http://www.neighborhoodinfodc.org/wards/Nbr_prof_wrde1.html [November 2015]

Table 4: Social and Economic Characteristics of D.C.'s Eight Wards

Ward	Poverty Rate/% of Children in Poverty (2007-2011)	Average Family Income (2007-2011)	Violent/ Property Crimes per 1,000 People (2011)	% Unemployment Rate (2007-2011)	% of Persons Without HS Diploma (2007-2011)
1	15.0 ± 1.5 22.0 ± 13.0	\$99,428 ± 9,338	14.0/50.0	7.2 ± 3.6	16.0 ± 4.1
2	15.0 ± 1.5 8.5 ± 35.0	\$222,345 ± 27,879	9.4/67.0	3.9 ± 4.1	6.3 ± 5.2
3	7.9 ± 1.0 1.9 ± 14.0	\$240,044 ± 17,393	1.5/21.0	3.5 ± 4.0	2.9 ± 4.8
4	12.0 ± 1.6 15.0 ± 8.8	\$115,482 ± 8,206	7.5/30.0	11.0 ± 4.5	16.0 ± 4.7
5	20.0 ± 9.6 26.0 ± 9.6	\$79,153 ± 6,850	13.0/46.0	15.0 ± 4.1	18.0 ± 4.5
6	16.0 27.0 ± 14.0	\$129,674 ± 9,983	12.0/49.0	7.5 ± 4.1	10.0 ± 4.4
7	26.0 ± 2.5 41.0 ± 6.5	\$57,387 ± 4,757	17.0/42.0	19.0 ± 6.5	17.0 ± 5.3
8	36.0 ± 2.7 49.0 ± 4.3	\$43,255 ± 3,558	19.0/38.0	22.0 ± 6.4	19.0 ± 5.3

NOTE: Source used ± to indicate range of certainty about the data.

SOURCE: Data from Neighborhood DC, a project of the Urban Institute and Washington DC Local Initiatives Support Corporation; see http://www.neighborhoodinfodc.org/wards/Nbr_prof_wrde1.html [November 2015]

Table 5: Number of Schools by Ward, 2014

Ward	DCPS	Enrollment
1	10	5228
2	8	2837
3	10	6651
4	15	6785
5	15	4550
6	17	6523
7	15	5527
8	19	8229
All	109	46,330

SOURCE: DCPS Dataset SY2014, retrieved October 2015 from <http://dcps.dc.gov/DCPS> and see also data retrieved from website of Neighborhood DC, a project of the Urban Institute and Washington DC Local Initiatives Support Corporation; see <http://www.neighborhoodinfodc.org/wards/wards.html> [November 2015].

METHODOLOGICAL APPROACH AND CONCEPTUAL MODEL

Model Used

Ordinary Least Squares (OLS) regressions would show us a likelihood of the rate changes in absences, suspensions and referrals, given a set of key independent variables, before and after the policy was enacted. Three separate OLS models of each of those dependent variables each regressed by the same key x-variables would give insight on the hypothesis on whether there is a statistical relationship with the dependent variables, absences, suspensions, and referrals. This approach is similar to reproducing a regression discontinuity model but with the risk of omitted variable bias and without a treatment and control group.

In the alternative, I created three OLS models. First, is an OLS regression of the absence rate as a continuous dependent variable will show changes in the rate of absences as either increasing or decreasing after the policy was enacted. Second, is an OLS regression of suspension as a binary dependent variable will show changes in the predicted values for the rate of suspensions as either increasing or decreasing after the policy was enacted. Third, is an OLS regression of referrals as a continuous dependent variable that should show slight changes in the predicted values in the rate of referrals made to CSS or SST also as either increasing or decreasing after the policy was enacted.

Through this method, we could make a logical inference that there is a potential correlation between suspensions and absences and if the change in absences is correlated with an increase to the number of referrals and suspensions. This latter portion requires extensive data and an instrumental variable that would allow an instrumental variable regression or a treatment and control group for a regression discontinuity.

Conceptual Framework

This paper is an attempt to examine the relationship between suspensions and truancy. The conceptual model here examines the gamut of the relationships potentially involved and frames the system of relationships driven by previous research and theory. The model would also assist in the choices of data and interpreting results, as well as include unobservable or unmeasurable factors.

Figure 3 suggests that there are four major factors involved that could contribute to chronic absenteeism and suspensions. Formulaically, this may look like:

$$\text{Suspensions} = f(\text{Absenteeism, Individual, School, Community})$$

$$\text{Absenteeism} = f(\text{Suspensions, Individual, School Community})$$

Thus, even with the conceptual modeling, it shows that there may be simultaneous causality bias in the key x and y variables.

In Figure 3, the individual household level, there are several factors that influence the reasons for a student's absenteeism. This can include stability in home, proper supervision, basic access to health, food and shelter. Many of these factors affect a student's behavior and performance but also affect school attendance. For instance, a student may not have the proper access to transportation or even in the likelihood of proper transportation, may not attend because they went elsewhere with their transportation. Parental or guardian involvement is another factor that is likely to impact attendance especially in the adolescent year for a student.

Likewise for school environment, there are several factors that can affect absenteeism. Schools play an important and integral role in child development. Students spend majority of their time during preschool to high school in the school environment. However, disciplining and suspending students have become a common trend. For instance, many teachers and schools will often resort to suspending and disciplining students in order to maintain safety and order in the

school. Which is one, counterproductive to improving student attendance; and two, deprives the child of instruction, the main reason for attending school. This kind of environment can impact absenteeism as a negative effect. There are also another form of school-based barriers which can include teacher-student conflicts, or lack of having high expectations of students or teachers inflexible attending to the different learning styles of students.

Another simple factor is the physical building condition. A school with bars on its windows or having broken windows does not give a student the feeling of encouragement to attend school or create a motivating learning environment. Nevertheless, even for schools to address the issue of reducing suspensions, requires a support system for schools that designates alternatives in order to address classroom and school management with student behavior.

Lastly, community factors can also impact a student absenteeism. A community riddled with violence and substance abuse may not necessarily provide the environment or encouragement for a student to attend or incentivize a guardian to ensure the student attends class. Access to resources, frequent visuals of police unit vehicles in the community, or communities that are physically dilapidated can also impact a student's attendance and motivation to be in school.

Tables 6 further breaks down many of the characteristics mentioned above that affect suspensions as well as absenteeism. OSSE specifically created the District of Columbia's truancy prevention guide, in "Attendance Matters Truancy Prevention Guide," as identifying the common causes of truancy. For instance, an individual's mental health, financial barriers or school-based barriers are also correlated with both absenteeism and suspensions for a student in school.

Figure 3: Conceptual Model Framework

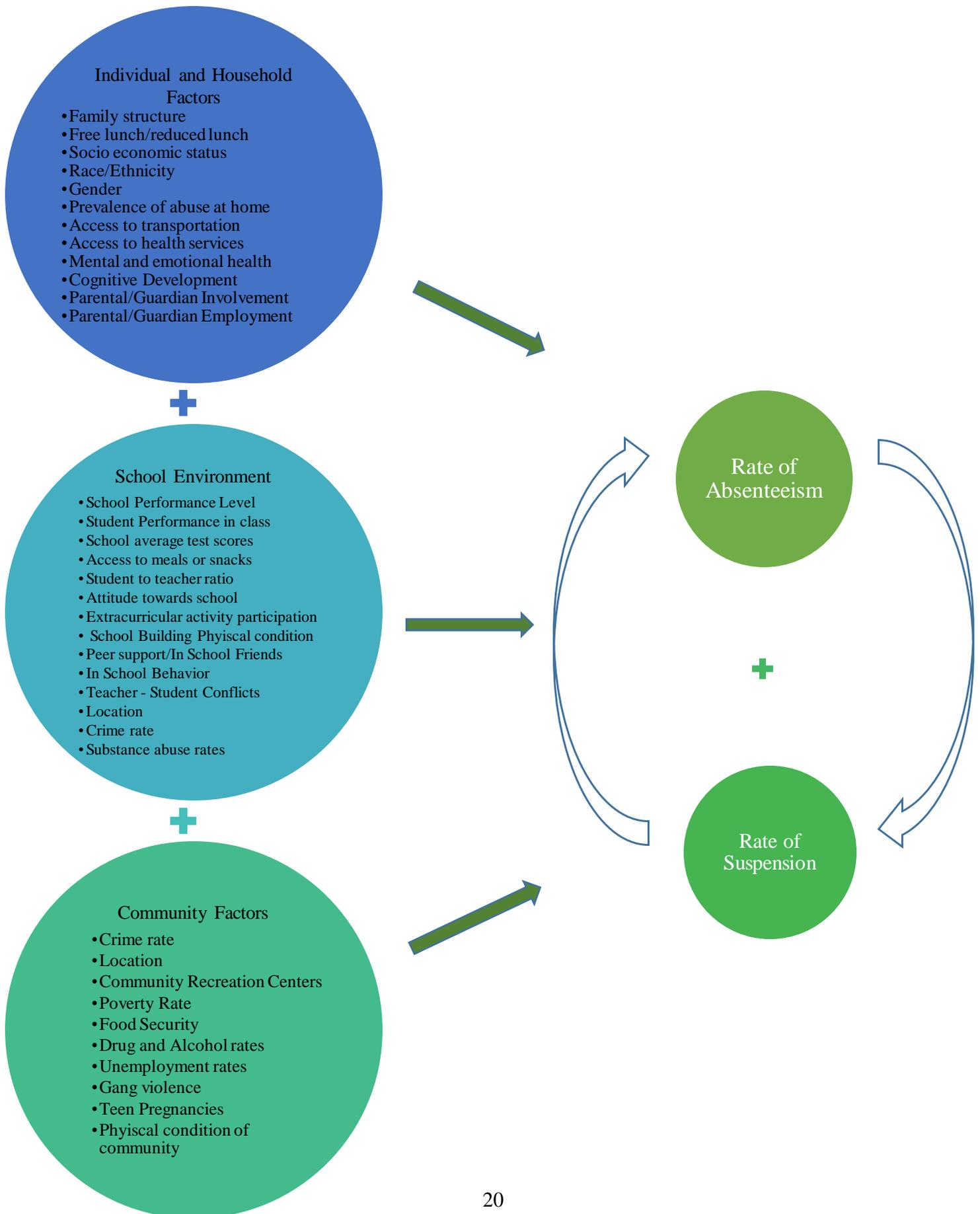


Table 6: Common Causes of Truancy as Identified in Attendance Matters Truancy Prevention Guide

<p>Health and Mental Health Barriers</p> <ul style="list-style-type: none"> • Child abuse and/or neglect • Drug or alcohol use and/or abuse • Childhood depression • Asthma or other chronic illness • Poor nutrition, dental, vision, hearing problems • Neurological factors, such as dyslexia <p>Financial Barriers</p> <ul style="list-style-type: none"> • Lack of affordable transportation • Insufficient food • Proper clothing not available • Homelessness • Students needing to be employed to support the family <p>Community/Cultural Barriers</p> <ul style="list-style-type: none"> • Lack of safety in the home or school community • Unawareness of community agencies that may provide needed support • Bullying • Language barriers <p>Personal Barriers</p> <ul style="list-style-type: none"> • Low academic grades • Peer pressure or inability to maintain friendships • Feelings of rejection and failure • Embarrassment due to lack of “fashionable” clothing • Low self-esteem • To meet with friends • Abuse by significant other 	<p>School-based Barriers</p> <ul style="list-style-type: none"> • Teacher-student conflict • Inadequate transportation • Fear of being bullied or cyber bullied • Inappropriate programming: too challenging/not challenging enough • Weak or no monitoring of daily attendance • Inconsistent attendance policies • Lack of parent involvement in the school • Lack of personalized attention to students • Lack of teacher expectations for high student achievement • School size: too small/too large • Inflexibility toward meeting different learning styles • Inconsistent procedures for dealing with chronic absenteeism <p>Family Barriers</p> <ul style="list-style-type: none"> • Insufficient parent support • Child kept home for babysitting or caring for a sick parent • Family history of dropping out • Lack of adequate adult supervision • Parent(s) addicted to drugs or alcohol • Parent(s) who do not value education • Lack of awareness of attendance laws • High mobility
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EMPIRICAL MODEL AND ESTIMATION STRATEGY

There are two issues to be addressed and are discussed in depth in the policy implications and data limitations section below. First, is the omitted variable bias (OVB) and dual causality, and second, is the truncated data.

First, there are factors that could not be measured limiting empirical analysis. OVB is generally accounted for in models such as regression discontinuity and dual causality by IV. Second, and an important limiting issue is the availability of the data. That is, I have only demographic data that is limited to one year with regard, to race, gender and income. What I have propose to do is to use the same data in the alternative with other school years with data for suspensions and absences. In that sense, I would impute data.

In order to address some of these issues, I created a binary dependent variable of suspensions. The absences and referrals variables remained continuous. They are summed by the total counts recorded and weighted by enrollment. Our data should be able to show us that there were students who prior to the law had 20 absences, the frequency of the discipline or suspension was lower than it was after the enactment of the law. Thus, a question to contemplate is whether this frequency changes with the number of absences and did the frequency of suspension increase because schools were enforcing the law and subjecting students to more suspensions or discipline? A simple regression model will allow us to determine this.

While I am not able to do actual regression discontinuity modelling or use IV, I can simulate the process through multiple regressions to address some OVB before the policy was enacted and after the policy was enacted. Thus, the regression models used in this analysis is the school year 2012-2013 (as before the policy) and school year 2013-2014 (after the policy).

In this study, I created three OLS models, shown below. First, is an OLS regression of the absence rate as a continuous dependent variable will show changes in the rate of absences as either increasing or decreasing after the policy was enacted. Second, is an OLS regression of suspension as a binary dependent variable will show changes in the predicted values for the rate of suspensions as either increasing or decreasing after the policy was enacted. Third, is an OLS regression of referrals as a continuous dependent variable that should show slight changes in the predicted values in the rate of referrals made to CSS or SST also as either increasing or decreasing after the policy was enacted.

$$\widehat{Absences_Rate} = \beta_0 + \beta_1 schoolyear + \beta_2 Black + \beta_3 White + \beta_4 other + \beta_5 free_or_reduced_lunch + \beta_6 Sped_Level + \beta_7 Ward + \mu$$

$$\widehat{Suspension} = \beta_0 + \beta_1 schoolyear + \beta_2 Black + \beta_3 White + \beta_4 other + \beta_5 free_or_reduced_lunch + \beta_6 Sped_Level + \beta_7 Ward + \mu$$

$$\widehat{Referrals_Rate} = \beta_0 + \beta_1 schoolyear + \beta_2 Black + \beta_3 White + \beta_4 other + \beta_5 free_or_reduced_lunch + \beta_6 Sped_Level + \beta_7 Ward + \mu$$

As mentioned, models that better account for OVB such as an instrumental variable or using regression discontinuity would provide estimates that could be statistically significant from zero. Nevertheless, given these restraints in data, the regression results for each of the dependent variables are weighted by enrollment (the number of all students in a DCPS school, for any age and grade). These estimates should provide a minimum basis for further studies into relationship between absences and suspensions, post-law.

Dependent Variable

In this case, there are three dependent variables, unexcused absences (denoted *absences_rate*), suspensions and referrals made to SST and CSS (denoted *referrals_rate*). The models examined the relationship between the dependent variable and the independent variables

based on race, free or reduced lunches, weighted by enrollment, for each school years (SY) 2013 and 2014.

Here, absences from 0-5, 6-10, 11-15, 16-20, 21+ absences will be added together and divided by the total number of students enrolled in a DCPS school. Referrals to SST and CSS will be added together and divided by the total students enrolled in DCPS. For suspensions, data already provided the rate of suspensions for the student body per school. For ease, this variable was changed to an indicator variable.

DESCRIPTION OF DATA

Summary of Data Sets used:

Suspension and discipline data based on Fiscal Year 2013 reports:

Q70: unexcused absences need data for only SY 2012-2013, SY 2013-2014

Q70: Court referral stats by grade and by school for SY 2012-13, SY 2013-14

Q74: suspensions SY 2012-2013

Q74: suspensions SY 2013-2014

Demographics are only available for School Year 2013-2014 (regression models for different school years use the same demographics from the SY 2013-14 since this was the only available data).

Description of Data and Variables

The data for this paper are drawn from the Oversight Responses that the District of Columbia Public School for the Fiscal Year (FY) 2013 for response Question 70 (Q70) and for response Question 74 (Q74). Q70 provides data on unexcused absences for the school years 2011-12, 2012-13, 2013-14, and Q74 provides data on suspensions for school years 2012-13, 2013-14. Table 7 defines the variable name by variable type, reporting method, and universe (population of students included for calculation) and applicable subgroups.

Q70 specifically asks for attendance data for the last two school years for the entire agency by grade, school that uses DCPS as a local education agency (LEA), including students who have an individualized education plan (IEP). Q70 also asks the number of students who missed 10+ days to provide those who have been referred to the Child and Family Services Agency (CFSA), attended Student Support Team (SST) meetings and the Court Social Services (CSS) Division of DC Superior Court. Similarly Q74 asks for suspension data for the last two school years for the entire agency by grade, including students who have an individualized education plan (IEP).

Data Sets

Data set 1 identifies the suspension and discipline rates of pupils in the 2012-13 and 2013-14 school years in DCPS. These two schools years will look at the rates of suspensions before the law was enacted to serve as the baseline/control group. The data also has information on those rates for the 2013-14 school year in order to do a longitudinal regression on the suspension and discipline measures in DCPS.

As for the data set 2, for demographics, the information is limited because I only have information from one school year, 2013-2014. This information, along with the responses to the survey questions asked in the Oversight Responses used the metrics from the DC 2013 School Equity Report, updated May 20, 2015. This report features several metrics including the school demographics, performance, in-seat attendance, unexcused absences, student suspension rates and withdrawal rates.

OSSE also released the DC 2013-2014 School Equity Report which provides the number of absent students by various demographics. This report also identifies the number of referrals made to SST. SST assesses a student's need and access to resources and elevated cases will get

referred to CSS. This information is available for 2013-2014 SY but not before the law was enacted nor is there more recent data available. However, this information would help in determining the number of cases referred after the law was enacted as a comparison to the number of suspensions or discipline measures used.

Data Type, Design and Limitations

The analysis will consist of pooled cross sectional data to demonstrate the multiple dependent variables that are observed at two or more time periods. Here, the number of suspensions and discipline measures issued will be observed by the school years (SY) 2012-2013 and 2013-2014 to demonstrate the difference in predicted values before the law was enacted and after the law was enacted in 2013. The sample size has 374 observations, missing values or observations without information were dropped from the analysis, for a total of 325 observations for absences, and 217 observations for suspensions and referrals. In all the analysis presented, the models have been weighted by enrollment in each school per ward.

The type of recorded data is continuous and binary. The ranges for Q70 include the number of absences with 1-5, 6-10, 11-20, and 21+ absences. The ranges for Q74 include the number of suspensions from 1-10, 10+, students who received one-10-day suspensions and the description of types of disciplinary actions leading to the suspensions.

The sampling design of the data is simple random sample based by school. The data collected is from DCPS, and I have not found their actual form of collecting the data. It was reported in the oversight report that data is based on the actual schools submitting reports and documentation. However, not all schools do this and not all documentation or reports may be accurate.

From an analytical point, the data is limited to two school years (SY) 2012-2013, and SY 2013-2014 to match data with demographics and the number of referrals made to CSS and SST. Moreover, there are issues of reporting consistencies among public schools in DCPS. For the purpose of this study, data will only reflect information for DCPS schools based on the number of students enrolled in DCPS for those school years with data released in January 2014. The key control variables include race, school year, free or reduced lunch and ward also in table 7.

Table 7: Variable Description

Student Attendance and Discipline Metrics		
Variable	Definition	
Absence Unexcused: Percent of students absent, overall and by subgroup.	<p>Variable Name: Absences_Rate</p> <p>Type of Variable: Dependent---Continuous</p> <p>Reporting: All DC students enrolled, as determined by the in-seat attendance (ISA) files, in the grades served by the school’s SY 2013-2014 grade configuration, as determined by the October 7, 2013, audited enrollment file. Student grade levels are determined by the ISA data files.</p> <p>Calculated by:</p> <ol style="list-style-type: none"> 1. Total each student’s days present, not counting partial days. - For DCPS, add each student’s number of days excused for academic trips. 2. Total each student’s total membership days. 3. Divide each student’s attendance days by his/her membership days 4. Sum of all present days divided by all membership days. <p>Universe: This metric divides two cross-sections of data. The universe for absences data is any record not meeting the inclusion rules. The universe for the denominator is any student included in the October 7, 2013, audited enrollment file.</p>	<p>By subgroup includes:</p> <p>Race/Ethnicity</p> <ul style="list-style-type: none"> - Black non-Hispanic - White non-Hispanic - Hispanic/ Latino - Asian - Pacific/ Hawaiian - Native Am./ Alaskan - Multiracial <p>Special Ed. (SPED) status</p> <p>English Language Learner (ELL) status</p> <p>Gender</p> <ul style="list-style-type: none"> - Female - Male <p>Economically Disadvantaged Adults</p> <ul style="list-style-type: none"> - Unique enrollment situation, with LEA enrolling PK3 and PK4 and adults
Total number of Absence Unexcused, overall.	<p>Type of Variable: Dependent---Continuous</p> <p>Reporting: The number of absences that occurred at that school in the year.</p> <p>Universe: All absences that occurred at the school by students present in the October audit throughout the year.</p>	
Suspensions: Percent of students suspended out-of-school, overall and by subgroup.	<p>Variable Name: Suspension</p> <p>Type of Variable: Dependent---Binary</p> <p>Reporting: % of students receiving out-of-school suspensions.</p> <p>Calculated by:</p> <ol style="list-style-type: none"> 1. Count students who have been suspended out-of-school for 1 or more full days in a single suspension in a school and also counted in the school’s audited enrollment. 2. Divide the total number of students who have been suspended by the total number of students in the school as determined by the October 7, 2013, audited enrollment file. <p>Universe: This metric divides two cross-sections of data. The universe for discipline data is any record meeting the inclusion rules above. The universe for the denominator is any student included in the October 7, 2013, audited enrollment file.</p>	
Total number of suspensions, overall	<p>Type of Variable: Dependent---Continuous</p> <p>Reporting: The number of suspensions that occurred at that school throughout the year.</p> <p>Universe: All suspensions that occurred at the school by students present in the October audit throughout the year.</p>	
Total number of referrals made to SST and CSS, overall	<p>Variable Name: Referrals_Rate</p> <p>Type of Variable: Dependent---Continuous</p> <p>Reporting: The number of referrals of chronically absent students that occurred at that school throughout the year.</p> <p>Universe: All referrals that occurred at the school by students present in the October audit throughout the year.</p>	

Student Demographics Metrics		
Variable	Definition	
Enrollment, overall and by subgroup.	<p>Variable Name: Enrollment Type of Variable: Independent---Continuous Reporting: All DC students enrolled, as determined by the in-seat attendance (ISA) files, in the grades served by SY 2013-2014 grade, as determined by the October 7, 2013, audited enrollment file. Student grade levels are determined by the ISA data files. Calculated by: 1. Total each student's days present, not partial days. - For DCPS, add each student's number of days excused for field trips. 2. Total each student's total membership days. 3. Divide each student's attendance days by his/her membership days 4. Sum of all present days divided by all membership days. Universe: All students of any age or grade enrolled for any number of membership days</p>	
Demographics: Percent of enrolled students by race/ethnicity.	<p>Variable Name: Black, White, Other non_Black non_White Type of Variable: Independent---Binary Reporting: 1. Count the total number of students in each of the reporting categories (7 race/ethnicity categories). 2. Divide each count by the total number of students. Universe: All students in the October 7, 2013, audited enrollment file.</p>	<p>Race/Ethnicity - Black non-Hispanic - White non-Hispanic - Hispanic/ Latino - Asian - Pacific/ Hawaiian - Native Am./ Alaskan</p>
Need: Percent of enrolled students by Economic Disadvantage.	<p>Variable Name: Free or Reduced Lunch Type of Variable: Independent--- Binary Reporting: 99% schools certified for Community Eligibility Provision (CEP). Calculated by: 1. Count the number of students receiving free or reduced price lunch, CEP, or direct certified. 2. Divide count by the total number of students. Universe: All students in the October 7, 2013, audited enrollment file.</p>	
Need: Percent of students enrolled by Special Education (SPED) status.	<p>Variable Name: All SPED Levels Type of Variable: Independent---Continuous Reporting: % of Special Education students % of SPED students by level (levels 1-4, where level 1 requires 8 or less hours of additional instruction time). Calculated by: 1. Divide the number of SPED status students by the total number of students enrolled. % Special Education by Level. Calculated by Dividing the number of students at each level by the total number of SPED students. Universe: All students in the October 7, 2013, audited enrollment file.</p>	
Ward	<p>Type of Variable: Independent---Categorical Reporting: The total number of students enrolled by Ward Universe: All students in the October 7, 2013, audited enrollment file.</p>	
SY 2012-13 SY 2013-14	<p>Variable Name: y2013, y2014 Type of Variable: Independent---Binary Reporting: Enrollment in SY 2012-2013 and 2013-2014. Calculated by: 1. Count the total number of students enrolled by school year. Universe: All students in the October 7, 2013, audited enrollment file.</p>	

DESCRIPTIVE STATISTICS FOR KEY VARIABLES

As shown in table 8, the average rates for all students enrolled in a DCPS school at any age and grade in SY 2014 weighted by enrollment is 0.754 for absences, 0.897 for suspension and 0.520 for referrals. In SY 2013, the rate of absences, suspension, and referrals were .953 for absences, 0.895 for suspension and 0.564 for referrals before the full enforcement of the law. In SY 2014, the average absence rate decreased while suspension and referrals relatively remained the same after the change in policy. The spike in the absences rate maybe due to several factors such as a more heightened awareness of the changes by way of dissemination of information to parents, students and guardians. There may also be a result of inconsistencies in school reporting. Without considering that error, comparison of suspension average rates between the two years, have a slight increase. The means have slight changes for the key independent variables, demonstrating that the policy impact is more associated with absences rather than race, income or special education.

Table 8: Summary Statistics of Key Variables: Mean and Standard Deviations by School Year, Weighted by Enrollment

VARIABLES	SY 2012-2013 (Before)		SY 2013-2014 (After)	
	Mean	Std. Dev.	Mean	Std. Dev.
Absences	0.953	0.212	0.754	0.433
Suspension	0.895	0.307	0.897	0.305
Referrals	0.565	0.498	0.520	0.502
All_SPED_levels	0.585	0.495	0.558	0.499
Black	0.838	0.370	0.832	0.376
Free_or_Reduced_Lunch	0.870	0.338	0.866	0.342
White	0.910	0.287	0.902	0.298
other_nonblack_nonwhite	0.620	0.487	0.593	0.494

N= 374

RESULTS

Table 9 provides OLS regression results (columns 1-3) for variables based on values for the 2014 school year as estimates after the enactment of the law. Ward 1, and school year 2013 (y2013) were omitted as reference variables.

Absences

The OLS regression using SY2014 (y2014) variable in table 9 shows a negative relationship between the 2013-14 school year and rate of absences and is statistically significant at conventional levels ($p < 0.001$) based on all the students enrolled in DCPS by grade and age. The predicted value of an individual enrolled in a DCPS school is associated with the likelihood of the absence rate increasing by 0.685 units before the policy was enacted, holding all other variables constant. This means that all students enrolled in DCPS schools before the policy was enacted were 32% more likely to have unexcused absences than after the policy was enacted.

The predicted value of an individual student enrolled in a DCPS school is associated with the likelihood of the unexcused absence rate decreasing by 0.129 units after the policy was enacted, holding all other variables constant. Thus, this results suggest that students enrolled in a DCPS school after the policy were only 19% likely to have an unexcused absence than before the policy was enacted, holding all other variables constant. The percent difference between before and after the policy was enacted is 13%, which is similar to the percent difference in the predicted value by the mean of 15%, shown in table 10. These values indicate that there is an association with the policy implementation and in the reduction in unexcused absences, after the law was enforced in DCPS.

Based on the demographics from the background section, Wards 7 and 8 are the most impoverished wards in D.C. Both Wards 7 and 8 show a negative relationship with rate of

absences, but are not statistically significant. The result shows that the law is associated in reducing the absences rate by 4% for students enrolled in DCPS from Ward 7 than before the policy was enacted, holding all other variables constant. For absences in Ward 8 is associated with a 1% reduction than before the law was enacted.

Table 10 also shows results from a separate OLS model regressing the interaction term of y2014 with Black. As such, the predicted value of an African-American student enrolled in a DCPS school is associated with the likelihood of an unexcused absence rate decreased to 0.003 units after the policy was enacted, holding all other variables constant. The percent difference in this case is less than a 1% reduction in unexcused absences from before and after the law was enacted, holding income, race, and ward constant.

Interestingly, the difference for African-American student from Ward 7 and Ward 8, before and after the law was enacted, is associated in reducing absences by 8% and 10%, respectively, for that student enrolled in DCPS, holding White, other non-black, income and special education constant. The percent difference in the predicted value for the means is 1%.

Suspensions

The OLS regression using SY2014 (y2014) variable in column 2, table 9 shows a negative relationship between the 2013-14 school year and rate of suspensions, but is not statistically significant. The predicted value of an individual enrolled in a DCPS school is associated with the likelihood of the suspensions rate increasing by 0.554 units before the policy was enacted, holding all other variables constant, and is statistically significant at conventional levels, ($p < 0.001$). This means that all students enrolled in DCPS schools before the policy was enacted were 4.5% more likely to have a suspension than after the policy was enacted.

The predicted value of an individual student enrolled in a DCPS school is associated with the likelihood of suspensions decreasing by 0.023 units after the policy was enacted, holding all other variables constant. Thus, this results suggest that students enrolled in a DCPS school after the policy were only 4.2% likely to have suspension after the policy than before the policy was enacted, holding all other variables constant. The percent difference between before and after the policy was enacted is three-tenths of a percent, which is a smaller value than the percent difference in the predicted value by the mean of 2%, shown in table 10. Overall, these values may not necessarily indicate that there is an association with the policy implementation and in the reduction in suspensions, after the law was enforced in DCPS.

Both Wards 7 and 8, in this case, show a positive relationship with suspensions rate, but are not statistically significant.

However, from table 10, the predicted value of an African-American student enrolled in a DCPS school is associated with the likelihood of suspensions decreasing is 0.189 units after the policy was enacted, holding all other variables constant. The percent difference in this case is a 6% reduction in suspensions from before and after the law was enacted, holding income, race, and ward constant. The difference for African-American student from Ward 7 and Ward 8, before and after the law was enacted, is associated in reducing suspensions by 3% and 5%, respectively, for that student enrolled in DCPS, holding White, other non-black, income and special education constant. The percent difference in the predicted value for the means is 5%.

Referrals

The OLS regression using SY2014 (y2014) variable in column 3, table 9 shows a negative relationship between the 2013-14 school year and rate of referrals, and is statistically significant at conventional levels, ($p < 0.001$). The predicted value of an individual enrolled in a

DCPS school is associated with the likelihood of the referrals rate increasing by 0.037 units before the policy was enacted, holding all other variables constant, and is statistically significant at conventional levels, ($p < 0.05$). This means that all students enrolled in DCPS schools before the policy was enacted were 96% more likely to have a referral than after the policy was enacted.

The predicted value of an individual student enrolled in a DCPS school is associated with the likelihood of referrals decreasing by 0.01 units after the policy was enacted, holding all other variables constant. Thus, this result suggests that students enrolled in a DCPS school after the policy were 26% likely to have a referral after the policy than before the policy was enforced. The percent difference in this case is 70% reduction in referrals since the policy was first enacted. However, this number would mean that just as the policy was enacted, schools were referring students to CSS and SST in high numbers, which tapered off over time. There could be several reasons for this, such as, schools not following the steps in the law when a student receive a number of absences.

Differences in the Means

As shown in table 10, the estimated difference in the predicted values based on the means before and after the law enactment is .864 and .735 for absences and .812 and .793 for suspensions, respectively. The difference in predicted values by percent for the means is associated with a 15% difference or reduction from before the law was enacted, and is associated with a 2% difference for suspensions. For referrals the difference is 87% from before the law, however, we have to note that referrals may have had a spike because the law was newly enacted and schools may have been utilizing the policy almost immediately without following the steps enumerated in the law.

Table 9: OLS Regression Results for Variables Absence, Suspension and Referral by Ward for SY 2014, Weighted by Enrollment

	(1) Absences_Rate	(2) Suspension	(3) Referral_Rate
y2014	-0.129*** (-5.87)	-0.0232 (-0.42)	-0.0474*** (-7.07)
Black	0.0761** (3.17)	0.0862 (0.87)	0.0117 (1.83)
White	0.00738 (0.29)	-0.0370 (-0.56)	-0.00698 (-0.54)
Other_nonblack_nonwhite	0.110** (3.19)	0.188 (1.84)	0.00493 (0.76)
Free_or_Reduced_Lunch	0.148*** (3.41)	0.131 (1.33)	0.0171* (1.99)
All_SPED_levels	0.0337 (1.82)	0.0560 (0.68)	0.00540 (0.48)
1.Ward	-0.00388 (-0.06)	0.0511 (0.30)	-0.00561 (-0.46)
2.Ward	0.0740 (1.24)	0.155 (0.90)	-0.00489 (-0.51)
4.Ward	-0.0409 (-0.60)	-0.0523 (-0.31)	-0.00967 (-0.96)
5.Ward	-0.0132 (-0.20)	0.211 (1.36)	-0.00734 (-0.47)
6.Ward	0.00945 (0.18)	0.273 (1.86)	0.00810 (0.86)
7.Ward	-0.0149 (-0.22)	0.0652 (0.37)	0.0197 (1.07)
8.Ward	-0.00117 (-0.02)	0.178 (1.10)	0.00563 (0.38)
_cons	0.685*** (13.48)	0.554*** (4.00)	0.0372* (2.50)
<i>N</i>	325	217	217

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 10: Predicted Values for Those Cases Used to Estimate OLS Regression Results for Absence, Suspension and Referral, Weighted by Enrollment

	(1) Absences_Rate	(2) Suspension	(3) Referral_Rate
Differences in Predicted Values by Means			
<i>If y2014 = 0</i>	0.864 (0.081)	0.812 (0.152)	0.054 (0.017)
<i>If y2014 = 1</i>	0.735 (0.081)	0.793 (0.152)	0.007 (0.017)
Difference in Predicted Values by Percent	15%	2%	87%
<i>N</i>	325	217	217
Standard deviation in parentheses			
Differences in Predicted Values if:			
<i>Y2014</i>	0.556	0.531	-0.010
<i>Ward 7</i>	0.541	0.596	0.009
<i>Ward 8</i>	0.554	0.709	-0.004
<i>Black^d</i>	0.682	-0.189	0.020
<i>Black in Ward 7</i>	0.742	0.728	0.057
<i>Black in Ward 8</i>	0.757	0.841	0.047

^d An OLS regression with an interaction term between y2014 and Black, by ward was used for the difference between African-Americans before the law was enacted and after for absence rates and for suspensions.

IMPLICATIONS AND LIMITATIONS OF DATA AND POLICY

Data

There are two issues to be addressed mentioned briefly in the empirical model and estimation strategy. First is the omitted variable bias (OVB), second is the truncated data. For instance, OVB would include difficult to measure variables such as behavior, following instruction or directions, number of meals a student has had, regular visits to doctors or the number of times a student witnessed violent acts and other psychologically related trauma.

Secondly, there is the shortcoming of truncated data. The most important limitations are with the demographics and referral data. Data consistent with the DCPS methods used most recently to collect information for unexcused absences and suspensions in 2014 school year provide demographic and referral data for that school year. While data for absences and suspensions was available for SY 2013 and older, the collection methods and school reporting were not consistent for demographics. As such, data on demographic were regressed with unexcused absence and suspension data from the SY 2013 data. This limitation may cause external validity issues more than interval validity issues.

Policy

Despite these limitations, this study produced results that show truancy prevention reduced the average rate of absences before and after the policy and slightly reduced the suspensions. Nevertheless, the difference in suspensions before and after the policy, had a slight decrease in its percent value, but this also is an indicator that the law did not impact suspensions as it did for absences. This means that, even though many of the schools that enforce the truancy law refer students out to SST, and/or CSS, the schools continue to suspend or discipline students as they did before along with referring students to SST because of the number of absences. Thus,

the issue becomes that whether schools are now more frequently suspending or disciplining students by way of the truancy law. The results from the OLS shows that the suspension rate remained relatively the same.

Thus, suspensions are administered at the rate that have been before the law for those same students who were chronically absent. While we cannot conclusively say this, we can make an inference that such an occurrence is possible.

Moreover, data collected over time will tell if suspensions are remained the same, reduced or increased. Legislation and public commenting during the enactment of the law suggest that truancy is problematic, and that schools need assistance in addressing chronically absent students. But whether the law also enables schools in increasing the number of suspensions for those chronically absent students requires further study. Here, if absenteeism has a relationship with the number of suspensions, it would show an increased number of absences associated with an increase in suspensions or have an inverse relationship with suspension.

What is interesting, is that we saw this similar pattern in the rate of referrals. That near the beginning of the policy the referrals spiked and over the school year, the referrals tapered off. This would indicate that for those students who are chronically absent and disruptive may be associated with the likelihood of being referred to CSS and SST more so than being suspended. The results also suggest that the policy is targeting absences, but schools may not be following the steps of students with certain number of absences. As such, schools maybe more likely to refer students out, instead of suspending a student, even though the student may not meet the threshold of when a student should be referred out.

While it may be difficult to discern the exact factor that affects suspensions, finding a correlation between absenteeism and suspensions will provide an insight on whether DC's

truancy prevention program is an actual cause of increased suspensions at a school. Another possible insight from this analysis is in the reverse relationship, where suspensions may affect absenteeism. This would also enable us to discern whether there is a relationship of other factors that are affecting suspensions which are in turn affecting student absenteeism from a school.

CONCLUSION

In conclusion, this study demonstrates how implementing a policy that is supposed to aid in one aspect, may lead to uninvited consequences and exacerbate another issue. In this case, the issue is of decreased classroom instruction time. This means that while the law aids schools addressing chronically absent students, the law may inevitably decrease class instruction time for those individuals by referring students out to CSS or suspend those same students.

The analyses presented in this study that contain OLS regression attempts show an effect the law may have on absences and suspensions, by showing the differences in those rates before and after the law was implemented.

Here, the OLS predicted values, as percent values, show the difference in absences rate changing before and after the policy was enacted is 15%, on average, for an individual enrolled at the time of the policy enactment, holding all other variables constant. For suspensions, the results suggests that the difference in suspensions rate changing before and after the policy was enacted is 2%, on average for an individual enrolled at the time of the policy enactment, holding all other variables constant. Referrals in this case, are a result of the policy and would not have occurred before the policy was enacted, but the results suggest that the difference for referrals rate since the policy change have a predicted value of 87%, on average.

As such, the policy has targeted its goal of reducing chronic absenteeism. But what the results show is that suspensions were not impacted as much as referrals. While I hypothesized

that suspensions would increase, what we can see is that referrals increased on average. Thus, data collection over time will allow us to revisit the relationship among, absences, suspensions and referrals post-truancy prevention law. From there we can better, address policy implications of truancy prevention.

APPENDICES

Appendix A

“Charter Schools”

Another important aspect is the growth of charter schools in D.C. since the enactment of PERAA. Its significance is known nationwide as one of the largest percentages of a city’s student enrolled in charter schools.²⁰ Student enrollment in charter schools increased from 27% to 44% since the enactment of PERAA in 2007. This is also a significant for D.C. students because charter schools are funded with tax payer dollars but can be operated or owned by a for-profit organization or as a small, local operation or part of a national network of school. Thus, charter schools are still regarded as a public schools but governed and accounted primarily through chartering organizations that function as local education agencies (LEAs).

“Truancy Related Terms”

Truancy can be defined as unexcused absences from school by a minor that exceed a number of such absences allowed under a state law. In D.C., truancy is defined as a minor, a person under the age of 18 or 16 unlawfully absent from school.^e SCSMAA also provides the procedures for policy authority over a truant child, specifically a minor between the ages of 5 years through 13 to be referred to the Child and Family Services after the accrual of 10 unexcused absences and a minor student between the ages of 14 to 17 to be referred to the Court of Social Services, Division of the Superior Court and to the Office of the Attorney General Juvenile Section.²¹

“Absence” --A full or partial school day on which the student is not physically in attendance at scheduled periods of actual instruction at the educational institution in which s/he was enrolled or attended, and is not in attendance at a school-approved activity that constitutes part of the approved school program.

“Absenteeism” -- A pattern of not attending school, including the total number of school days within one school year on which a student is marked with an excused or unexcused absence.

“Chronic Absenteeism” --The accumulation within one (1) school year of ten (10) or more school days on which a student is marked absent, including excused and unexcused absences.

“Chronically Truant” -- A school aged child who is absent from school without a legitimate excuse for ten (10) or more days within a single school year.

“Truant” --A school-age child who is absent from school without a legitimate excuse for absence.

^e D.C. Official Code §32-221(2015); D.C. Official Code §25-782(b)(2015); there was no defined meaning of a “truant” person in the D.C. Official Code. This reference is based on a search of the word “truant” or “truancy” of the D.C. Official Code. Truant is defined in the D.C. Municipal Code of regulations (D.C.Mun.Reg).

Absences (Excused/Unexcused)²²

Any absence, including an absence from any portion of the instructional day, without a valid excuse shall be presumed to be an unexcused absence.

“Excused absences” include but not limited to categories regarding illness, death in student’s family, religious holiday observance, or as excluded by the direction of authorities. (Title 5 D.C.Mun.Reg. §A2102.1 to 2102.4 (2013))

School Attendance Requirements²³

Every parent, guardian, or other person, who resides permanently or temporarily in the District during any school year and who has custody or control of a minor who has reached the age of 5 years or will become 5 years of age on or before September 30th of the current school year shall place the minor in regular attendance in an educational institution during the period of each year when the public schools of the District are in session. This obligation of the parent, guardian, or other person having custody extends until the minor reaches the age of 18 years. For the purpose of this section placement in summer school is not required.

Suspensions (Short, Medium and Long-terms)

“Suspension” - the denial of the right of a student to attend any DCPS school or program, including all classes and school activities, except in an approved Alternative Educational Setting, in no event exceeding ninety (90) school days pursuant to the provisions of this chapter.

“Short-Term Suspension” - on-site or off-site Suspension for one (1) to five (5) school days for Secondary students or one (1) to three (3) school days for Elementary students.

“Long-Term Suspension” - Suspension for eleven (11) to ninety (90) school days.

“Medium-Term Suspension” - Suspension for six (6) to ten (10) school days.

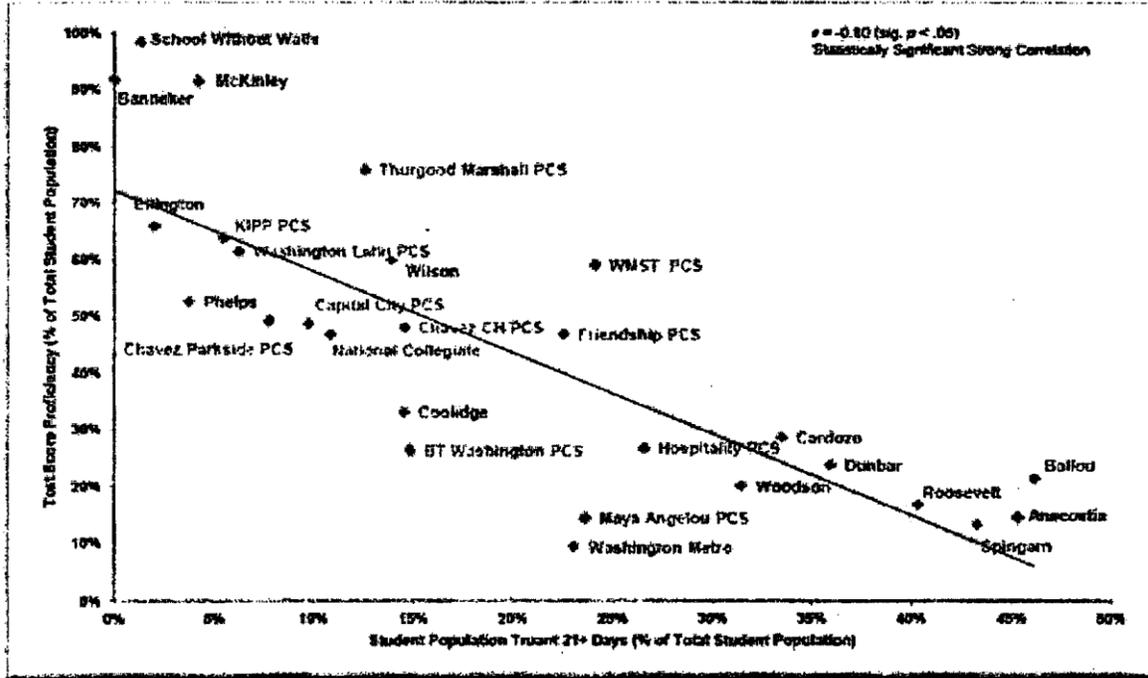
Discipline (In school disciplinary action)

“In-School Disciplinary Action” - disciplinary actions such as after-school detention, loss of privileges (including recess), exclusion from extracurricular activities, written reflection, conflict resolution, mediation, or similar actions of short duration that do not result in the student’s loss of academic instruction time.

Expulsion

“Expulsion” - the denial of the right of a student to attend any DCPS School or program, including all classes and school activities, except DCPS Alternative Educational Settings, for one (1) calendar year.

Appendix B^f



Truancy is similarly a problem at District public charter schools. Last school year, 6,559 students in grades Kindergarten through 12 missed at least 11 days of school with an unexcused absence. This represents 28% of the 23,423 students enrolled in these compulsory grades.

^f See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 12.

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^g Note, APA does not specifically address citing state legislative documents, and refers to *The Bluebook: A Uniform System of Citation*.

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¹ See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 12.

² Harris, Kamala and Hamilton, Joan O.C. “Smart on Crime” Chronicle Books, 2009 at 129.

³ See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 2.

⁴ Public Education Reform Amendment Act of 2007, D.C. Law 17-9 (2007); B17-0001; *codified as* D.C. Official Code §§ 38-171 to 38-191(2013); D.C. Act; 54 D.C.Reg.4102.

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¹⁰ Attendance Accountability Amendment Act of 2013, D.C. Act; 60 D.C.Reg.9839; B20-0072; *as amended* D.C. Official Code §38-201 thru §38-241 for “Compulsory School Attendance Law, (2015).

¹¹ See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 2.

¹² See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 11.

¹³ See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 2.

¹⁴ See Bill No. B20-0072, Committee Report, Council of the District of Columbia, on the “Attendance Accountability Amendment Act of 2013” at 16.

¹⁵ See Title 5 D.C.Mun.Reg. §A2100 (2013); Compulsory Education and School Attendance at Public Educational Institutions.

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¹⁸ National Research Council Id. at 24

¹⁹ National Research Council, “An Evaluation of the Public Schools of the District of Columbia: Reform in a Changing Landscape,” Committee for the Five-Year (2009-2013) Summative Evaluation of the District of Columbia’s Public Schools, National Academies Press, Washington D.C., 2015, at 26

²⁰ National Research Council Id. at 31

²¹ D.C. Official Code §38-208 (c)(1)(A)-(B)(2015)

²² Title 5 D.C.Mun.Reg. §A-2102.1 to 2102.4 (2013)

²³ D.C. Official Code §38-202(a)(2015)