Greek Retention

Basic Differences in the retention of Greek FTIACs vs. non-Greek FTIACs

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OAKLAND UNIVERSITY ™

Introduction and Summary

Greek life at OU is small, with around 500 or so students participating in a registered sorority or fraternity each semester. With almost 17,000 undergraduate students, students involved with Greek life represent about 3% of the overall student body.

Though there is some previous research nationally on Greek affiliation and its impact on retention[1] that does suggest a positive impact on retention rates, much of the research is unable to estimate the causal impact of Greek life on retention, is limited in its generalizability, or is simply outdated. To complicate matters even more, OU has a very different Greek culture than the stereotypical ones that are found on other large campuses. Because of this, it was reasonable to conclude that Greek affiliation at OU could have a far different impact on retention than estimates made from other institutions.

It's very difficult to attempt to estimate whether or not participating in Greek life is likely to cause changes in retention. Part of this reason is because participants are choosing whether or not to join a fraternity or sorority, rather than being randomly assigned to join one. Because of this, the students that do join represent students that really want to be involved. Thus, simply naively looking at retention rates between Greek students and non-Greek students would suffer from what researchers call 'selection bias'. And this bias limits the ability of researchers to link causal explanations based on only correlative data.

However, researchers can try to add controls to the data set to compensate for this selection bias. There are sophisticated techniques that can attempt to control for all of the selection bias, but it's only possible to do so if one had infinite control variables (which obviously can't happen). The best that researchers can do is try to get as close to possible.

The problem with these techniques is that they are fraught with challenges and issues, and the researcher never knows whether or not they've included enough control variables to appropriately account for the selection bias.

Because of these issues and the time involved to conduct research like this, OIRA is opting not to investigate this path at this time. Despite this, there are a number of simple control variables that OIRA can include, and we can still draw some conclusions by looking at the data critically.

The first important control to include is to make sure that the types of students come from the same basic population. For the comparison group, OIRA looked only at the first year retention rates of FTIACs (First-Time-In-Any-College), a rather standard group of students that represent first time freshmen (N = 14,225). For the Greek students, OIRA included only FTIACs that were identified as a first semester

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[1] For example: DeBard & Sacks (2010), 'Fraternity/Sorority Membership: Goods News About First-Year Impact', And: Nelson et al (2006), 'Effects of Fraternity/Sorority Membership and Recruitment Semester on GPA and Retention', both published in Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors. In addition, researchers from Auburn University in 2005 presented a report in an Alabama IR conference about their research regarding Greek affiliation. The report, which is titled 'First Year Retention: Is it Housing or Affiliation that Matters' found a small positive benefit for Greek Affiliation.

pledge, using data provided by student affairs to identify these students (N = 380). Each group contained only new FTIACs from 2008 through 2013. (The data includes both full time and part time students)[2].

OIRA routinely examines retention rates. One of the strongest predictors of whether or not a student will return in the fall is their first semester GPA. (It is a far stronger a predictor than high school GPA, ACT scores, or first generation status).

Figure 1 shows the retention rate of FTIACs (first-time-in-any-college) for those that participate in Greek life their first semester and those that do not. These retention rates are displayed by first term GPA, a measure that controls for academic ability (at least through the first semester).

Figure 1: First Year Retention Rates by First Semester GPA, Greeks Affiliation vs. All Students
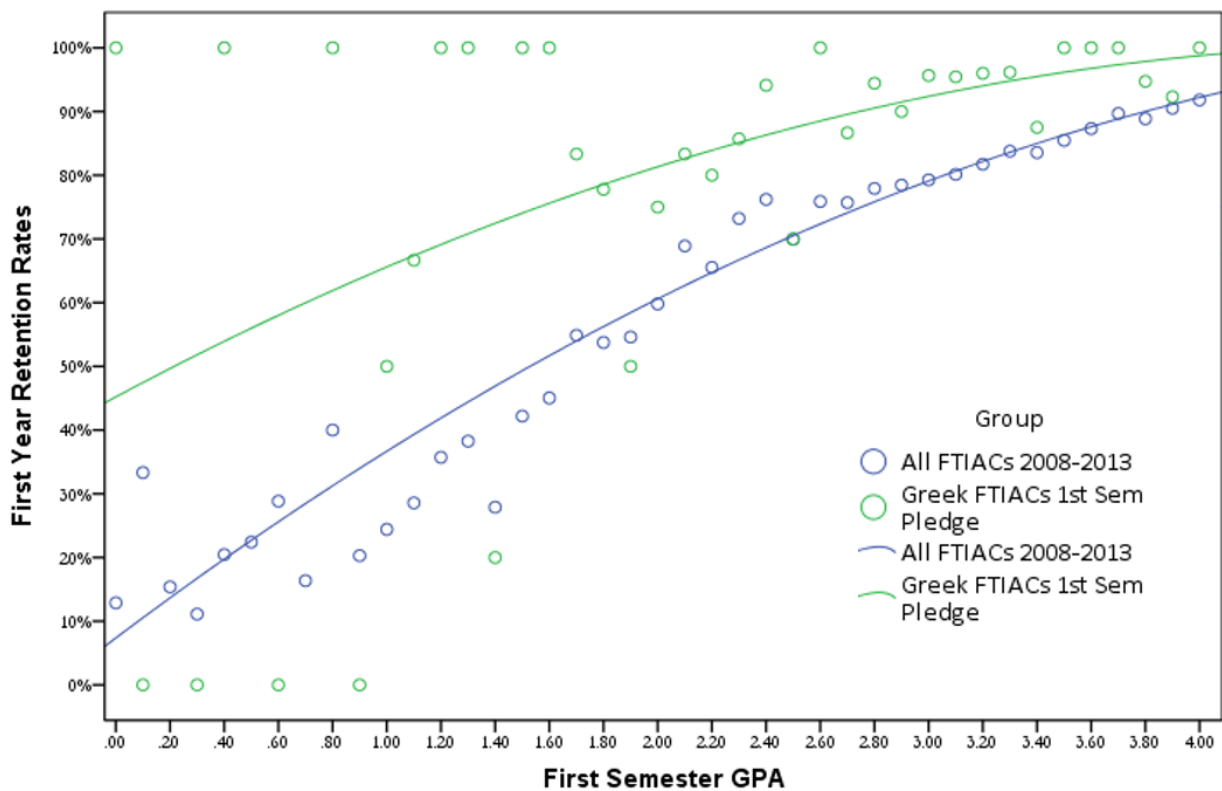
What Figure 1 clearly shows is that the retention rates for Greek affiliated students are far higher than unaffiliated students. In fact, the rate is higher along the entire spectrum of GPA ranges. The effect size here is monstrously large, especially for students with lower GPAs, where we see retention rates nearly 40% higher than that of the control group. Even for high achieving students, the effect size is noticeable, at around 5 or 6%. The difference for students in the middle is somewhere around 10-12%.

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[2] The control population of all FTIACs does actually include the 380 Greek FTIACs, so the difference presented in Figure 1 is actually slightly underestimated. The actual difference between Greek FTIACs and non-Greek FTIACs is slightly larger, but trivially so.

Another important control variable that OIRA finds is highly predictive of retention is the number of first term credits attempted. Attempting less than 16 credits is sometimes a sign that students aren't committed, or are attempting to balance difficult work-life situations that pull them away from school. Figure 2 presents the same graph as figure 1, except it filters both groups to only students that attempt 16 or more credits their first semester. OIRA added a further control, and excluded students with a 0.0 GPA. That is, they had to have at least one confirmed non-zero grade. (This ensures that students actually attended a class, rather than signing up for classes and disappearing).

These new control restrictions reduce the sample size of Greek students to 248 students and the comparison condition to 8573 students. Figure 2 displays the result of this new control condition. (The curves presented are LOESS smoothing curves instead of quadratic curves as presented in Figure 1, but the curves still summarize the overall pattern in the data the same way).

Note that Figure 2 shows the same pattern as Figure 1. Greek students are retained at noticeably higher rates than non-Greek students. In fact, the effect might even be more pronounced than what is shown in Figure 1, at least for students that struggled their first semester.

Figure 2: First Year Retention Rates by First Semester GPA, Greek Affiliation vs. All Students, 16+ Credits
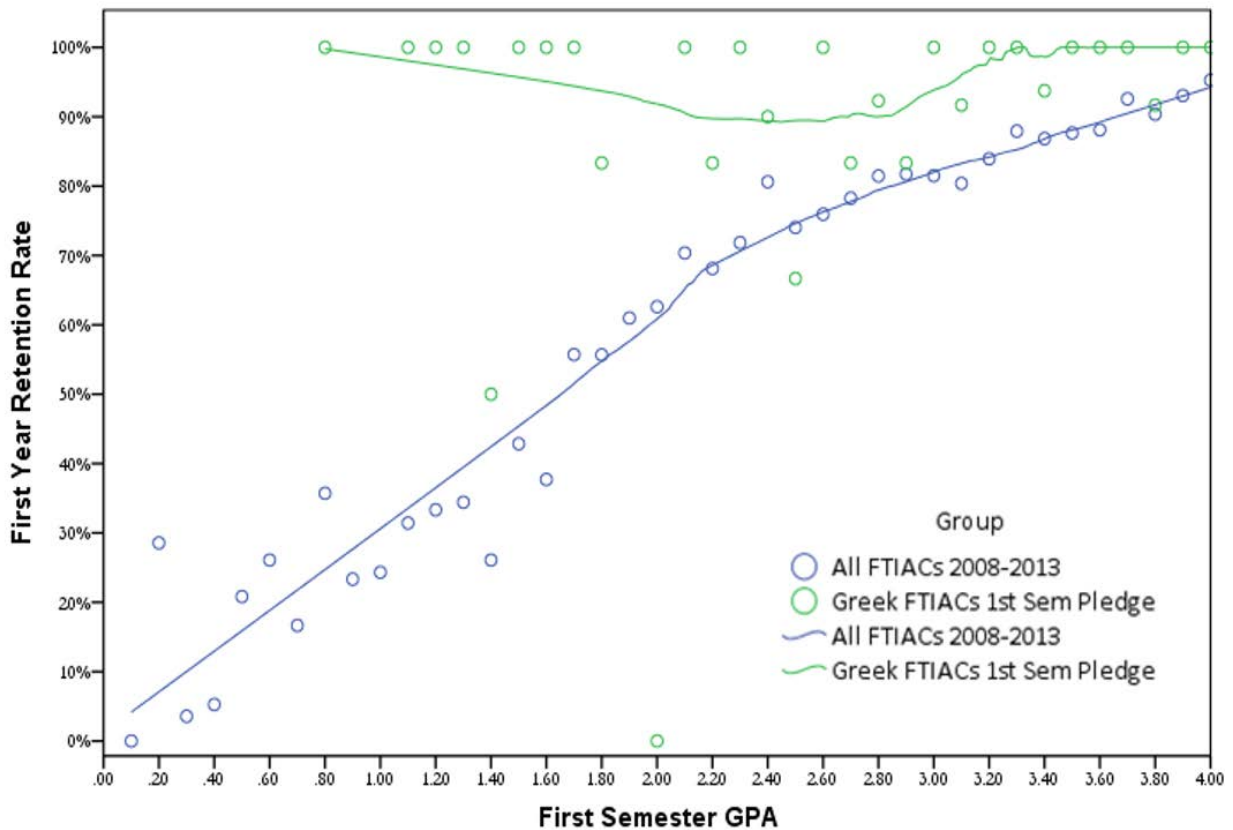
There is yet another possible way to control for the data that may make a difference in its interpretation. It is possible that a large number of students that do not return for their first year actually make the decision not to return early in their first semester. They may do this even before they are able to pledge. If so, one could argue that a survivor effect is biasing the Greek data but not the control group, thus making the comparison between the two unfair. The argument would then be that the control data should be composed only of students that already retained their first semester, and then to compare first year retention rates.

Figure 3 does just that (while still correcting for the control conditions presented in Figures 1 and 2). OIRA isn't convinced that this is wholly appropriate control group, but it does provide an additional important perspective on the data. Most notably, Figure 3 shows only small changes in the control group position, with the gap between the two groups narrowing slightly.

**Figure 3: First Year Retention Rates by First Semester GPA,
Greek Affiliation vs. Improved Control Group, 16+ Credits**
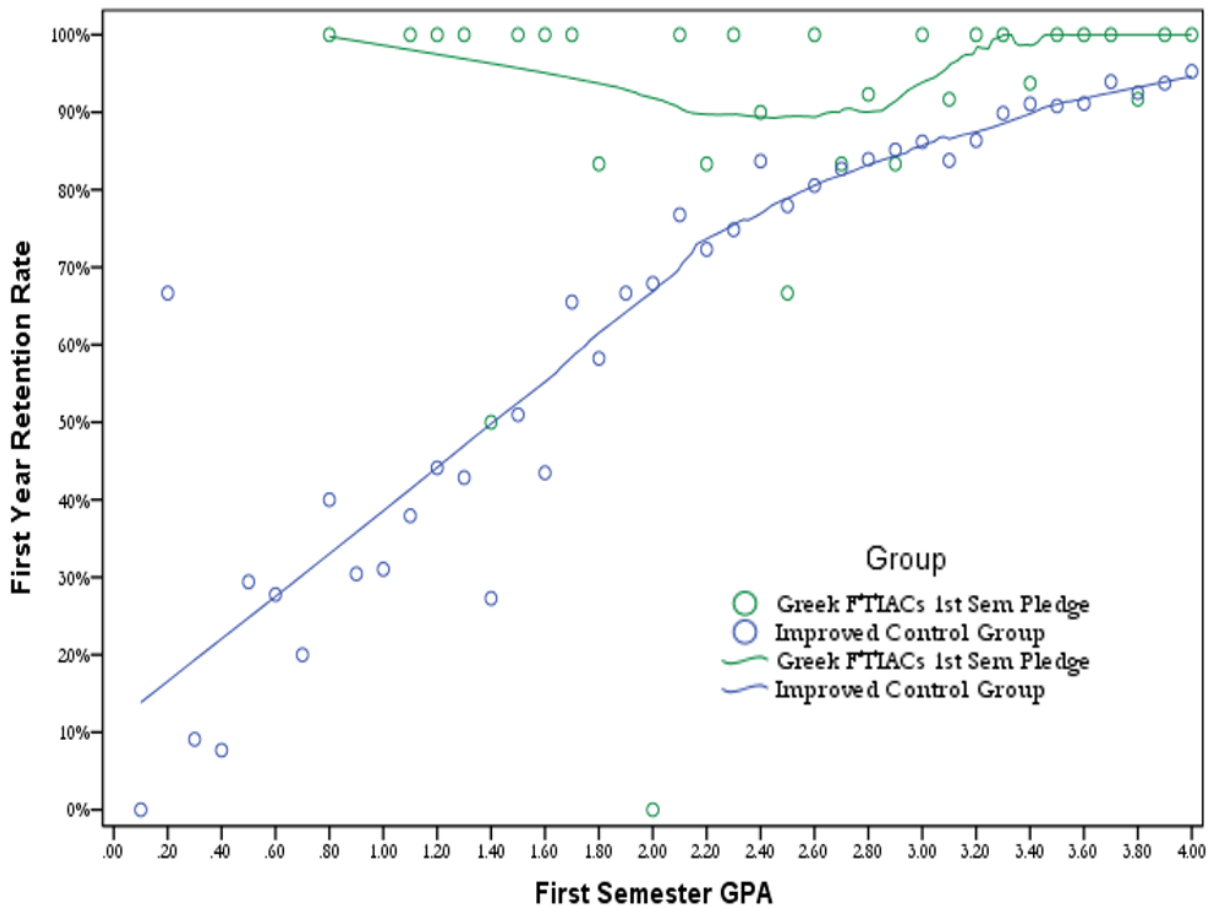
Discussion and Recommendations

FTIAC students with Greek affiliation show noticeably higher retention rates than FTIACs as a whole. This increase is more pronounced for students that struggle in their first semester, and this increase seems to persist even after several important control variables are added to the data.

Unfortunately, none of the data presented can confirm that participating in Greek life *causes* a change in retention rates. However, the sheer size of the difference deserves further discussion and consideration. What's the chance that Greek affiliation does cause a meaningful increase in retention rates? How might we find out?

Before considering these questions further, it may be useful to think about the mechanism through which Greek affiliation might impact retention. What we see in the data is a pronounced difference in retention rates at every level of academic success. A very reasonable mechanism is that Greek affiliation provides a meaningful source of connection and sense of community for students, a sort of link between the student and the university that encourages them to persevere independent of their academic success.

If that is the case, then there are many other potential communities or links that students could choose, they just happened to choose Greek life as one of those links. If Greek life were to disappear, these students might very well suffer declines in retention rates. But they might also find other communities to connect with, and it's possible they would retain anyway.

Therein lies the difficulty in trying to understand the causal impact that Greek affiliation has on the retention of students. OIRA is skeptical that taking the difference in retention rates at face value would be an appropriate estimate of the magnitude of the effect that Greek affiliation has on retention. However, the sheer magnitude of the difference is impressive, and it's not something that OIRA sees often in any of its research. It certainly seems possible and even likely that OU's current Greek system causes an increase in retention rates. But figuring out how much is far more difficult to answer.

OIRA's best recommendation would be for the university to slowly but consistently increase the number of students participating in Greek life. There are two reasons why OIRA recommends such an action. First, the initial data is very encouraging, and it warrants further exploration and consideration by the university. Second, a managed increase in the number of students participating in Greek life will allow the university to better estimate the causal impact the program has while simultaneously allowing for the expansion of the program without adversely impacting its culture. This is critical because it is the current culture of Greek life that is responsible for any impact on retention. Were this culture to change rapidly, there would be no guarantee that its impact would remain constant (or even positive).

The only other caveat that OIRA would like to make is that Greek affiliation data is not entered into Banner. It is contained in a shadow database system. Because of this, changes, additions, deletions, etc. are difficult to keep track of. Shadow databases are disconnected from Banner and automatic error checking systems, such as those that would not allow a student to be Greek affiliated in a semester unless they are enrolled, do not have an opportunity to function. OIRA did find a small number of what seemed to be contradictory enrollment indicators (i.e. students that were Greek affiliated in semesters where official files show no enrollment) that were contained within the data. At this time, OIRA does not

believe that such errors introduce substantial bias into the data. The differences are too extreme to be impacted by a few errors per semester. OIRA would suggest that some consideration be made to formalize Greek affiliation data within the Banner system.