I am examining the Academic Progress Rate (APR) of NCAA teams, focusing specifically on men’s revenue sports, defined as football and occasionally men’s basketball at the Division 1 level. My hypothesis is that men’s revenue sports have lower APR’s than non-revenue men’s sports. It is generally believed that male college students who are also high-level athletes with likelihoods of professional careers that are directly based on their play in the NCAA receive lower grades and have lesser academic outcomes due to the pressures of playing and the incentives it offers.

I used a dataset with a total sample of 6,511 cases from the years 2003-2014. This dataset focused on the four year rolling average APR from the 2010-11 season to the 2013-14 season. I used a subset of this data focusing on only Division 1 teams which was further narrowed to four teams, football, men’s basketball, men’s cross country, and baseball of 211 data points. I picked these sports because football and men's basketball are revenue sports while cross country and baseball are not revenue sports. Although some college baseball players may later play professionally, they do not offer substantial monetary benefits to their institution for their play, thus they do not have the same incentives as football and men’s basketball players.

I used the metric of multi-year APR Rate, which is an interval variable that measures the multi-year APR from the 2010-11 season to the 2013-14 one and is adjusted for team size. As it is not recommended to use intervals in crosstabs, I created a new column in the data subset called APR\_Scaled, which placed the intervals into categories of “Average” [2], “Below Average” [1], and “Above Average” [3]. I made these determinations based on the standard deviations, means, minimums, and maximums of the original dataset filtering for Division 1 institutions and the filtered subset of the four sports I used. The total mean in 988.57 with a standard deviation of 13.72 while the mean of the filter is 980. Combined with the minimums of both datasets, 871 and 974 respectively, and their maximums, both 1000, I decided that any value less than 980 would be below average, coded as 1 while anything above 993 would be above average and thus coded as 3, everything in between those two values would be considered average and coded with 2.

I used only men’s sports in this analysis as I cannot generalize on women’s sports which are all non-revenue and while there are some sports that could be prospective revenue sports, the incentives are very different. Additionally, the teams are not separated by conference or revenue, meaning that there is a wide swathe of athletic departments that are covered, some of whom have million dollar TV deals and others of which that do not. Further, I am using a variable that is adjusted for team size meaning that smaller teams can have their APR’s skewed either higher or lower due to a few academically high achieving team members. Further, APR takes into account retention and men’s basketball has a high proportion of players who are “one and done”, meaning they leave after completing one year of school, thus artificially depressing the APR value. Creating my own variable could also lead to some bias as the boundaries are slightly arbitrary and can be argued a few points in either direction.

**Table 1: Crosstabulation of Sport Played by Academic Progress**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Below Average** | **Average** | **Above Average** | ***TOTAL*** |
| **Baseball** | 25  25% | 25  30.8% | 7  23.3% | **57**  ***27.0%*** |
| **Men’s Basketball** | 35  35% | 23  28.4% | 3  10% | **61**  ***28.9%*** |
| **Men’s Cross Country** | 7  7% | 25  30.8% | 20  66.7% | **52**  ***24.6%*** |
| **Football** | 33  33% | 8  9.9% | 0  0% | **41**  ***19.4%*** |
|  | **100** | **81** | **30** | ***N = 211*** |

Chi-Square = 60.26; df = 6; p < 0.005

Cramer’s V = 0.378

There is a definitive relationship between the sport played and academic progress as measured by APR. This is shown by the chi-squared value being much larger than the critical value. Further, the results of my analysis are statistically significant, as the p-value is less than 0.005. Using Cramer’s V, we can also see that there is at least moderate association between the variables. When examining metric differences, football players had the worst academic progress of the sports with most teams below average, while cross country had the best, with most teams above average, while basketball teams skewed towards being below average but still had high achieving outliers. Further, baseball teams tended towards having average APR scores, with some teams trending higher or lower.

My hypothesis that men’s revenue sports have lower APR’s than their non-revenue counterparts is heavily supported by my analysis. Especially interesting is that baseball teams tend to have average APR and are a non-revenue sport that offers significant post-college incentives, but are not revenue generating for collegiate institutions. In the future I would like to compare women’s sports to see if there are similar differences between academic progression in non-revenue and what I call “prospective revenue” sports, such as basketball and volleyball. Additionally, it would be interesting to compare solely based on NCAA division to see if the trends observed here continue in less lucrative competitions.