AN ECONOMETRIC ANALYSIS OF NORTH CAROLINA’S LEGISLATIVE RIGHT-TO-COUNSEL FOR UNC-SYSTEM STUDENTS

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ABSTRACT

This study analyzes the effect that N.C. GEN. STAT. §116-40.11(a) (2015) may have had on the number of disciplinary referrals for alleged campus conduct violations committed by students in UNC System schools. We use two approaches to estimate effects. First, we use state-level synthetic comparison methods. Second, we use institution-level difference-in-differences estimation. To derive causal estimates of the effect, we use the synthetic control to compare statewide disciplinary referral rates to the disciplinary referral rates in a synthetic counterpart. For confirmation, we also estimate the changes in disciplinary referrals using a differences-in-differences comparison group matched factors related to research intensity, institutional size, and urbanicity.

This study provides evidence that statutory regulation of student conduct administration in North Carolina may have unexpectedly altered the number of alcohol and illicit substance related referrals to campus disciplinary processes. Referral rates dropped while there is also evidence that suggests student behaviors tend to remain constant. We propose these results suggest cost-conscious and risk-averse university conduct administrators may adjusted their practices upon the adoption of N.C. GEN. STAT. §116-40.11(a) (2015). These results proffer important considerations when planning policies that modify if or how attorneys may participate in student conduct and disciplinary processes.

I. STUDENT CONDUCT REFERRALS

A. Student Conduct Referrals

Empirical examination of disciplinary referral rates at American colleges and universities is an underdeveloped area of policy inquiry. The earliest examples analyzed data from one or a few institutions while framing recidivism rates as a measure of indication of student disciplinary system effectiveness.1 Another study examined disciplinary referral rates, appeal rates, rates of modification on appeal, recidivism, and litigation as a result of student discipline in reaching a conclusion that can broadly be summarized as indicating that the type of disciplinary process did not seem to correlate with the study’s outcomes.2

More recently, federal data collected pursuant to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act3 has been examined to assess if crime or disciplinary referral rates correlate with graduate rates.4 All institutions participating in federal Title IV student financial aid must report a series of crime and safety related statistics.5 Among these statistics are tallies of disciplinary referrals that would also constitute violations of laws regulating weapons, liquor, or drugs. A disciplinary referral is the “referral of any person to any official who initiates

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3 Hereinafter, the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act will be referred to as the “Clery Act” and the data associated with the Clery Act will be referred to as the “Clery Data.”


a disciplinary action of which a record is established and which may result in
the imposition of a sanction.” These data provide the most complete and
most widely available indication of disciplinary referral rates at American
colleges and universities.

This study seeks to examine whether disciplinary referral rates may have
been affected by a shift in policy that became effective on August 23, 2013
throughout the University of North Carolina System. The North Carolina
legislature and governor adopted legislation that provided in part:

Any student enrolled at a constituent institution who is
accused of a violation of the disciplinary or conduct rules of
the constituent institution shall have the right to be
represented, at the student’s expense, by a licensed attorney or
nonattorney advocate who may fully participate during any
disciplinary procedure or other procedure adopted and used by
the constituent institution regarding the alleged violation.
(N.C.G.S. § 116-40.11).

This legislation represented a dramatic shift in policy for student
disciplinary processes at UNC System schools. Until N.C.G.S. § 116-40.11,
UNC System schools had the option to prohibit or restrict attorney
involvement. A frequently referenced “Twenty-First Century Model Student
Code of Conduct” specifically excludes attorneys from participating as
advisors in student disciplinary processes. Courts have approved policies
that allow attorneys “to advise his [sic] clients during the hearing, but… not
permitted to participate in the proceedings.” It is common common practice
for colleges and universities to restrict attorney involvement.

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6 Id.

7 Hereinafter, the University of North Carolina System of colleges and universities will
be referred to as the “UNC System.”

8 Stoner, Edward N., and John Wesley Lowery. “Navigating Past the ‘Spirit of
Insubordination’: A Twenty-First Century Model Student Conduct Code with a Model
Hearing Script.” Journal of College & University Law 31, no. 1 (October 2004): 1–63, at 41-
2.

9 Id, at note 128 (further explaining that “there is no requirement to allow either the
presence or participation of attorneys, except in a few circumstances in some jurisdictions at

10 For example, a federal judge has recently had occasion to discuss the University of
Notre Dame’s policy of restricting attorney involvement. Testifying on behalf of his
B. Empirically Analyzing Clery Data

Many scholars have concluded that Clery data likely suffers from omissions, errors, or other quality concerns.\(^1\) Multiple studies have reported that some constituents view Clery data with skepticism.\(^2\) One particularly provocative finding from a survey of campus law enforcement officials is that many of those officials self-reported circumstances which, if true, clearly indicate their institutions may be out of compliance with the notice and reporting requirements of the Clery Act.\(^3\) Popular media also express

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\(^2\) Steven M. Janosik, Parents’ Views on the Clery Act and Campus Safety, 45 J. OF C. STUDENT DEV. 43, 51 (2004) (studying and reporting parental views of administrators as “forthcoming and candid”); Janosik & Plummer, supra note 14; Dennis E. Gregory & Steven M. Janosik, The Views of Senior Residence Life and Housing Administrators on Clery Act and Campus Safety, 34 J. OF C. & U. STUDENT HOUSING 50, 56 (2006) (describing the somewhat limited available scholarship regarding views towards the veracity of Clery data; and reporting that at least some administrators believe institutional officials may be hiding crime related information); Steven M. Janosik & Dennis E. Gregory, The Clery Act, Campus Safety, and the Perceptions of Senior Student Affairs Officers, 46 J. OF STUDENT AFF. RES. & PRAC. 208, 217 (2009) (studying and reporting that a modicum of administrators may believe institutional officials may be hiding crime related information).


Of serious concern, however, is the finding that 22% of respondents reported
skepticism regarding the accuracy of *Clery* data.\(^{14}\) Another potentially worrisome finding in the literature is that self-reported victimization rates seem to exceed police or institution tallied crime rates.\(^{15}\) However, referencing victimization rates as an indication that institutionally reported crime rates might be inaccurate or unrepresentative fails to acknowledge the dramatically different processes associated with compiling these two kinds of data. The methodological bases for comparing and contrasting *Clery* data with victimization data may be flawed.\(^{16}\) Institution and police tallied crime reports are subject to at least some scrutiny. Self-reported victimization represents un-scrutinized data. Also, *Clery* data are geographically constrained in a manner that may not apply equally to victimization survey data. Therefore, with fewer restrictions, self-reported not scrutinized not

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Similarly, 12% of respondents indicated their institutions do not make crime reports public upon request when the release would not affect pending investigations. This, too, violates provisions of the Act (Campus Crime Act, 38 CFR 668.46).

But see also, **John J. Sloan III & Bonnie S. Fisher**, *The Dark Side of the Ivory Tower: Campus Crime as a Social Problem*, at 38 (2010) (discussing US Department of Education program reviews in the late 1990s which examined Clery implementation at 117 institutions. The reviews indicated a small proportion of those institutions, 8 institutions, had failed to comply fully with Clery.).


geographically constrained victimization tallies compiled with dissimilar methods would not necessarily equal Clery tallies.

An additional important theme in the literature is argument that the Clery Act and Clery-like state equivalents merely serve as symbolic reform.\(^{17}\) A closely related notion is that advocates, activists, and others may have embellished (“socially constructed”) the phenomena or nature of campus crime for purposes of gaining stronger influences in policy discourse.\(^{18}\)

Despite data quality concerns, previous study of Clery data (or campus crime data) provides insight that informs study of disciplinary referrals. At least two studies have produced provocative results drawn from the analysis of Clery data. The first study sought to study “whether there is substantial under-counting of sexual assault by universities by examining statistical patterns in [Clery] data.”\(^{19}\) The study compared institutionally reported rates of sexual assault before, during, and following UW Department of Education audits. The author estimated that the number of sexual assaults during audit were 44% higher than the rates before audit. After audits, the sexual assault rates returned to pre-audit levels. Similar patterns were not present in the rates reported for other types of crime.\(^{20}\)

A subsequent study utilized Clery data which includes disciplinary referral rates and campus arrest rates to ascertain if either correlated with graduate rates.\(^{21}\) The author produced results that indicate “the utilization of the college’s conduct systems related to constructive student outcomes, whereas reliance on the criminal justice system related to adverse outcomes.”\(^{22}\)

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\(^{19}\) Corey Rayburn Yung, *Concealing Campus Sexual Assault: An Empirical Examination*, 20 PSYCHOLOGY, PUBLIC POLICY, AND LAW 1, 1-9 (2015).

\(^{20}\) Id, at 6.


\(^{22}\) Id, at 10.
Since the available data constitutes disciplinary referrals for behavior that may also have been violations of drug or liquor laws, the literature’s information related to identifying what campus characteristics may correlate with crime provided assistance in building the statistical analysis described below.\(^{23}\) Other studies have shown that many of the variables relating to campus crime also relate to disciplinary referral rates. Campus gender proportions relate to disciplinary referral rates; generally as the number or percentage of men enrolled increases so do the number of disciplinary referrals.\(^{24}\) Campus attributes that indicate institutional size also statistically related with disciplinary referral rates.\(^{25}\)

A final note from the literature related to analysis of Clery data is that no study has scrutinized the reported tallies of disciplinary referrals for accuracy in the same manner that the studies discussed supra scrutinized other aspects of Clery data. Further, factors recognized as an impediment to accuracy of Clery crime data would not necessarily also work to impede the accuracy of Clery’s disciplinary referral data. For example, one study identified issues pertaining to institutional structure and the processes of collecting data as impediments to accurate Clery reporting.\(^{26}\) When collecting crime data, positive

\(^{23}\) Positively related to campus crime rates are the percentage of students living on campus and unemployment rates in nearby cities. Lee R. McPheters, *Econometric Analysis of Factors Influencing Crime on the Campus*, 6 J. CRIM. JUST. 47, 51 (1978). The more students there are on a campus, the more crime there is. *Id.* Also the nearby unemployment rate increases, so goes the campus crime rate. *Id.* Another study determined that campus size as measured or conceptualized by the number of buildings on campus, acres of campus, total enrollment, and percentage of male students explained a significant portion of campus crime rates. James Alan Fox & Daryl A. Hellman, *Location and Other Correlates of Campus Crime*, 13 J. CRIM. JUST. 429, 436 (1985). Fox and Hellman’s results also supported those by McPheters indicating that campuses with a higher percentage of students living on campus can expect to experience higher crime rates. *Id.* The number of male students, number of female students, number of non-white students, and number of students in the residence halls related to campus crime. Max L. Bromley, *Correlates of Campus Crime: A Nationwide Exploratory Study of Large Universities*, 17 J. SECURITY ADMIN. 37, 41–42 (1994).

\(^{24}\) Steven M. Janosik, Mary B. Davis & Edward F. D. Spencer, *Characteristics of Repeat Student Offenders: A 6-Year Study*, 26 J. OF C. STUDENT PERSONNEL 410, 411 (1985) (comparing and contrasting one-time offenders, repeat offenders, and non-offenders); Steven M. Janosik, P. M. Dunn & Edward F. E. Spencer, *Student Misconduct in the Residence Halls: Differences Between First and Repeat Offenders*, 7 C. STUDENT AFF. J. 46, 48 (1986) (specifically reporting 63% of first offenders and 77% of repeat offenders were male).

\(^{25}\) Janosik, Dunn, & Spencer, *supra* note 23, at 48 (reporting that 65% of first offenders and 62% of repeat offenders lived in larger residence halls).

\(^{26}\) McNeal, *supra* note 14, at 111–12.
generally a college is expected to gather data from “a broad array of campus programs, departments, and centers.” As an indicator of the complexities associated with accurately reporting general crime data the U.S. Department of Education provides a 300-plus page long handbook for college administrators. Disciplinary referral data are different from the crime data in that the disciplinary referral data tends to be collected centrally by an office of student conduct or as a part of the school’s dean of students office. Despite the potential that the disciplinary referral data in Clery reports may be more reliable than other Clery data, the disrepute of Clery data counts as a limitation of this study. As outlined infra this study incorporated a statistical technique known as fixed effects in order to partial-out effects contributed from time-invariance that may be in Clery data.

C. Universities and Decision Making

We cite evidence that university administrators must manage limited resources, seek to reduce risk by making reactive decisions, and are responsible for maximizing net income for the institution. Following this section, we outline reasons university administrators may perceive that attorney involvement could be a threat to those interests.

As organizations, universities have considerably increased their human capital in the last 25 years; university administrators, particularly in the area of student affairs, have more than doubled—vastly outpacing increases in student enrollment or faculty employment. The impact on university budgets amidst rapid growth, combined with declining public financial support at state universities, thinly stretches available resources. Despite, or


perhaps because of this growth in university administrators, many administrators report finite resources as a significant job constraint, which impacts decision making.\textsuperscript{31}

The literature identifies universities as organizations that tend to be places where decisions are made reactively, as opposed to proactively, where decision making is often strategically aimed toward minimizing risk.\textsuperscript{32} Reactive decision making is a means by which institutions avoid exposing institutions to the unknown dangers or risks associated with proactive decision making. Antithetical to change or innovation, this style of administration has been characterized as “preventative and treatment” where the aim “is to identify and define actual or potential legal problems and provide options for resolving or preventing them.”\textsuperscript{33} The literature on university decision making also indicates that university administrators as decision makers are tasked with making decisions that maximize the university’s reputation and net income.\textsuperscript{34} Thus, not only must administrators manage limited resources and maximize net income they are averse to risk.

Anecdotally, the literature’s characterizations held true for at least one UNC-System institution upon implementation of N.C.G.S. § 116-40.11.\textsuperscript{35}


\textsuperscript{35} Nelson, at the time of this statute’s effective date worked at a UNC-System institution, East Carolina University (ECU). Prior to passage, neither ECU nor the UNC-System made
Given that administrators manage limited resources, have a tendency to make reactive decisions, and are responsible for maximizing net income to the institution it may follow that administrators, such as student conduct personnel - most of whom are not attorneys - would be reluctant to initiate a disciplinary proceeding when that proceeding would strain limited resources and increase costs or expose the institution to unknown risks. In theory for the sake of allocating and conserving limited administrative resources, and for avoiding unknown risks, the legislation may have motivated a conscious or unconscious modification in institutional processes associated with selecting which potential incidents merit referral to disciplinary processes and which incidents do not. The following section discusses reasons, whether they are valid or not, that administrators may perceive that attorney involvement in disciplinary proceedings may increase costs or exposure to unknown risks.

D. The Role of Attorneys

There are stigmas associated with attorney participation in any process. In the student disciplinary setting, apparently “some advisors (particularly attorneys) try to delay the student discipline process by contending that their ‘other commitments,’ personal and professional, conflict.”

Survey data suggest that lawyers are among the most distrusted of professionals. Lawyer humor, portraying lawyers as predatory, amoral, and singularly uninterested in fairness or justice, is often greeted enthusiastically by a general audience... Contemporary fictional media portrayals of lawyers extend from the surreal to the diabolical; in one film,

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36 Stoner & Lowery, supra, at 42 n.129; And see generally ANDREW ROTH & JOHNATHAN ROTH, DEVIL’S ADVOCATES: THE UNNATURAL HISTORY OF LAWYERS 169 (1989) (explaining “[p]erhaps there is an inevitable and never-ending animosity . . . between the lawyer and the laity”).
the head of the law firm is actually Satan.\(^{37}\)

There is some evidence that suggests student conduct administrators lack confidence in an attorney’s ability to effectively serve students in the context of a student disciplinary process. Student conduct administrators in the UNC-System have recently reported a belief that “some attorneys do not understand the university system and have a difficult time transitioning from the court processes to the university disciplinary system.”\(^{38}\) Assuming an attorney can be trusted to comprehend the intense complexity of a the educational student conduct process there is also evidence that suggests student conduct administrators do not trust attorneys to make their schedules fit with the institution’s schedule. A study of student conduct administration at UNC-System institutions stated in reference to N.C.G.S. § 116-40.11 that “it may be hard to find a time that meets the attorney’s availability.”\(^{39}\) In at least one instance, attorney reputation for gaming availability may have been earned.\(^{40}\) These stigmas and logistical considerations such as involving additional staff or adjusting preferred timelines increase actual costs and introduce uncertainty for student conduct administrators. That uncertainty increases risks (another form of cost) associated with pursuing disciplinary proceedings when attorney involvement may be more likely.

Thus, by allowing attorneys an opportunity to participate in the student disciplinary process, we frame N.C.G.S. § 116-40.11 as a legislative intervention that may have resulted in increased costs for student disciplinary administrators. To avoid or mitigate those costs we surmise that administrators may have adjusted the thresholds associated with determining what incidents should result in a disciplinary referral and what incidents should not. If it is true that administrators may have implemented such an adjustment, whether intention or otherwise, doing so would be an exercise in the administrator’s discretion. The analysis below provides evidence that this statutory regulation may have unexpectedly altered the number of some types of disciplinary referrals.


\(^{38}\) Id at 81.

\(^{39}\) Elrod, Joshua Dave. "Prompt and equitable: A critical study of sexual violence policies and procedures at university of North Carolina system institutions." PhD Diss., Appalachian State University, 2015. at 80.

\(^{40}\) Stoner, Edward N., and John Wesley Lowery, supra.
II. Empirical Analysis

A. Data

This study referenced two sources of data. Clery data, the first data source described above, is collected pursuant to the Clery Act. The U.S. Department of Education’s Office of Postsecondary Education provides public access to Clery data, which contains important information on violations of conduct and law at university campuses. As germane to this analysis, Clery data offers totals of disciplinary referrals related to weapon, drug, and liquor policy violations. These totals are reported by incident location.

The second data source was the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS) which collects data institutions of higher education who receive funding pursuant to Title IV of the Higher Education Act (HEA) of 1965. Specifically, we reference the Institutional Characteristics Survey and the 12-Month Unduplicated Headcount Survey in this study.

Table 1 provides a description of each variable referenced, its data source, and summary statistics. On average, drug-related referrals per 1000 students among North Carolina institutions (5.10) slightly exceeds the comparison group (3.85), while alcohol referrals per 1000 students at North Carolina institutions (11.88) lag comparison institutions (15.74). Also, North Carolina institutions, on average, also have fewer residence hall rooms per institution, full-time first time students required to live on campus, and open admission policies, as well as males and whites as a proportion of their overall undergraduate enrollment than the comparison group. By contrast, on average, North Carolina institutions have a higher proportion of HBCUs, and number of residence hall rooms as a proportion of enrollment. Finally, North Carolina institutions have an identical percentage of institutions located in cities to the comparison group.
Table 1. Summary Statistics

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Treatment Estimates</th>
<th>Comparison Estimates</th>
<th>Pooled Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Variables</strong></td>
<td></td>
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<tr>
<td>Res. hall-campus drug related disciplinary referrals per 1000 students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>5.10</td>
<td>3.85</td>
<td>3.93</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.34</td>
<td>5.25</td>
<td>5.16</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0.12 to 13.05</td>
<td>0 to 44.39</td>
<td>0 to 44.39</td>
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<tr>
<td>Res. hall-campus liquor related disciplinary referrals per 1000 students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>11.88</td>
<td>15.74</td>
<td>15.51</td>
</tr>
<tr>
<td>S.D.</td>
<td>10.87</td>
<td>18.47</td>
<td>18.12</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0.19 to 41.93</td>
<td>0 to 153.85</td>
<td>0 to 153.85</td>
</tr>
<tr>
<td><strong>Covariates</strong></td>
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<tr>
<td>Tot. residence hall rooms.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3757.12</td>
<td>4050.11</td>
<td>4033.18</td>
</tr>
<tr>
<td>S.D.</td>
<td>2093.64</td>
<td>3132.89</td>
<td>3080.78</td>
</tr>
<tr>
<td>Min / Max</td>
<td>1075 to 10257</td>
<td>0 to 18722</td>
<td>0 to 18722</td>
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<tr>
<td>Full-time, first-time students required to live on campus.</td>
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<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0.02</td>
<td>0.10</td>
<td>0.09</td>
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<tr>
<td>S.D.</td>
<td>0.15</td>
<td>0.30</td>
<td>0.29</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0 to 1</td>
<td>0 to 1</td>
<td>0 to 1</td>
</tr>
<tr>
<td>Historically Black College or University.</td>
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<td></td>
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</tr>
<tr>
<td>Mean</td>
<td>0.36</td>
<td>0.07</td>
<td>0.09</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.43</td>
<td>0.25</td>
<td>0.28</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0 to 1</td>
<td>0 to 1</td>
<td>0 to 1</td>
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<tr>
<td>Open admission policy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0.01</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.11</td>
<td>0.24</td>
<td>0.24</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0 to 1</td>
<td>0 to 1</td>
<td>0 to 1</td>
</tr>
<tr>
<td>Institution located in a large, medium, or small city.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0.71</td>
<td>0.71</td>
<td>0.71</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
</tr>
<tr>
<td>Min / Max</td>
<td>0 to 1</td>
<td>0 to 1</td>
<td>0 to 1</td>
</tr>
<tr>
<td>Tot. residence hall rooms / Tot. enrollment. (Undergrad unduplicated 12mo.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>32.26</td>
<td>25.17</td>
<td>25.64</td>
</tr>
<tr>
<td>S.D.</td>
<td>5.58</td>
<td>13.57</td>
<td>13.44</td>
</tr>
<tr>
<td>Min / Max</td>
<td>18.15 to 76.73</td>
<td>0 to 76.74</td>
<td>0 to 76.74</td>
</tr>
<tr>
<td>White enrollment / Tot. enrollment. (Undergrad unduplicated 12mo.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>27.58</td>
<td>32.34</td>
<td>32.06</td>
</tr>
<tr>
<td>S.D.</td>
<td>15.21</td>
<td>13.44</td>
<td>13.67</td>
</tr>
<tr>
<td>Min / Max</td>
<td>1.85 to 49.36</td>
<td>0 to 57.63</td>
<td>0 to 57.63</td>
</tr>
<tr>
<td>Male enrollment / Tot. enrollment. (Undergrad unduplicated 12mo.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>41.14</td>
<td>45.62</td>
<td>45.35</td>
</tr>
<tr>
<td>S.D.</td>
<td>7.38</td>
<td>6.51</td>
<td>6.65</td>
</tr>
<tr>
<td>Min / Max</td>
<td>26.74 to 55.71</td>
<td>8.67 to 81.17</td>
<td>8.67 to 81.17</td>
</tr>
</tbody>
</table>
B. Treatment & Comparison Group

As discussed above, the subject of interest in this study is the effect of the passage of N.C.G.S. § 116-40.11—the treatment—on student disciplinary referrals. Thus, this study’s treatment group consisted of all of the public four-year institutions in North Carolina to which this law applies. N.C.G.S. § 116-40.11 applies to every institution in the North Carolina’s UNC-System with one exception: UNC-Chapel Hill was excluded from the treatment group because its student-run disciplinary process excepted it from the requirements of N.C.G.S. § 116-40.11. Each of the treatment group Carnegie classifications were primarily or highly residential with the exception of UNC-Charlotte which was classified as primarily non-residential. Additionally, all fourteen institutions reported enrollments between 1,000 and 19,999 students. The institutions were mostly located in large, medium, or small cities, or distant towns, with the exception of Western Carolina University, which was located in a fringe rural area. The smallest residence hall system among the fourteen institutions consisted of 1,079 rooms.

To establish a comparison group, we utilized the IPEDS dataset to include all public four-year institutions that matched the characteristics associated with this study’s fourteen treatment institutions, as described above. Because institutional characteristics sometimes varied, and that the differences-in-differences estimation method relies on parallel trend assumptions, we matched by characteristics as they were reported at the beginning of this study’s dates of interest—2010. Ultimately, the comparison group consisted of 222 public four-year institutions.

C. Descriptive Results

The principal consideration of this study is whether the passage of the right to counsel in university disciplinary decisions resulted in changes in student disciplinary referrals. Figure 1 depicts how this law may have impacted the number of drug-related disciplinary referrals per one thousand students, averaged at the state level as compared with drug related disciplinary referrals per one thousand students averaged among the institutions in the comparison group. While North Carolina institutions’ drug related referrals demonstrate relatively high variability over the seven-year period, it is clear that the passage of N.C.G.S. § 116-40.11 results in a significant reduction in drug-related referrals at North Carolina institutions,

41 Given the differences between institutions in the U.S. and those in its territories, we excluded institutions located in American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Marianas, Palau, Puerto Rico, and the Virgin Islands, even though institutions from these countries are included in the IPEDS dataset.
especially relative to their comparison group counterparts—particularly from the year’s mark prior to passage through 2014. However, by 2015, the trajectory of the comparison group appears to be falling in terms of the number of drug-related referrals, while the number of drug-related referrals appears to be gradually rising at North Carolina institutions. It should be noted, however, that these trend lines are merely descriptive and not causal.

Similarly to Figure 1, Figure 2 represents alcohol-related disciplinary referrals per one thousand students, averaged at the state level as compared with institutional averages among comparison group institutions. Here, the indication is that North Carolina institutions, which outpace the comparison group in the 2.5 years prior to the passage of the right-to-counsel law, sharply diverge from the comparison group institutions after the passage of the law. In fact, a one referral difference in 2012 between groups, with the greater averaged number of referrals per one thousand students among North Carolina institutions, results in a four referral difference in 2015 between groups.
Here, too, the descriptive pattern emerges that suggest that the implementation of the North Carolina law results in declining disciplinary referrals, which had peaked in the year immediately before the implementation of the law. The comparison group institutions, by contrast, remain relatively flat, fluctuating between nearly 14 and 16 referrals per one thousand students per year.

Additionally, while these are merely descriptive results, the peak of drug related referrals in 2012 among North Carolina institutions present in Figure 1, which is also present in the liquor related referrals in Figure 2, below, may evince “gaming” behavior, especially relative to the stagnant changes in comparison group institutions. That is, as university administrators foresaw the implementation of N.C.G.S. § 116-40.11 in August 2013 impacting their ability to conduct a student disciplinary hearing as usual, they may decided to crack down on student behaviors that violated university drug and alcohol policy before students could be represented by legal counsel. The analysis that follows aims to ascertain whether this behavior, and especially the reduction of referrals in 2013 and later, can be related causally to the implementation of the right-to-counsel law.

D. Empirical Analysis

1. Synthetic Comparison Methods

A troublesome challenge in conducting comparative research is related to the selection of representative comparison units. Instead of locating and arguing in favor of an appropriate comparison state system that would
provide for practitioners and scholars a convincing counterfactual, this study first compared averaged trends among a group of many comparison institutions with the averaged trends among the group of treatment institutions. Comparing average trends among many institutions implies an assumption that information from many comparisons will provide a more valid, reliable, and robust counterfactual. However, descriptive comparisons typically are not sufficient for causal inference.

By contrast, the synthetic comparison method relies on a similar assumption but instead of drawing from many comparisons, it derived a as weighted combination of multiple comparisons. It is believed that a weighted combination, which provides the counterfactual, from a few empirically similar comparisons may be do “a better job of producing the characteristics of the unit or units representing the case of interest.”

We conducted an analysis of these data using and the `synth` package in Stata to implement synthetic control methods. Figure 3 illustrates our results.

![Figure 3. Trends in disciplinary referrals per 1k students](image)

As compared with traditional regression methods, the synthetic control method uses a weighted average of the available control units of each measure. As such, the contribution of each control variable is accounted-for, and because the weights of these variables can be restricted, this method safeguards against extrapolation. As such, the following figures reveal an


absolute difference between the control and North Carolina treatment institutions. Specifically, when compared with the possible combinations of their trajectories, the actual trajectory of North Carolina institutions is lower than fourteen and the same as only one of their placebo-differences analysis results for drug-related referrals—in essence showing North Carolina institutions’ actual averaged referrals to their synthetic predicted referrals before the advent of the passage of the right-to-counsel law. In fact, for drug-related referrals, North Carolina institutions actually evince a two and one half alcohol-related referral-rate per one thousand students average less than could be predicted in after almost three years following the passage of the law. Perhaps more convincingly, when comparing alcohol-related referrals, North Carolina institutions indicate a nine drug-related referral-rate per one thousand students average less than could be predicted after almost three years following the passage of the law, beating all synthetic predictions—more than three drug-referrals per one thousand students less than the next closest average of the synthetic control prediction for averaged North Carolina institutions.
To probe the robustness of these causal estimates, we also employed a differences-in-differences estimation method—another quasi-experimental method of comparing treatment to control groups in a natural experiment like the passage of the right-to-counsel law—comparing North Carolina institutions to their comparison institutions, using the IPEDS dataset. This method attempts to calculate the effect of treatment on the number of referrals by comparing the average change over time in the number of referrals for the treatment group, compared to the average change over time for the control group. This study’s DID statistical model was:

\[ y_{it} = \beta_0 + \beta_1(treat) + \beta_2(post) + \beta_3(treat\timespost) + \beta_4(controls_{it}) + e_{it} \]

The results in Table 2 indicate the stark, statistically significant, and causal differences between the North Carolina institutions and the institutions included in their comparison group.

\[ \text{Figure 4. Placebo differences analysis} \]

Liquor related disciplinary referrals

N.C.G.S. § 116-40.11 Implementation (Aug 2013)

To italize the reference to N.C.G.S. § 116-40.11, the implementation date of the Right-to-Counsel Law in August 2013 is noted. The graph illustrates the treated-placebo rate gap over time, with North Carolina institutions shown in black and placebo states in gray. The implementation date is highlighted, showing a decline in liquor-related disciplinary referrals after the law's passage.

\[^{44}\text{Notably, this method is robust against selection bias, but is perhaps still susceptible to omitted variable bias in a way that synthetic control analysis is not necessarily susceptible.}\]
ANALYSIS OF N.C.'S RIGHT-TO-COUNSEL LAW

Table 2. DID Estimation Results.

<table>
<thead>
<tr>
<th>(1) Drug related disciplinary referrals per 1k students</th>
<th>(2) Liquor related disciplinary referrals per 1k students</th>
<th>(3) Drug related disciplinary referrals per 1k students</th>
<th>(4) Liquor related disciplinary referrals per 1k students</th>
</tr>
</thead>
<tbody>
<tr>
<td>DID Estimator</td>
<td>-0.958*</td>
<td>-3.158**</td>
<td>-4.391**</td>
</tr>
<tr>
<td></td>
<td>(-2.57)</td>
<td>(-2.84)</td>
<td>(-3.37)</td>
</tr>
<tr>
<td>Located in City</td>
<td>0.302</td>
<td>0.545</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.57)</td>
<td>(0.31)</td>
<td></td>
</tr>
<tr>
<td>Residence Hall per 100</td>
<td>0.136**</td>
<td>0.362*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.96)</td>
<td>(2.44)</td>
<td></td>
</tr>
<tr>
<td>% White Students</td>
<td>-0.00359</td>
<td>0.138</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.08)</td>
<td>(0.87)</td>
<td></td>
</tr>
<tr>
<td>% Male Students</td>
<td>0.0158</td>
<td>-0.147</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(-0.46)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.662***</td>
<td>18.76***</td>
<td>0.302</td>
</tr>
<tr>
<td></td>
<td>(27.31)</td>
<td>(36.78)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>N</td>
<td>1020</td>
<td>1020</td>
<td>940</td>
</tr>
</tbody>
</table>

* statistics in parentheses  
Estimations with institutional level fixed effects and standard errors clustered by U.S. State  
* p < 0.05, ** p < 0.01, *** p < 0.001

CONCLUSION

This study characterizes and frames N.C.G.S. § 116-40.11 as a statutory regulation of student disciplinary processes. The analysis above provides evidence that this statutory regulation may have unexpectedly altered the number of some types of disciplinary referrals. Relying on arguments from organizational theory and decision making theory literature, these results suggest that by allowing attorneys an opportunity to participate in disciplinary processes, this statutory regulation may have increased the costs associated with that process. This cost increase may have led to a decrease in disciplinary referral rates. Importantly, a review of the statute on its face and of the statute’s legislative history suggests that it was not intended to modify the number of disciplinary referral rates. This study assumes that the legislation had no effect on how students behave and also assumed that the rates of student misbehavior remained steady before and after the statute.

Given student effort to be discreet, to avoid detection, actual rates of misbehavior whether or not detected by enforcement, are difficult variables to observe. However, summary data from ACHA-NCHA provide evidence to support the notion that rates of drug and alcohol use do remain relatively unchanged over the years included in this study. Specifically, fall ACHA-
NCHA surveys indicate that nationally the percent of students using alcohol use within the last 30 days ranges from as low as 61.3% in Fall of 2013 to 62% in the Fall two years earlier. Similarly reported marijuana use rates were as low as 14.1% to as high as 15.3%.\(^{45}\)

If rates of drug-related misbehavior have held steady and if ACHA-NCHA results may be generalized to NC, the number of drug related disciplinary referrals before and after the statute’s effective date should also have remained on trend with available comparison groups. Therefore, a broad finding of this study is that legislative regulation of student disciplinary processes in specific, and legislative regulation of higher education in general, risks unintended consequences.

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