Fraternities and Sexual Assault

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Abstract

This is to be completed later when I have all of the final covarites.

1 Introduction

(*This section is the only section has not been updated since last 290 meeting. All other sections have been updated*) Rape remains prevalent on all university campuses. According to the Campus Climate Survey on Sexual Assault and Sexual Misconduct conducted by the Association of American Universities, the overall rate of nonconsensual sexual contact since a student enrolled at their respective college was 13% in 2019.[1] Additionally, this percentage has increased since 2015[2] with the largest increases stemming from undergraduate women. Academics have pointed to multiple sources of this heinous behavior including college partying with alcohol (Lindo, Siminski, and Swensen 2018), liquor violations (Wiersma-Mosley, Jozkowski, and Martinez 2017), and most pertinent, fraternities (Foubert, Newberry, and Tatum 2008). In the book *Sexual Assault on Campus: The Problem and the Solution*, the authors Carol Bohmer and Andrea Parrot claim that "the men who are most likely to rape in college are fraternity pledges."[3] Furthermore, academic studies using survey data have found

[1] This number comes from the 33 large universities that participated in the survey.

[2] Of the 21 schools that participated in both the 2015 and the 2019 surveys, results showed a 3% increase for undergraduate women, 2.4% increase for graduate and professional women.

[3] A fraternity pledge is another name for a first-year member of a fraternity.

that fraternity men were more likely to commit sexual assault than men who did not join a fraternity (Foubert, Newberry, and Tatum 2008), university males rated sexual assault perpetrators as less guilty when the perpetrator was a fraternity member (Seabrook and Ward 2019), and sorority women (who interact with fraternity men frequently) were sexually assaulted at four times the rate of non-sorority women (Minow and Einolf 2009). Universities have responded to fraternity-related misconduct with a range of policy initiatives, and in particular, placing moratoriums on fraternity social-life. Each of these moratoriums occurs campus-wide, thereby affecting all fraternities simultaneously. And while the moratorium guidelines vary by university, each of them prohibits fraternity social gatherings with alcohol. This paper exploits the variation in timing of 39 fraternity moratoriums at 34 four-year universities across the US to estimate a causal effect of fraternity moratoriums on cases of rape.

2 Background: Fraternities in the US

In the context of universities, a fraternity is a group of men who gather for social, academic, or demographic interests. Fraternities are a ubiquitous presence at most four-year universities. In 2015, the North American Interfraternity (NIC) conference noted that there were over 5500 chapters (groups) located on over 800 campuses in the US and Canada. According to the US News Reports, some universities have fraternity membership as high as 85%. The overall composition of fraternity members tend to have family income and education higher than non-members (Routon and Walker 2014), and economic studies have linked fraternity membership to higher academic performance (Cheng 2018), alcohol consumption (Routon and Walker 2014), and future income (Mara, Davis, and Schmidt 2018).

This analysis focuses on a subset of fraternities known as the Interfraternity Council (IFC). These fraternities are composed of individual chapters that are "social fraternities," although their values are far more outreaching than this. According to their website, the

IFC "exist to promote the shared interests and values of our member fraternities: leadership service, brotherhood, and scholarship."

To become a member of an IFC fraternity, prospective members must apply ("pledge") during recruitment events that take place at least once a year. Once a chapter and prospective member jointly accept membership, the new member must abide by the chapter's guidelines. Figure 1 shows an example of the overarching rules within the chapter, Sigma Alpha Epsilon–one of the oldest fraternity chapters across the US. Each member must maintain a GPA over a certain threshold, pay an initiation and semesterly fee, attend chapter ritual events and meetings, be involved in one additional campus or community organization, and complete service hours. Upon membership, pledges are invited to live within the fraternity house, although national statistics for what percentage of pledges take this offer are not available.

Each chapter house has its unique set of rules and atmosphere. In one field study, students at universities were surveyed about their opinions at each chapter house on campus. In the perceived "high risk" houses, social behavior differed dramatically from "low risk" houses—high risk house parties had skewed gender ratios, more segregation between men and women, and men engaged in more jokes and conversations that degraded women than low risk houses (BOSWELL and SPADE 1996). However, all fraternities interact with sorority chapters frequently, whose members have been found to consume alcohol with greater frequency, delay assessments of threat, and have significantly higher rates of drugging victimization than non-sorority members ((Franklin 2016),(Lasky et al. 2017)). Moreover, each chapter is overlooked by the IFC and its corresponding university, and each of their social events must be registered with university staff. This is imperative to the experimental design, as each of the moratoriums I observe implement a halt on social events with alcohol.

3 Fraternity Moratoriums

The sample consists of 39 campus-wide moratoriums. Table 1 shows the universities in the sample and their corresponding moratorium dates and lengths. The average length of the moratoriums was 72 days and the majority of universities (85%) only experienced one moratorium in the sample period. Importantly, each moratorium differs substantially across universities in terms of triggering event (i.e. the event that resulted in the moratorium), restrictions, and governing body that oversaw the moratorium—IFC chapters are under the jurisdiction of both the university and the overarching IFC. Figure 2 shows the distribution of triggering events by the governing body that enacted it. Sexual assault reports and hazing allegations account for 21% of campus moratoriums, while deaths and racist activity account for 15 and 5 percent respectively. Alcohol violations, re-evaluation due to national trends, and unspecified rule violations are grouped into their own category ("Other") with consisting of the remaining 38%. University and IFC implemented moratoriums are evenly balanced on their triggering events outside of deaths and racist activity where universities possess the entire density.

4 Data

The main analysis uses data from the Uniform Crime Reporting (UCR) Program from the FBI. The UCR systematically collects crime data from local police departments and aggregates them to the agency-month level. In particular, it contains information on the total number of rape incidences reported by each department. Each local police department and university-specific police agency was connected to a corresponding university area using the Law Enforcement Agency Identifiers Crosswalk[4]. Table 2 shows the universities and

[4]To match law enforcement agencies with schools, the data was filtered by local police agencies and four-year university police departments. Each university police department has a "place code" which is an area that that particular police department covers. However, there are other police departments in these areas that also serve universities, and each of these was attached to the school, although some that were obviously not serving the university (e.g. nearby community college police) were withdrawn.

their corresponding local municipalities that serve them. On average, there are approximately two law enforcement agencies that serve each university area–a dedicated university police and a more encompassing local municipality. Notably, reports of rape are significantly lower for university police departments than the local municipalities. Figure 3 illustrates this discrepancy by plotting the distribution of $log(rape + 1)$ of university-police and local municipalities.

The sample, which consists of 34 unique 4-year degree-granting universities, begins in 2013 to correspond with the year the UCR changed its definition of rape to include non-consenting acts from both males and females in addition to acts of oral or anal penetration. Due to this change, I limit my sample to all media-known,[5] campus-wide moratoriums of fraternity life from the years 2013-2018.[6] Of the 34 universities included, 94% are public, and 11% have appeared at least once in the Princeton Review Top Party Schools list in the corresponding time frame. Table 3 shows descriptive statistics of the universities from the Integrated Postsecondary Education Data System (IPEDS). The average undergraduate enrollment is approximately twenty-four thousand, although the standard deviation is large at approximately eleven thousand. Graduation rates vary significantly across the schools, as the maximum graduation rate reaches over ninety percent, while the minimum is approximately forty five percent. On average, the universities are composed primarily of white individuals (~60%). Furthermore, fraternity participation varies considerably across these schools. Although not currently complete, average GPA, new member population, and total fraternity populations by semester/quarter are being collected through Freedom of Information Act (FOIA) requests (~26% complete).

[5]The schools that I observe in my sample all had some form of media article or press release from a school /local newspaper. While these may not be the universe of campus-wide moratoriums, they are, to my knowledge, the only events that received media attention.

[6]My preferred sample will include 2019 when the UCR is updated.

5 Empirical Strategy

I estimate the effects of campus-wide fraternity moratoriums on reports of rape using the variation in the timing of the implementation dates. In particular, I estimate the following models:

$$Rape_{a,m,u,y} = \alpha_a + \gamma_m + \rho_u + \phi_y + \beta_{fe} Moratorium_{a,m,u,y} + \mathbb{X}_{m,u,y} + \epsilon_{a,m,u,y} \quad (1)$$

$$Log(Rape_{a,m,u,y} + 1) = \alpha_a + \gamma_m + \rho_u + \phi_y + \beta_{fe} Moratorium_{a,m,u,y} + \mathbb{X}_{m,u,y} + \epsilon_{a,m,u,y} \quad (2)$$

$Rape_{a,m,u,y}$ is the count of reported rapes in police agency a, at university u, in month m and year y. Since treatment lengths vary in time across months, $Moratorium_{a,m,u,y}$ is a continuous variable between 0 and 1 that represents the proportion of moratorium days in each month. For instance, Texas State University experienced a moratorium on 11/14/2017 that ended on 2/26/2018. In this case, $Moratorium_{a,m,u,y}$ would be equal to 0.53 in the month of November ((30-14)/30), 1 in the months of December and January (31/31), and 0.93 in February (26/28). This allows for a measure of treatment intensity, as a month with a small proportion of days that are treated differs from a month that is completely treated. $\mathbb{X}_{m,u,y}$ is a vector of covariates including graduation rate and undergraduate population/demographics corresponding to each university u in month m at year y. However, the critical covariates of fraternity membership and pledge populations by semester are still incomplete and will be added in future iterations. The inclusion of agency α_a, university ρ_u, and month-year fixed effects (γ_m, ϕ_y) controls for any time-invariant differences between law enforcement agencies, universities, and time of year. This is crucial, as law enforcement agencies can have systematic differences in their reporting habits, universities differ in social cultures, and reports of sexual assault change seasonally (McLean 2007).

The model's identifying assumption is that universities that have, or will, experience a moratorium are a good counterfactual for universities undergoing a moratorium conditional on the covariates mentioned above. Additionally, there are several other assumptions needed

to estimate causal effects. First, fraternity moratoriums must not be an anticipated event. As Figure 2 shows, 15% were due to a fraternity death and 5% were because of racist activity. These events are plausibly unexpected, although they only account for 20% of the moratoriums. However, the other 80% (hazing, sexual assault, alcohol violations, rule violations) are consequences that could lead chapters to anticipate their own house being suspended, but these events are unlikely to lead fraternity members to believe that their entire community will face a moratorium. Figure 4 shows the event study trends of rape reports before and after the moratoriums. In the months leading to a moratorium, the means oscillate around zero in a non-systematic fashion with the confidence intervals containing zero. Second, the sample only observes reported rapes which has been estimated to be 12% of the true occurrences for students (Kilpatrick 2007). Therefore, it is imperative to test that the likelihood of reporting a rape is not changing because of a campus-wide moratorium on fraternities. If reports of rape are systematically underreporting during of a fraternity moratorium (e.g. fear of blame) then the model would be underestimating the true effect. On the other hand, if reports of rape are systematically overreporting concurrently with a moratorium period (e.g. more victims come forward because fraternities are under more pressure), than the model would be overestimating the results.

6 Preliminary Results

Preliminary results are shown in Table 4 and 5. I differentiate the results between two divisions of my sample: one including the entire year and another excluding the summer months of June, July, and August where students are less likely to be on campus. Additionally, I differentiate between using all of the police municipalities (Table 4), and only the university police departments (Table 5). Since vital control variables are still missing (fraternity population and new member population by school), these results are not final. Without the control variables of fraternity/new member population, and average GPA by university,

I am not comparing schools that have similar prevalence of fraternity activity. However, the preliminary results show that there is a strong, statistically significant difference in the reports of rape on party schools relative to non-party schools.

7 Planned Next Steps/Directions

- I have Clery Act crime reports by-year that date back further than my sample period. These crime reports contain all of the university-affiliated crime reports that occur on-campus and off-campus. Some of the outcomes available are: rape, statutory rape, fondling, robbery, motor vehicle theft, and murder. Given that this data is only at the yearly level, it might be difficult to find effects-although this might be a nice place to look at robustness checks.

- I am unsure whether I can FOIA hazing violations, but I'll start sending out the requests. I think this might be a good outcome variable. My understanding is that hazing violations will only be by-semester rather than by-month, although I may be able to request date of occurrence.

- I still have the NIBRS which has daily level data on crime reports which include age of victim, and time of incident. NIBRS will shrink my sample size to include only 16 universities, but it will still be a nice check.

- I want to wait until I have my final covariates before starting to build a story of how effective moratoriums are at reducing reports of rape. I could run the analysis using my incomplete data, but I do not want results to sway which way I paths I begin to analyze.

- Clement recommended I add in other universities that are similar to my sample that are never treated, and also try out one of his new estimators that allow for heterogeneous

effects for units that switch in and out of treatment status. He advised to stay away from poisson regressions.

- Once I have more of my results, I'll do a more in-depth literature review to build around my story.

8 Feedback Wanted

- Other covariates needed in my regression? I believe the fixed effects and my current covariates are soaking up most of the differences between universities, but I would want to hear others thoughts on this.
- Any other regression specifications you'd like to see?
- What other things could be useful for me to convince you that moratoriums are random?
- Any thoughts on how I could indirectly test whether reports of rape change? My current solution (as described above) relies on observing whether there are changes in the reports of rape that result in arrest.

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Table 1: Fraternity Moratorium Closure and Reinstated Dates

University	Suspension Date	Suspension End	Length	Suspension Date (2)	Suspension End (2)	Length (2)
Ball State University	2017-10-24	2018-01-31	99 days	NA	NA	NA days
California Polytechnic State University-San Luis Obispo	2015-01-13	2015-04-06	83 days	2018-04-17	2018-06-06	50 days
California State University-Northridge	2014-10-23	NA	NA days	NA	NA	NA days
Clemson University	2014-09-23	2014-10-10	17 days	2018-01-27	2018-03-01	33 days
East Carolina University	2015-01-28	2015-03-07	38 days	NA	NA	NA days
Florida Atlantic University	2017-11-28	2018-03-01	93 days	NA	NA	NA days
Florida International University	2018-01-01	2018-04-01	90 days	NA	NA	NA days
Florida State University	2017-11-06	2018-03-26	140 days	NA	NA	NA days
Indiana University-Bloomington	2017-11-27	2018-02-28	93 days	NA	NA	NA days
Louisiana State University and Agricultural & Mechanical College	2017-09-14	2017-10-12	28 days	2017-10-19	2018-03-01	133 days
Marshall University	2018-03-05	2018-03-15	10 days	NA	NA	NA days
Miami University-Oxford	2018-02-20	NA	NA days	NA	NA	NA days
Murray State University	2018-05-09	2018-08-14	97 days	NA	NA	NA days
North Carolina State University at Raleigh	2015-03-01	2015-05-09	69 days	NA	NA	NA days
Northwestern University	2017-02-07	2017-03-27	48 days	NA	NA	NA days
Ohio State University	2017-11-16	2018-02-07	83 days	NA	NA	NA days
Pennsylvania State University	2017-02-07	2017-05-05	87 days	NA	NA	NA days
Rollins College	2017-02-22	2017-03-17	23 days	NA	NA	NA days
Rutgers University-New Brunswick	2015-04-06	2015-06-01	56 days	NA	NA	NA days
San Diego State University	2018-03-09	2018-10-01	206 days	NA	NA	NA days
Texas State University	2017-11-14	2018-02-26	104 days	NA	NA	NA days
University of California-Berkeley	2016-10-16	2016-10-27	11 days	NA	NA	NA days
University of Central Florida	2013-02-20	2013-04-01	40 days	2018-01-08	2018-03-05	56 days
University of Idaho	2017-12-12	2018-03-13	91 days	NA	NA	NA days
University of Iowa	2017-05-01	2017-11-18	201 days	NA	NA	NA days
University of Kansas	2018-03-12	2018-03-14	2 days	NA	NA	NA days
University of Michigan-Ann Arbor	2017-11-09	2018-01-03	55 days	NA	NA	NA days
University of Missouri-Columbia	2018-03-06	2018-03-13	7 days	NA	NA	NA days
University of New Mexico	2017-12-08	2018-02-19	73 days	NA	NA	NA days
University of North Florida	2017-12-04	2017-12-18	14 days	NA	NA	NA days
University of Pittsburgh-Pittsburgh Campus	2018-01-19	2018-08-30	223 days	NA	NA	NA days
University of Virginia	2014-11-22	2015-01-09	48 days	NA	NA	NA days
Washington State University	2016-11-07	2017-01-09	63 days	NA	NA	NA days
West Virginia University	2014-11-14	2015-01-19	66 days	2018-02-14	2018-08-18	185 days

RISE ABOVE

Candidates for Membership

Sigma Alpha Epsilon Member Onboarding Handout

Expectations of a Member

As a member of the Fraternity, there are certain things that are expected of you. Every member of the chapter must complete the following 7 expectations each semester:

1. **You must maintain a minimum GPA of 2.5 or higher (as specified by the chapter's bylaws)**
   i. Our chapter's minimum GPA is _____
   ii. First and foremost, you are here to graduate from this school
   iii. GPAs are reviewed each semester

2. **You must be involved in at least one additional campus or community organization (The member educator can help you find involvement opportunities)**
   i. Proof of involvement is required each semester

3. **You must complete at least 85% of educational assignments throughout the year**
   i. We host weekly educational sessions at chapter meeting for all members

4. **You must attend at least 75% of chapter Ritual events**
   i. Initiations, graduation ceremonies, and installation of officers

5. **You must be financially current or on an approved payment plan**
   i. Your initiation fee is $310 and semesterly dues are _____

6. **You must complete a minimum of 20 service hours per academic year (The member educator can help you find service opportunities)**

7. **You must attend at least 85% of chapter meetings**
   i. Your attendance will be tracked during roll call each week

Add any additional expectations your chapter might have for ALL members

Figure 1: Sigma Alpha Episilon (Fraternity Chapter) Guidelines

Table 2: Universities and their corresponding police municipalities

University	Local Municipality	ORI	Fplace Code
Ball State University	BALL STATE UNIVERSITY POLICE DEPARTMENT	IN0180500	51876
Ball State University	MUNCIE POLICE	IN0180100	51876
California Polytechnic State University-San Luis Obispo	CALIFORNIA POLYTECHNIC STATE UNIVERSITY-SAN LUIS O	CA0400700	68154
California Polytechnic State University-San Luis Obispo	SAN LUIS OBISPO POLICE DEPARTMENT	CA0400600	68154
California State University-Northridge	CALIFORNIA STATE UNIVERSITY - NORTHRIDGE POLICE	CA0198400	52176
Clemson University	CLEMSON POLICE DEPARTMENT	SC0390200	14950
Clemson University	CLEMSON UNIVERSITY POLICE	SC0390600	14950
East Carolina University	EAST CAROLINA UNIVERSITY DEPT. OF PUBLIC SAFETY	NC0740900	28080
East Carolina University	GREENVILLE POLICE DEPARTMENT	NC0740300	28080
Florida Atlantic University	BOCA RATON POLICE DEPARTMENT	FL0500200	7300
Florida Atlantic University	FLORIDA ATLANTIC UNIVERSITY POLICE	FL0503700	7300
Florida International University	FLORIDA INTERNATIONAL UNIVERSITY POLICE	FL0133100	45000
Florida International University	MIAMI POLICE DEPARTMENT	FL0130600	45000
Florida State University	FLORIDA STATE UNIVERSITY POLICE	FL0370600	70600
Florida State University	TALLAHASSEE POLICE DEPARTMENT	FL0370300	70600
Indiana University-Bloomington	BLOOMINGTON POLICE	IN0530100	5860
Indiana University-Bloomington	INDIANA UNIVERSITY POLICE DEPARTMENT	IN0530200	5860
Louisiana State University and Agricultural & Mechanical College	BATON ROUGE POLICE DEPARTMENT	LA0170200	5000
Louisiana State University and Agricultural & Mechanical College	LOUISIANA STATE UNIVERSITY POLICE DEPARTMENT	LA0170400	5000
Marshall University	HUNTINGTON POLICE DEPARTMENT	WV0060200	39460
Marshall University	MARSHALL UNIVERSITY POLICE DEPARTMENT	WV0060400	39460
Miami University-Oxford	MIAMI UNIVERSITY POLICE DEPARTMENT	OH0091700	59234
Miami University-Oxford	OXFORD POLICE DEPARTMENT	OH0090700	59234
Murray State University	MURRAY POLICE DEPARTMENT	KY0180100	54642
Murray State University	MURRAY STATE UNIVERSITY POLICE DEPARTMENT	KY0180200	54642
North Carolina State University at Raleigh	NORTH CAROLINA STATE UNIVERSITY DEPT. OF PUBLIC SA	NC0921600	55000
North Carolina State University at Raleigh	RALEIGH POLICE DEPARTMENT	NC0920100	55000
Northwestern University	EVANSTON POLICE DEPT	IL0163200	24582
Northwestern University	NORTHWESTERN UNIV:EVANST	IL0162W00	24582
Northwestern University	NORTWESTERN UNIVERSITY PD EVANSTON	IL0167D00	24582
Ohio State University-Main Campus	COLUMBUS POLICE DEPARTMENT	OHCOP0000	18000
Ohio State University-Main Campus	OHIO STATE UNIVERSITY POLICE DEPARTMENT	OH0252700	18000
Pennsylvania State University-Main Campus	PENN STATE UNIVERSITY POLICE SERVICES	PA0141100	78704
Pennsylvania State University-Main Campus	PENNSYLVANIA STATE UNIVERSITY - SCHUYLKILL POLICE	PA0545200	78704
Rollins College	WINTER PARK POLICE DEPARTMENT	FL0480600	78300
Rutgers University-New Brunswick	NEW BRUNSWICK POLICE	NJ0121400	51210
Rutgers University-New Brunswick	RUTGERS UNIVERSITY POLICE - NEW BRUNSWICK	NJ0123000	51210
San Diego State University	SAN DIEGO POLICE DEPARTMENT	CA0371100	66000
San Diego State University	SAN DIEGO STATE UNIVERSITY	CA0371400	66000
Texas State University	SAN MARCOS POLICE DEPARTMENT	TX1050100	65600
Texas State University	TEXAS STATE UNIVERSITY AT SAN MARCOS POLICE DEPART	TX1050300	65600
University of California-Berkeley	BERKELEY POLICE DEPARTMENT	CA0010300	6000
University of California-Berkeley	LAWRENCE BERKELEY LAB PD UNIV OF CA BERKELEY	CA0012700	6000
University of California-Berkeley	UNIVERSITY OF CALIFORNIA - BERKELEY POLICE	CA0019700	6000
University of Central Florida	ORLANDO POLICE DEPARTMENT	FL0480400	53000
University of Central Florida	UNIVERSITY OF CENTRAL FLORIDA POLICE	FL0481400	53000
University of Idaho	MOSCOW POLICE DEPARTMENT	ID0290500	54550
University of Iowa	IOWA CITY POLICE DEPARTMENT	IA0520200	38595
University of Iowa	UNIVERSITY OF IOWA POLICE	IA0520400	38595
University of Kansas	LAWRENCE POLICE DEPARTMENT	KS0230100	38900
University of Kansas	UNIVERSITY OF KANSAS POLICE DEPARTMENT	KS0230200	38900
University of Michigan-Ann Arbor	ANN ARBOR POLICE DEPARTMENT	MI8121800	3000
University of Missouri-Columbia	COLUMBIA POLICE DEPARTMENT	MO0100200	15670
University of Missouri-Columbia	UNIVERSITY OF MISSOURI POLICE DEPT.	MO0100400	15670
University of New Mexico-Main Campus	ALBUQUERQUE POLICE DEPARTMENT	NM0010100	2000
University of New Mexico-Main Campus	UNIVERSITY OF NEW MEXICO POLICE DEPARTMENT	NM0010200	2000
University of North Florida	JACKSONVILLE CITY CNTY PD	FL0160200	35000
University of North Florida	UNIVERSITY OF NORTH FLORIDA POLICE	FL0160600	35000
University of Pittsburgh-Pittsburgh Campus	PITTSBURGH POLICE DEPARTMENT	PAPPD0000	61000
University of Pittsburgh-Pittsburgh Campus	UNIVERSITY OF PITTSBURGH - MAIN CAMPUS POLICE	PA0021N00	61000
University of Virginia-Main Campus	CHARLOTTESVILLE POLICE DEPT.	VA1020000	14968
University of Virginia-Main Campus	UNIVERSITY OF VIRGINIA POLICE DEPARTMENT	VA0020100	14968
Washington State University	PULLMAN POLICE DEPARTMENT	WA0380300	56625
Washington State University	WASHINGTON STATE UNIVERSITY POLICE DEPARTMENT	WA0380500	56625
West Virginia University	MORGANTOWN POLICE DEPARTMENT	WV0310100	55756
West Virginia University	WEST VIRGINIA UNIVERSITY POLICE DEPT.	WV0310600	55756

Table 3: Averages of the 34 universities' attributes over the years 2013-2018

	Mean	Max	Min	Std Dev
Undergraduate Enrollment	24703.843	55010.500	2631.667	11595.760
Graduation Rate	69.485	93.833	45.500	14.337
Percent Asian	0.069	0.351	0.008	0.074
Percent Black	0.065	0.193	0.008	0.040
Percent Hispanic	0.142	0.671	0.019	0.150
Percent White	0.606	0.828	0.092	0.187

Table 4: Effects of Fraternity Moratoriums on Rape

	Full Year		Excluding Summer	
	Rape	Log(Rape+1)	Rape	Log(Rape + 1)
Treatment	1.916*	-0.013	1.668	0.009
	(1.096)	(0.089)	(1.188)	(0.109)
Party School	-1.001	-0.116***	-1.451	-0.152***
	(0.660)	(0.041)	(0.975)	(0.047)
University Enacted	-0.258	-0.025	0.833	0.004
	(1.558)	(0.081)	(1.925)	(0.096)
Graduation Rate	0.050	-0.004	0.030	-0.006
	(0.100)	(0.006)	(0.108)	(0.006)
Total Undergrad	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Undergrad Asian	0.001**	0.000*	0.001**	0.000*
	(0.001)	(0.000)	(0.001)	(0.000)
Undergrad Black	0.001	0.000	0.001	0.000
	(0.001)	(0.000)	(0.001)	(0.000)
Undergrad Hispanic	0.000	0.000	-0.001	0.000
	(0.000)	(0.000)	(0.001)	(0.000)
Undergrad White	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Num.Obs.	4742	4742	3556	3556
R2	0.454	0.667	0.508	0.693
R2 Adj.	0.444	0.661	0.496	0.686
Cluster vars	university	university	university	university
FE: month	X	X	X	X
FE: ori	X	X	X	X
FE: university	X	X	X	X
FE: year	X	X	X	X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Effects of Fraternity Moratoriums on Rape (University Police Only)

	Full Year		Excluding Summer	
	Rape	Log(Rape+1)	Rape	Log(Rape + 1)
Treatment	0.086	-0.020	0.197	0.033
	(0.256)	(0.093)	(0.295)	(0.105)
Party School	-0.352***	-0.120***	-0.490***	-0.175***
	(0.083)	(0.026)	(0.099)	(0.031)
University Enacted	0.046	0.035	0.003	0.019
	(0.237)	(0.088)	(0.277)	(0.100)
Graduation Rate	-0.019	-0.005	-0.027	-0.008
	(0.016)	(0.007)	(0.018)	(0.008)
Total Undergrad	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Undergrad Asian	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Undergrad Black	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Undergrad Hispanic	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Undergrad White	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Num.Obs.	2443	2443	1832	1832
R2	0.201	0.239	0.203	0.242
R2 Adj.	0.182	0.220	0.179	0.219
Cluster vars	university	university	university	university
FE: month	X	X	X	X
FE: ori	X	X	X	X
FE: university	X	X	X	X
FE: year	X	X	X	X

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

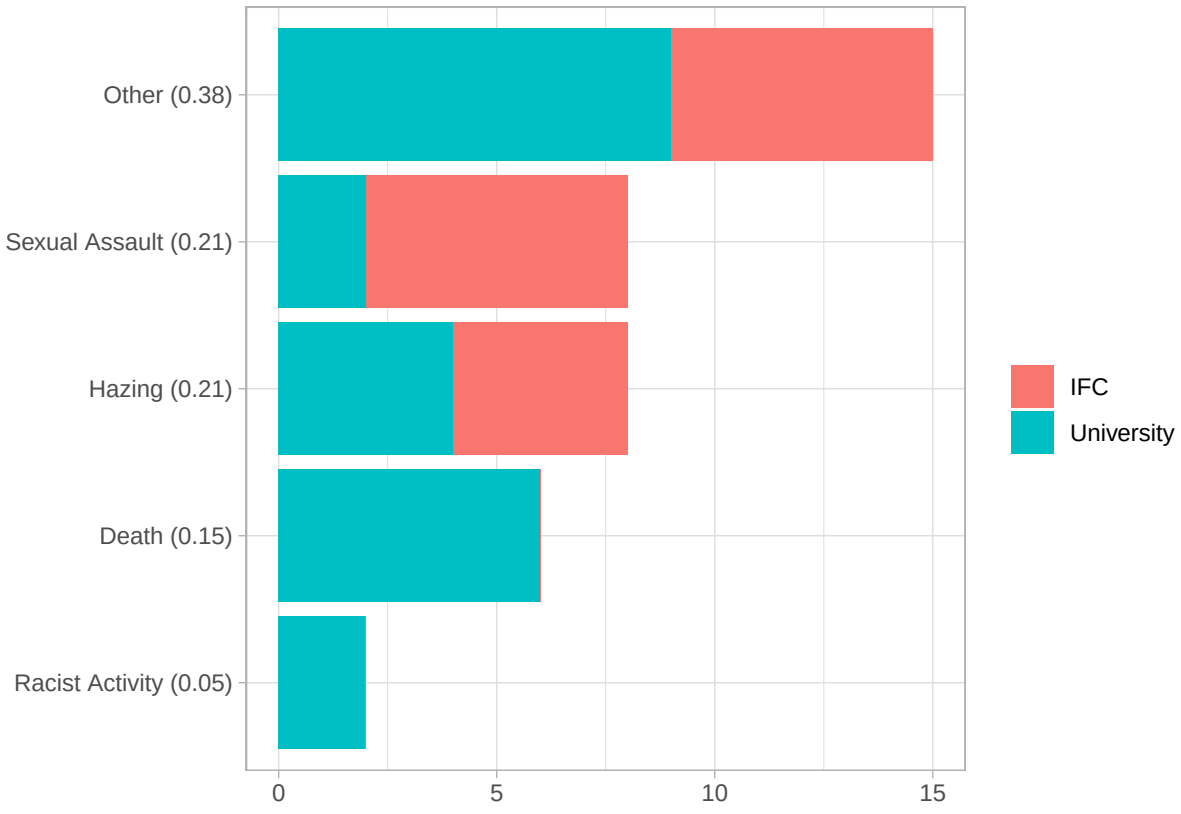


Figure 2: Distribution of triggering events for university moratoriums. The *Other* category represents triggering events such as alcohol violations, re-evaluation due to national trends, and unspecified rule violations.

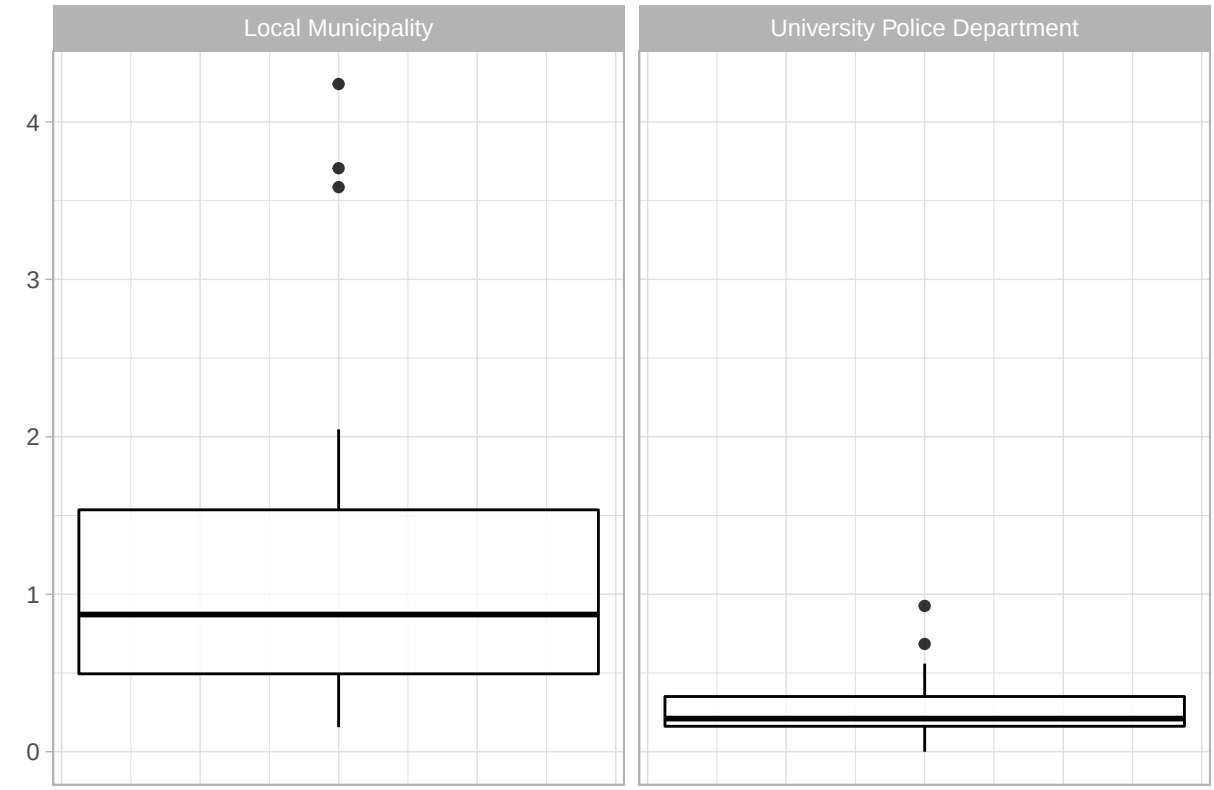
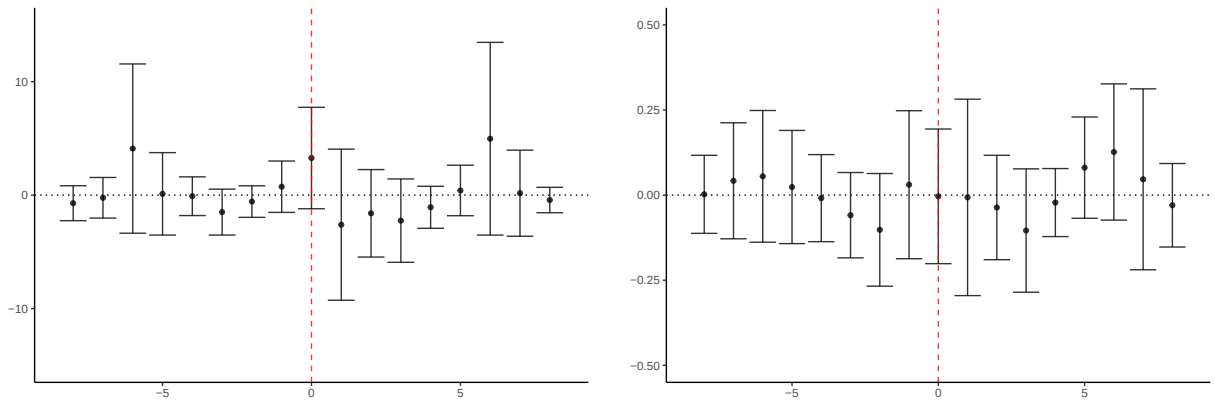


Figure 3: Distribution of reports of rape (log +1) by type of police municipality.



(a) Rape

(b) Log(Rape+1)

Figure 4: Event study showing 8 months prior and after date of moratorium.