Year 1 Academic Success of Student Athletes at UC Merced

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Student Athletes at the University of California, Merced are provided with academic support activities, mandatory activities required of frosh and continuing students with sub-2.3 grade point averages, and optional activities available to all athletes. This report examines whether student athletes at UC Merced experience greater initial academic success compared with their non-athlete peers. We defined academic success as retention to the third semester, good academic standing at the end of the first year, and year 1 cumulative grade point average. Outcomes were compared based on SAT score ranges, gender, and Under-represented minority status to account for existing group differences between athletes and non-athletes that could otherwise explain any differences in student success.

Background

Student Athletes are required to participate in mandatory academic support activities as entering Freshmen, including an USTU 10 Freshman Success Course specific to student athletes, taught by Athletics staff and coaches; and Study Tables, which are a quiet space for students to study (requirements are 6 hours per week in Semester 1 and 3 hours per week in Semester 2). Optional activities include the SALA (Student Athlete Learning Assistant) program, which provides academic support and encouragement through individual and group tutoring sessions; and the Student Athlete Learning Center, which provides study space for athletes.

This analysis combined entering Fall Frosh cohorts from 2011 to 2016 (transfer students were excluded, as there have only been 22 transfer athletes, which is insufficient for analysis). These cohorts included 278 athletes, and 9,671 non-athletes. Demographics and majors are described in Tables 1 and 2, with a few main differences between the two student populations, which are described below.

Demographics

Athletes and non-athletes were compared based on gender, ethnicity, and initial major distributions. Significant differences were observed across ethnic categories, initial major, and school[i]. With regards to ethnicity, athletes were significantly more likely to be African-American (10.4% of athletes vs. 5.1% of non-athletes), or White (24.1% of athletes vs 11.2% of non-athletes), and less likely to be Asian (6.8% of athletes vs 22.6% of non-athletes). Gender and Underrepresented minority proportions were not significantly different.

Table 1: Demographics

	Athletes		Non-Athletes	
Gender				
Female	136	49%	4988	52%
Male	140	50%	4636	48%
N	2		47	
Race/Ethnicity				
International	10	4%	520	5%
Hispanic	131	47%	4891	51%
African-American*	29	10%	493	5%
American Indian	1	0%	15	0%
Asian*	19	7%	2188	23%
Pacific Islander	4	1%	65	1%
White*	67	24%	1084	11%
Multi-racial	14	5%	356	4%
Unknown	3	1%	59	1%
URM	165	59%	5464	57%

URM includes Hispanic, African American, and American Indian/Alaska Native.

**denotes statistically significant differences*

Table 2: Initial Majors of Athletes and Non-Athletes

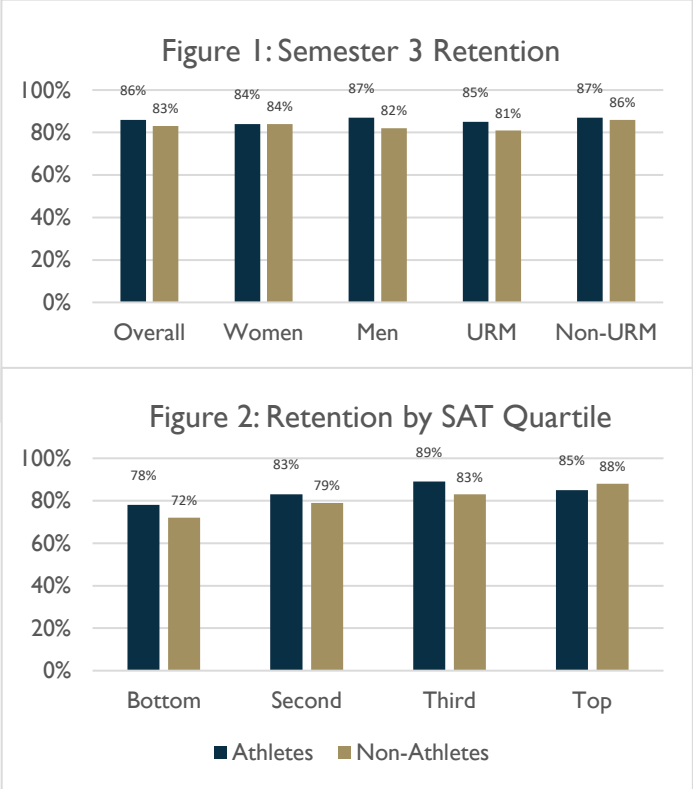
	Athletes		Non-Athletes	
Undeclared*	81	29%	1873	19.4%
School of Social Sciences, Humanities and Arts				
Anthropology	0		72	0.7%
Cognitive Science	0		95	1.0%
Economics	0		110	1.1%
English	3	1.1%	66	0.7%
Global Arts Studies	0		3	0.0%
History	3	1.1%	97	1.0%
Literatures and Cultures	3	1.1%	42	0.4%
Management and Business Economics*	16	5.8%	323	3.3%
Political Science	4	1.4%	299	3.1%
Public Health	5	1.8%	77	0.8%
Psychology	19	6.8%	784	8.1%
Sociology	5	1.8%	248	2.6%
Spanish	0		22	0.2%
Undeclared SSHA	7	2.5%	165	1.7%
School of Engineering				
Bioengineering*	0		283	2.9%
Computer Science & Engineering*	9	3.2%	883	9.1%
Environmental Engineering	3	1.1%	155	1.6%
Mechanical Engineering	21	7.6%	612	6.3%
Materials Science Engineering	2	0.7%	44	0.5%
Undeclared Engineering	12	4.3%	256	2.6%
School of Natural Sciences				
Biological Sciences	66	23.7%	2310	23.9%
Chemical Sciences*	5	1.8%	422	4.4%
Earth Systems Science	1	0.4%	34	0.4%
Applied Mathematical Sciences	0		121	1.3%
Physics	1	0.4%	78	0.8%
Undeclared NS*	12	4.3%	197	2.0%
Total	278	100%	9671	100%

Initial Major

Initial major choices were significantly different between athletes and non-athletes. Athletes were significantly more likely to choose Undeclared (29% vs 19.4%), Management and Business Economics (5.8% vs 3.3%), and Undeclared Natural Sciences (4.3% vs 2.0%), while non-athletes were more likely to enroll in Bioengineering (2.9% vs 0%), Chemical Sciences (4.4% vs 1.8%), and Computer Science and Engineering (9.1% vs 3.2%). When comparing school of first major, athletes are less likely to major within the School of Engineering (16.9% vs 23.1%).

Semester 3 Retention

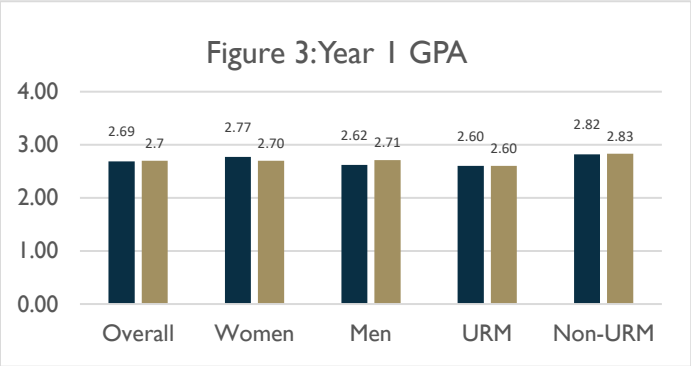
We found that 86% of Athletes were retained to the third semester compared to 83% their peers, though the difference was not statistically significant (Figure 1). Retention to the third semester (Figure 2) was also equally likely for athletes and non-athletes across SAT ranges, gender, and URM status. SAT quartile refers to SAT scores in terms of brackets- "bottom" refers to the lowest 25% of scores; "top" refers to the top 25%, and so on. In many cases, the percentage retained was higher

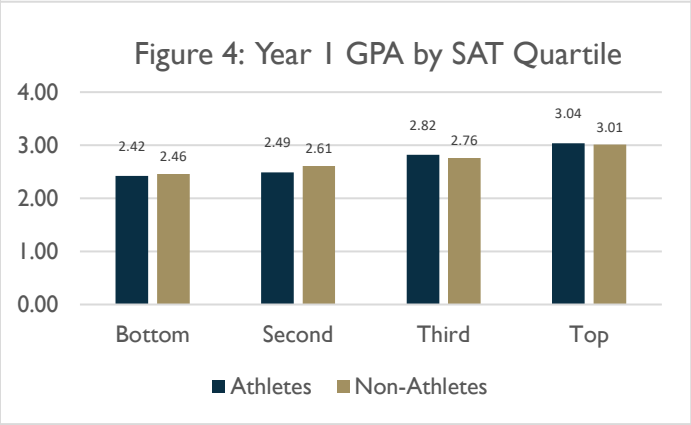


for athletes, such as for men and underrepresented minorities, but observed differences did not reach statistical significance.

Year 1 Grade Point Average

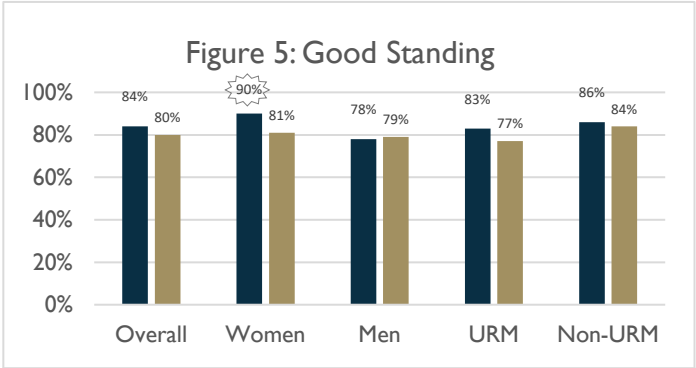
Average cumulative Year 1 GPA was similar for athletes and non-athletes, with no significant differences (Figures 3 and 4). Athletes had an average Year 1 GPA of 2.69, compared to non-athletes' 2.70. There was a non-significant trend for women athletes to have higher GPAs compared to non-athlete women (Figure 3).

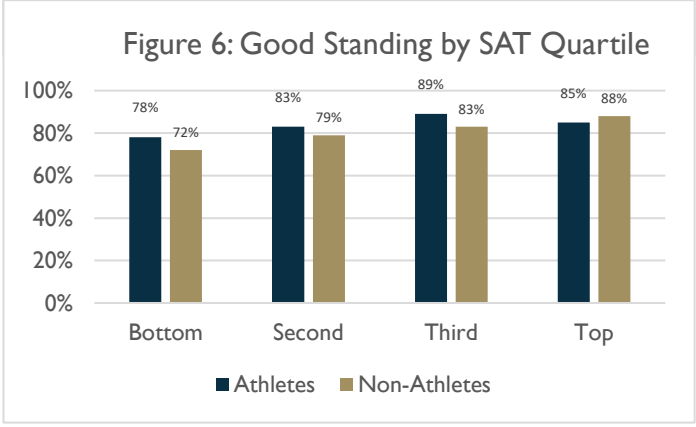




Academic Standing

Academic standing at the end of year 1 was compared for students who enrolled in their second semester. 84% of enrolled athletes were in good standing (see Figure 5), while 80% of non-athletes were in good standing, which not reach statistical significance. However, there was a significant difference for Women – female athletes were more likely to be in good standing when compared to their peers (90% vs 81%). Men were equally likely to be in good standing whether or not they were athletes, as were URM and non-URM students, and across SAT quartiles (Figure 6).





Conclusion

Overall, student athletes at UC Merced were just as academically successful as their peers. Though the raw percentages were more favorable to athletes in terms of retention and academic standing, the sample size was not large enough for these differences to reach statistical significance.

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ENDNOTES

1. Based on Chi-Square analysis, $p < .05$
2. Based on Pairwise Comparisons of Column Proportions with Bonferroni Correction.