Exploratory Analysis

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Last Updated: 2021-03-23

Data

Alcohol and Sexual Assault Offenses

During fraternity moratoria, the raw data show us that there is a decrease in alcohol offenses on Friday-Sunday, with the rest of the week being rather noisy. This relationship is shown in Figure 1. The analysis should be able to replicate this effect. On the other hand, sexual assaults look rather noisy, and there appears to be no real trend in when reports of sexual assault occur by day-of-week.

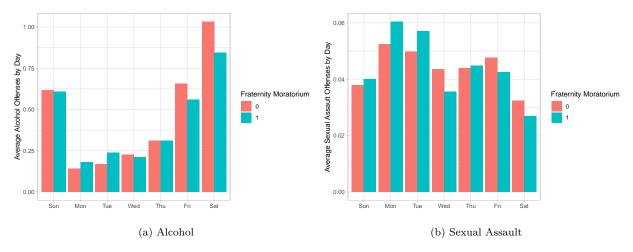


Figure 1: Offenses by day of the week

We can facet-wrap this evidence by university. We can see that there is some interesting variation here: lots of schools have big declines, but there are a couple of schools that look like fraternity moratoria actually **increase** the average number of alcohol offenses. ## Regression Evidence

Comparing a difference in means with/without robust standard errors (and filtering out the summer months of June, July, and August), I get extremely significant results at the 1% level as shown in Table ??.

Time Trends

Looking at offenses over days of the week. We can see that alcohol offenses spike on Thursday- Sunday, but sexual assaults, and drug offenses do not.

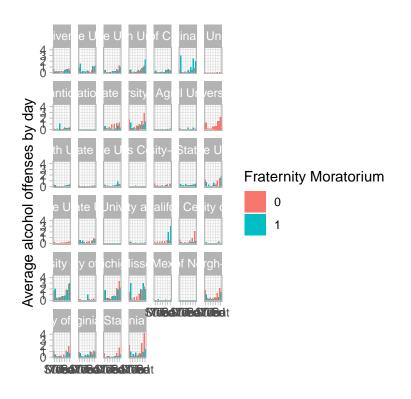
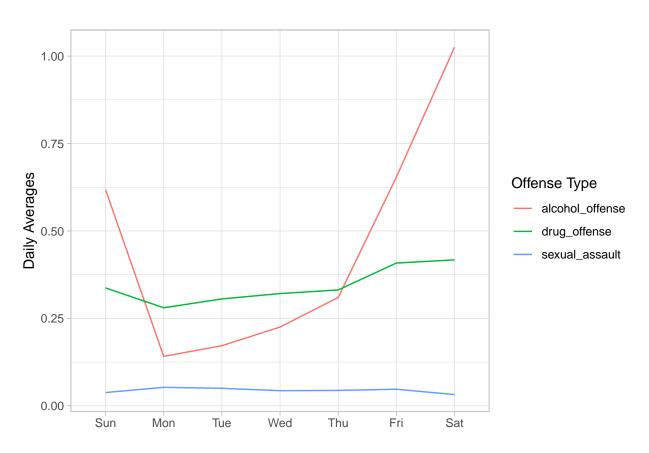


Figure 2: Alcohol offenses by university by day



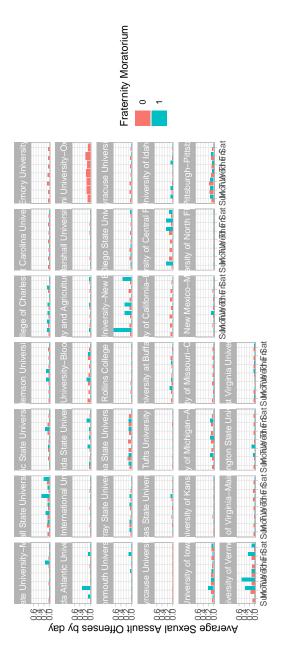
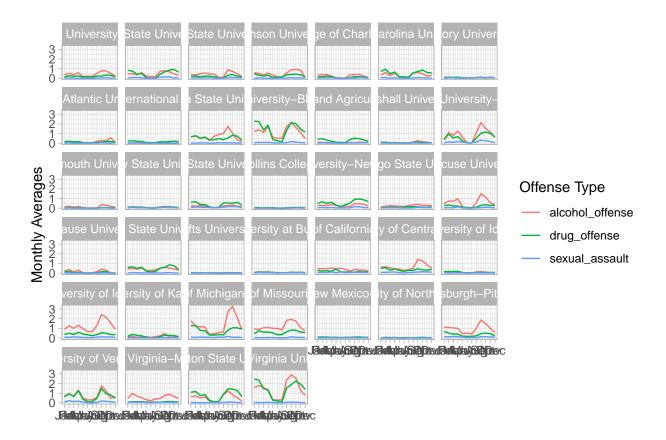


Figure 3: Sexual assaults by university by day

It seems as though all of the universities generally follow the same monthly trend: Large spikes in September-October.





Distribution of Outcomes

Daily Level

It looks like there is so little variation here. I'm not sure that this is the way to go. Let's look at weekly level variation.

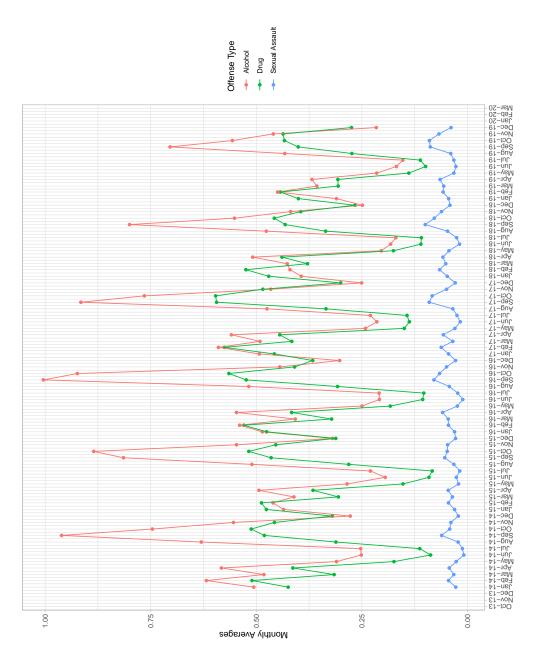
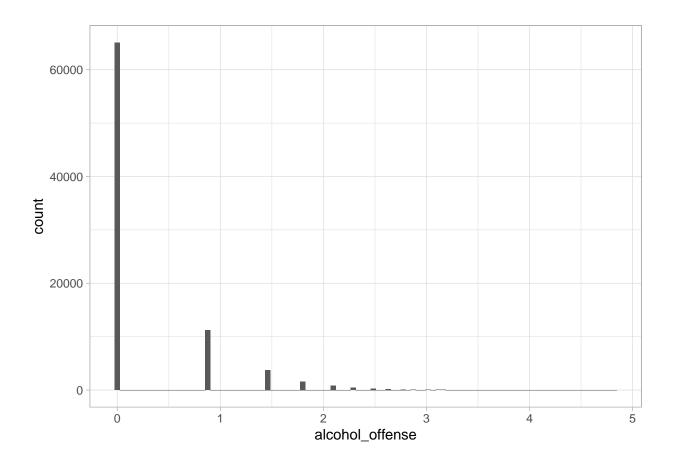
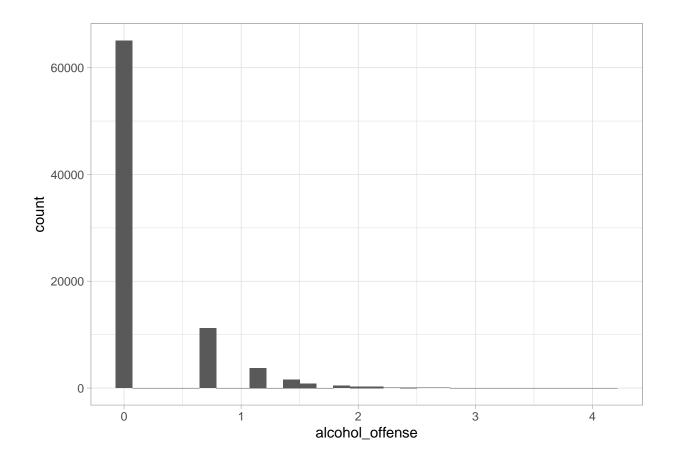


Figure 4: Monthly Averages of Offenses





Weekly Level

	Unique (#)	Missing (%)	Mean	SD	Min
sexual_assault	10	0	0.2	0.4	0.0
alcohol_offense	52	0	0.9	0.9	0.0
drug_offense	35	0	0.8	0.8	0.0
theft	33	0	1.2	0.9	0.0
robbery_burglary	23	0	0.4	0.6	0.0
alcohol_offense_strict	52	0	3.0	5.1	0.0
noise_offense	10	0	0.1	0.2	0.0
treatment	2	0	0.0	0.2	0.0
university_enacted_1	3	3	0.6	0.5	0.0
university_enacted_2	3	87	0.6	0.5	0.0
treatment_percent	8	0	0.0	0.2	0.0
year	7	0	2016.5	1.7	2013.0
$\operatorname{unit}_{-\operatorname{id}}$	39	3	173571.1	39827.1	106458.0
graduation_rate_total_cohort_	50	3	70.3	13.7	39.0
$total_number_of_undergraduates_financial_aid_cohort_$	191	19	21010.7	11262.8	2571.0
fips_state_code	26	3	27.7	15.4	5.0
$sector_of_institution$	3	3	1.1	0.3	1.0
degree_granting_status	2	3	1.0	0.0	1.0
$postsecondary_and_title_iv_institution_indicator$	2	3	1.0	0.0	1.0
institution_size_category	5	3	4.6	0.7	2.0
longitude	79	3	-88.1	13.9	-122.3
latitude	80	3	36.9	5.4	25.8
total_students_all	227	3	27203.3	13801.8	3127.0
total_black_all	221	3	1913.0	1742.1	133.0
total_asian_all	220	3	1977.4	2649.4	72.0
total_women_all	229	3	14604.0	7329.5	1876.0
total_men_all	228	3	12599.3	6660.2	1250.0
total_undergrad_men	228	3	9865.6	5367.9	1031.0
total_undergrad_women	227	3	11197.7	6110.3	1540.0
$total_undergrad_black$	219	3	1521.1	1492.4	101.0
total_undergrad_asian	213	3	1600.6	2237.0	59.0
total_undergrad_hispanic	222	3	3461.7	5654.4	161.0
total_undergrad_white_men	225	3	5695.5	3038.2	582.0
$total_undergrad_white_women$	225	3	6286.9	3101.5	819.0
total_white_all	228	3	15257.2	7223.4	1710.0
ftime_total_undergrad	228	3	18039.0	8924.5	2433.0
ftime_total_undergrad_men	228	3	8490.4	4369.5	972.0
$ftime_total_undergrad_women$	224	3	9548.5	4680.8	1455.0
total_students_undergrad	229	3	21063.4	11352.9	2571.0