

# Exploratory Analysis

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## 0 Update: Football Games + NIBRS

This update will focus on the addition of adding in footballs games from sports-reference.com/espn.com in addition to spillovers using the NIBRS data set.

### 0.1 Questions about the paper:

- I think it's a little awkward having the baseline specification, and then showing event studies/reporting with the preferred specification. A lot of the NIBRS data would also “look better” if I used the baseline specification just because I'm really lacking a lot of data in these graphs. I'm not sure if switching back and forth between all of these specifications is a great idea since it confuses the reader. While the lindo paper went through a ton of specifications in their main table, maybe this can be a robustness check? Not quite sure how to proceed here. Of course, I could also justify the baseline specification with power issues.
- Placement of the spillovers. I have data on CSS (residence hall stuff) and NIBRS. Not entirely sure where best this fits in. On one hand, it makes sense to put them in the results section, but on the other, they're both using different data sets and this is really trying to get at the mechanism. Maybe best in the discussion/mechanisms as I have already?
- What exactly is a moratorium? I looked into this more and this is what I could find:
  - Moratoriums could include things such as all social events, drop-ins, formals, semi-formals, philanthropic events, house parties, new member activities, and third party events (e.g., events at bars/restaurants). There is a ton of heterogeneity between each school, and some are vague with “social events”. Not sure how I should describe this in the paper. Maybe in a footnote?

## 1 Football games

I was able to collect data on football games for 34 of the 38 schools. The 8 schools remaining do not have football teams. Additionally, I obtained football game data for my other “untreated” schools to verify the results further. While not included in this document, the results only get more precise and more significant. I will focus on the “only treated” schools as I do in the paper, although this brings the question of whether my sample should include never treated schools in the main results.

Basic summary statistics for game days/moratoriums are shown in Table ??.

### 1.1 Football games as controls

In Table ??, I replicate my main table in the paper except with football games as controls. A comparison is shown. Main idea here is that football games as controls do not change the results very much at all.

## 1.2 What are the effects of Moratoriums and Game Days?

It is important to see what the effects of each of these things are. Table ?? shows the preferred specification (2) split by weekends and weekdays while showing the effects of each game days and moratoriums, along with the interaction. Notice that game days cause significant increases in alcohol offenses as expected, although no significant increases in sexual assaults (likely due to power). However, the coefficient is positive, thus consistent with the Lindo paper.

Table ?? shows the effect of game days AND moratoriums together. There are no significant effects here, although there is evidence that football games are causing more alcohol and sexual assaults (positive sign). This matches intuition - while moratoriums can decrease behavior, they can only mitigate the effects of game days.

## 2 NIBRS

The NIBRS data is bad but it's only here to try and show spillover effects. The big concern is that fraternity members/other partyers are just going off campus and partying somewhere else despite my evidence that partying is going into the residence halls.

### 2.1 Replicating the Lindo paper

I replicate the Lindo paper using their fixed effects specifications. I divide this into two tables. Table ?? shows the replication of the Lindo results using all alcohol offenses and sexual assaults (I use sexual assaults, not rapes which is defined as rape + statutory rape + fondle + sexual assault with an object), and Table ?? which separates into college-aged victims only (e.g., ages 17-22). I use Poisson regression in lieu of OLS since this is what Lindo does. Note that the NIBRS data only gives me a total of

### 2.2 Spillovers

I split spillover effects into multiple tables. I can show more if requested. The ones I think are most relevant are Table ?? which shows the effects of moratoriums using NIBRS with local police departments and university police and Table 2.2 which shows the effects of moratoriums using NIBRS with only local police departments (e.g., nearby place). I can show for college-aged individuals as well, but didn't want to overload with tables.

## 3 Heterogeneity: IFC Fraction

Doing heterogeneity analysis on the fraction of IFC populations to total enrollment. Similar to moratorium length, I split into 3 quantiles based on the 33rd and 66th percentile. Note that I only have 34/38 universities that give IFC participation. The results are shown in Table ?? where it appears that there really isn't a difference between how much presence the IFC has. If anything, this is just significantly underpowered like pretty much every other heterogeneity analysis.

## 4 Raw Data Graph

I tried to make a few raw data graphs, although it was difficult given that the reporting between universities is vastly different. As an alternative graph, I plot the raw data by weekdays and weekends, split by frequency of crimes occurring/reported at police departments. This was inspired by the results needing the university fixed effects to really show up. This is shown in the barplot Figure ??