9^{th} International Conference on Computational Social Science IC^2S^2
July 17-20, 2023, Copenhagen, Denmark

Top-Down Discipline: The Role of Carceral Ideology in US Public Schools' Disciplinary Regimes

Keywords: school discipline, racial inequality, education policy, text as data

Extended Abstract

Black students face significantly higher school discipline rates than their white peers. Black students account for 15.1% of public school students, yet represent 38.2% of out-of-school suspensions, 28.7% of referrals to law enforcement, and 31.6% of school arrests [5]. Studies that examine these disparities tend to emphasize behavioral and socioeconomic differences between racialized groups, as well as racially disparate treatment by teachers and administrators. However, critical quantitative perspectives have highlighted how empirical studies of disparities often reinforce and normalize racialized differences [1]. In contrast to a "bottom-up" view where schools respond to assumed student misbehavior, I consider a "top-down" model of discipline, where schools create disciplinary regimes that shape student behavior.

The policies, procedures, and practices that comprise these disciplinary regimes can be characterized by their use of carceral ideology, which I define here as the propensity to solve problems through surveillance, coercion, confinement, and correction. Carceral ideology is a belief system that views societal problems as individual and familial failures that require "correction." Given the long history of criminalization and incarceration of Black people in the United States, carceral ideology maintains that students of color are inherently deviant, creating both a rationale and set of tools for their disparate disciplinary treatment. This study examines school-level disciplinary regimes via two related research questions. First, to what extent does carceral ideology vary across different types of school environments, different geographies, and different populations of students? Second, is carceral ideology associated with higher rates of discipline?

With the growth of fast and inexpensive computational resources, text analysis has become a widely popular collection of techniques to analyze political and social phenomena [2]. To investigate the key research questions, I conduct a dictionary-based textual analysis of policy documents—school handbooks—to develop a measure of carceral ideology that can be applied to a large, nationally representative sample of schools. As formal policy documents, handbooks provide key information as well as values, goals, rules, and expectations. Handbooks are widely accessible, contain relatively standardized content, and convey concise information about schools' values, goals, structure, practices, and intentions.

Using web-scraping techniques, I collected approximately 15,000 handbooks from a mix of elementary, middle, and high schools between 2019 and 2021 (see Figure 1). A majority of the handbooks were matched to school-level records from two datasets: (1) the 2018-19 NCES Common Core of Data (CCD) [3], and (2) the 2017-18 Civil Rights Data Collection (CRDC) [4]. School information from these sources includes directory information such as name, address, geographic coordinates, and website; characteristics such as charter or magnet status; student body demographics including race and free- or reduced-price meal (FARMs) eligibility; and school-level disciplinary outcomes including in-school and out-of-school suspensions and expulsions.

I operationalize carceral ideology in school handbooks as the document-level proportion of carceral terms that appear throughout a handbook (see Figure 2). For a given document, I compute its *Carceral Ideology (CI) Score* as the proportion of sentences containing at least one carceral term. One limitation of the score is that it does not increase as the number of carceral terms increases within a sentence. This is by design, as we are primarily interested in the prevalence of carceral ideology across many dimensions of education. Therefore, a school that has a high concentration of carceral terms in a single section (e.g., disciplinary procedures) would have a lower CI Score than a school with carceral terms spread across many sections (e.g., goals, expectations, dress code, attendance, etc.). Widespread use of carceral language is a stronger indication of a broader carceral ideology.

I find that schools' use of carceral ideology varies with respect to the school environment—whether the school is a charter, magnet, or traditional public school—as well as student demographics and geographic locale (see Table 1). Charter high schools with majority Black populations exhibit the highest prevalence of carceral ideology within their written policies. Outside of charter schools, Black students' exposure to carceral ideology decreases as their numbers increase. This suggests that Black students may encounter more substantial mechanisms of social control when they comprise a statistical minority. Carceral ideology is also more prevalent in schools with greater numbers of students who qualify for free and reduced-price meals. With respect to geographic locale, carceral ideology is more prevalent among traditional public schools in suburban and rural areas. This finding supports recent efforts to expand the study of educational inequality beyond urban environments. Finally, I find that carceral language is a statistically significant predictor of school suspensions and expulsions (see Table 2).

References

[1] David Gillborn, Paul Warmington, and Sean Demack. QuantCrit: Education, Policy, 'Big Data' and Principles for a Critical Race Theory of Statistics. *Race Ethnicity and Education*, 21(2):158–179, 2018.

[2] Justin Grimmer and Brandon M Stewart. Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, 21:267–297, 2013.

[3] U.S. Department of Education. Common Core of Data (CCD), file ccd_SCH_029_1819_w_0a_04082019, 2018-19, Version Preliminary 0a, July 2019.

[4] U.S. Department of Education. 2017-18 Civil Rights Data Collection Public-Use File. https://ocrdata.ed.gov/resources/downloaddatafile, September 2020.

[5] U.S. Department of Education Office for Civil Rights. An Overview of Exclusionary Discipline Practices in Public Schools for the 2017-18 School Year. https://www2.ed.gov/about/offices/list/ocr/docs/crdc-exclusionary-school-discipline.pdf, 2021.

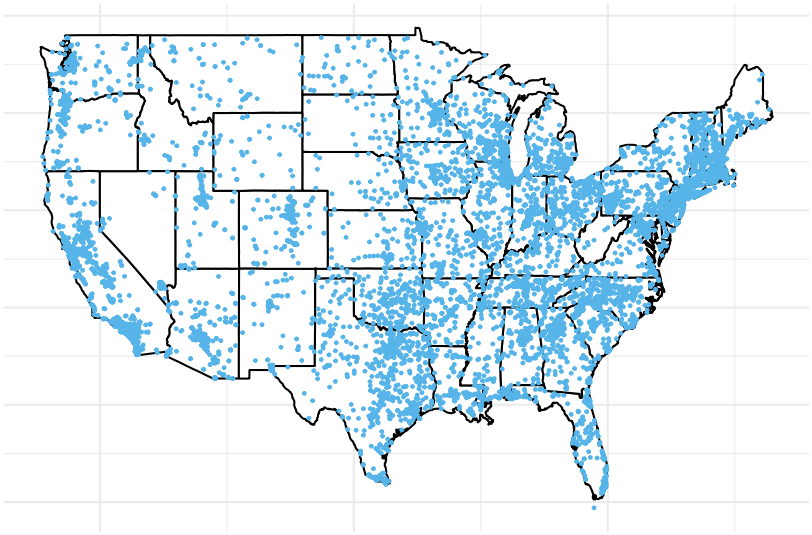

Figure 1: School Handbook Distribution by State

Figure 2: Carceral Ideology Stems by Dimension

Table 1: Carceral Ideology Estimates by Grade Level (with Interactions)

	Elementary Schools	Middle Schools	High Schools
	(1)	(2)	(3)
Charter	1.090*	0.029	1.776**
	(0.586)	(1.351)	(0.905)
Magnet	0.294	−2.070*	−1.468
	(0.770)	(1.197)	(0.958)
Rural	1.911***	1.061*	1.318**
	(0.363)	(0.634)	(0.538)
Suburban	1.227***	0.780	1.922***
	(0.323)	(0.545)	(0.531)
Pct Free/Red Lunch	2.637***	1.009	−0.053
	(0.549)	(1.031)	(1.002)
Pct Black	−2.627***	−3.130*	−3.520**
	(0.879)	(1.633)	(1.456)
Enrollment	0.001*	−0.001	−0.001
	(0.001)	(0.001)	(0.0003)
Charter x Pct Black	2.885*	1.525	6.911***
	(1.487)	(3.659)	(2.364)
Constant	25.708***	32.385***	35.426***
	(1.833)	(3.310)	(2.471)
Observations	5,542	1,834	2,112
R^2	0.115	0.096	0.085

Note: The outcome of interest, *CI Score*, is the document-level proportion of . sentences containing at least one carceral term. Models include state fixed effects; *p<0.1; **p<0.05; ***p<0.01

Table 2: Discipline Rate Estimates: Suspensions and Expulsions

	In-School Suspensions	Out-of-School Suspensions	Expulsions
	(1)	(2)	(3)
CI Score	0.011***	0.013***	0.004***
	(0.002)	(0.001)	(0.001)
Charter	−0.519***	−0.090*	−0.066**
	(0.067)	(0.053)	(0.028)
Magnet	−0.346***	−0.665***	−0.032
	(0.085)	(0.068)	(0.036)
Rural	0.059	−0.071**	0.059***
	(0.043)	(0.034)	(0.018)
Suburban	−0.103***	−0.098***	−0.075***
	(0.040)	(0.032)	(0.017)
Enrollment	0.002***	0.002***	0.001***
	(0.00004)	(0.00003)	(0.00002)
Pct Free/Red Lunch	0.559***	1.165***	0.170***
	(0.070)	(0.056)	(0.030)
Pct Black	0.189*	1.325***	0.205***
	(0.099)	(0.079)	(0.042)
Constant	0.733***	0.969***	−0.397***
	(0.219)	(0.175)	(0.093)
Observations	9,186	9,186	9,186
R^2	0.307	0.423	0.217

Note: The outcome of interest is the log-transformed count of incidents leading to a suspension or expulsion at the school level; Models include state fixed effects; *p<0.1; **p<0.05; ***p<0.01