

GENDER DIFFERENCES IN UNIVERSITY STUDENT-ATHLETES' EXPRESSED LEVELS OF ACADEMIC AND ATHLETIC MOTIVATION

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ABSTRACT

A survey conducted among 670 student-athletes at five campuses of a large western university system revealed differences between males and females in the level of motivation they expressed for pursuing athletic versus academic success. Teams on three of the campuses surveyed compete at the Division I level, whereas teams on the remaining two compete in Division III. At both divisional levels, females expressed greater academic motivation than did their male counterparts. Implications of these results for university administrators and counselors are discussed.

INTRODUCTION

Recent NCAA investigations into gender equity among college and university athletic programs have begun to focus attention on economic differences between men's and women's athletics. These financial analyses point out some factual differences but stop short of probing the educational aspects of male and female orientations toward athletics and academics.

Women's sports at the university and college levels have not developed and proliferated to the degree that men's sports have. Title IX, a federal statute which mandates equal expenditures in all areas of education for men and women, was instituted in 1974. Thus, it could be speculated that over the last two decades women's athletic programs have had some "catching up" to do in terms of funding and development. It is also expected that, as there are far fewer post-college occupational options for women in sports, the level of college sport participation among women might reflect a lack of involvement and motivation.

Research into the area of gender differences regarding academics and athletics has increased in recent years. Brown and Holzman (1955) noted significant differences in favor of college women over men on 65% of questions regarding orientation to academic study. Mayo (1982) found that female student-athletes at Ohio State University achieved significantly greater academic success than did male student-athletes who participated in either revenue or non-revenue sports. Purdy, Eitzen, and Hufnagel (1982) and Kiger and Lorentzen (1988) found significant gender differences in favor of female over male student-athletes on various measures of academic performance, including grade point average, graduation rates, and academic probation. The American Institutes for Research (1989) found that women student-athletes spent significantly more hours preparing for and attending classes than did their male counterparts. Curry and Weiss (1989) found differences in the amount and type of athletic motivation between male and female college student-athletes.

One contradictory piece of evidence was reported by Henschen and Fry (1984). In their longitudinal study, an "alarming decline" was found in female student-athletes' graduation rates from 1973 to 1982 at the University of Utah. The authors noted that the decline had occurred since the implementation of Title IX.

The purpose of this study was to examine possible differences between male and female student-athletes in regard to their expressed levels of academic versus athletic motivation. It was expected that across all levels of college sport competition and professionalism, the mean academic motivation scores of female student-athletes would be significantly higher than those of male student-athletes.

METHOD

Two terms necessary to assess motivational aspects of college student-athletes are academic motivation and athletic motivation. Academic motivation has been defined as "the persisting motive to achieve in school" (Buxton, 1966, p. 192). A general definition of athletic motivation is "the persistent need or desire to persevere, excel, or succeed in physical tasks" (Hilgard, Atkinson, & Atkinson, 1971, p. 579). This is a broader construct distinct from "episodic" athletic motivation, which "consist[s] of [motivational] demands occurring over periods as long as a season as well as those occurring within a more constricted time frame" (Cratty, 1989, p. 198).

As a method of standardizing the academic backgrounds of the sample, student-athletes from three different Division I programs and two different Division III programs in a large western university system were surveyed in February 1992 (see Table 1). These schools do not offer physical education as an academic major, so there was no carryover from the student-athletes' sport into the vocation or field of study they may choose upon graduation.

Table 1

Background Data (Divisions I and III Combined)

	Males	Females
U.S. Citizen	93.1%	96%
Admitted as freshman	66%	71.4%
Year in school	Sophomore +	Sophomore
Parents' Education	Beyond Bachelor's degree	Bachelor's and/or Master's degree
Parents' Income	Less than \$60,000	Less than \$60,000

In the survey, the subjects put themselves in seven different situations where they had to choose between responses more athletically inclined versus those that were academically oriented (see appendix). After reading each scenario, they chose from among four alternatives. The fixed alternatives forced the male and female respondents to articulate differences between a more athletic choice and a more academic one.

The respondents' choices were scored on a Likert scale from 1 to 4, with 1 being a more academically and 4 being a more athletically inclined response ("a" = 1, "b" = 2, "c" = 3, "d" = 4). T-tests of statistical significance were run on each of the seven items.

RESULTS

Based upon the prior research cited in this study, it was hypothesized that differences between male and female student-athletes in regard to their athletic and academic motivation would not be great. However, very dramatic gender differences were seen in both levels of intercollegiate competition, as revealed by the data in Table 2. These means reflect the expressed levels of academic/athletic motivation.

There is ample evidence, as exhibited in Table 2, to support the hypothesis that male student-athletes, regardless of divisional level, have significantly lower levels of expressed academic motivation than do female student-athletes. At the Division I level, in five out of the seven situations (i.e., road trip, field trip, graduation choice, final exam study, and roommate choice) female student-athletes chose more academically inclined responses than did their male counterparts. Four of these five items were significant at the .01 level. Similarly, Division III female student-athletes also chose at statistically significant levels the more academically inclined responses in five items (i.e., road trip, field trip, graduation choice, roommate choice, and late start options). Four of these were significant at the .01 level. Interestingly, the Division I

women showed gender differences in the "final exam" situation, but not in the "late start," whereas the Division III women's responses were the reverse. Results for each situation are described below.

Table 2

Gender Comparison of Athletic versus Academic Motivation

<u>Division I</u>	Male <u>n=282</u>	Female <u>n=153</u>	T-value	Prob.
Motivation Items	mean (s.d.)			
1. Road trip	2.129 (1.013)	1.743 (0.759)	4.106	.000**
2. Preregistration	2.032 (0.835)	1.980 (0.685)	0.655	.513
3. Field trip	3.150 (0.780)	2.868 (0.660)	3.779	.000**
4. Graduation choice	1.874 (1.317)	1.105 (0.447)	7.002	.000**
5. Final exam study	1.929 (0.921)	1.625 (0.735)	3.503	.001**
6. Roommate choice	2.873 (1.355)	2.520 (1.464)	2.486	.013**
7. Late start options	2.469 (1.202)	2.284 (1.082)	1.568	.118
<u>Division III</u>	Male <u>n=135</u>	Female <u>n=100</u>	T-value	Prob.
1. Road trip	1.978 (0.926)	1.710 (0.782)	-2.338	.020*
2. Preregistration	1.637 (0.698)	1.650 (0.702)	-0.140	.888
3. Field trip	3.045 (0.793)	2.710 (0.820)	-3.147	.002**
4. Graduation choice	1.585 (1.142)	1.121 (0.500)	-3.783	.000**
5. Final exam study	1.607 (0.713)	1.640 (0.759)	-0.337	.736
6. Roommate choice	2.440 (1.459)	1.909 (1.348)	-2.837	.005**
7. Late start options	2.400 (1.134)	1.990 (0.927)	-2.957	.003**

* Significant at .05 level

** Significant at .01 level

Weekend Competition Road Trip

In situation #1, male student-athletes at both divisional levels were less likely than were females to prepare on the road for a Monday midterm after a weekend competition. The males were more likely to read only a portion of the material necessary to prepare for the exam, whereas the females tended to want to read and take notes on "as much if not all of the [exam] material."

Preregistration

In situation #2, when determining preregistration class load, females were not significantly more academically oriented than the males at either the

Division I or III level. Both male and female Division I student-athletes would make sure to include "at least one other class [that] is not very vigorous" in their preregistration class load. The Division III males and females would both choose their class load without a necessary regard for one less rigorous class.

Field Trip

The decision of whether or not to choose to go on a field trip, as posed in situation #3, resulted in female student-athletes at both divisional levels being more likely to go on the field trip, with the coach's approval. Males, on the other hand, would try to find some way of making up the field trip or miss it altogether.

Graduation Choice

It is somewhat self-evident that among all the student-athletes in the sample, few have the opportunity to turn professional, and even fewer female student-athletes have this opportunity. Thus, in situation #4 when choosing whether or not to graduate, most female student-athletes chose to return after their fourth year to finish their degrees. Male student-athletes, on the other hand, in both Divisions I and III were more likely to choose other options, such as traveling, taking a job, or turning professional.

Studying for Final Exams

Division I female student-athletes were more likely than males to spend more time studying for their final exams in order to get the best possible grades, as reflected in situation #5. This gender difference was not found at the Division III level.

Choice of Roommates

Female student-athletes' choices of roommates in situation #6 was more likely to be based on non-athlete criteria than their male counterparts' choices at both divisional levels. At the Division I level, this difference was based upon the choice of team member or non-athlete. At the Division III level, the difference was based upon dormitory versus sorority and fraternity environment.

Late Start

Finally, when faced with a late start on the day in situation #7, females were more likely to choose to miss one half of the morning class and miss part of the afternoon practice in order to make up the academic material. Male Division III student-athletes were more likely to get notes for the second half of

the class they missed and not miss practice for their sport. This difference was not as prevalent in Division I, nor was it significant at that level.

DISCUSSION AND IMPLICATIONS

This study examined the levels of expressed academic and athletic motivations among male and female student-athletes at five campuses of a large western university system. As consistent with research reported earlier in this study, female student-athletes seem consistently to prioritize academics over athletics more so than male student-athletes, regardless of whether they are competing at the Division I or III level. At the Division I level, this disparity between male and female academic inclinations does not seem surprising. Most studies comparing males and females in Division I have agreed that female student-athletes prepare more conscientiously and achieve at higher levels than their male counterparts.

What is unusual is that these differences occur at the Division III level also. Without the influence of athletic scholarships, it might be expected that a closer set of perspectives and motivational levels between Division III male and female student-athletes exists. Such was not the case.

It was also curious that Division III males and females were very close in terms of their final exam study preferences (situation #5). This could mean that grades, in the context of their relationship to final exams, are still very important to male student-athletes in Division III, at least in comparison to Division I male student-athletes. Another anomaly between Divisions I and III appears to be the differences in starting late for classes during the day (situation #7). Female Division I student-athletes appear to be closer to the choice of getting notes for classes missed than either their Division I or III male counterparts. In contrast, Division III females seem more inclined to go to a repeat class and miss part of their athletic practice.

An underlying question not answered in this research is why the levels of academic motivation are higher for women than men. Situation #4 (the graduation choice), which produced the largest reported mean difference in answers, might provide some insight into the academic/athletic gender difference. Because there are few professional sports avenues for women to pursue, the college degree takes on more meaning and is a more important goal for female than for male student-athletes. Mayo (1982) made note of this lack of a female professional sports career in her study. She also went on to say that female student-athletes may not feel the "pressure" of competition because of the lack of professional options.

Another underlying factor perhaps relevant to the disparity in the academic inclinations of male and female student-athletes is parents' educational background (see Table 1). This difference, which shows the female student-athletes as having parents with a higher level of educational background, is significant at the .05 level. This point deserves further research.

From another perspective, these results could lead to the conjecture that female student-athletes do not place as much importance on athletics as do their male counterparts. Perhaps there is a connection with the underlying motivational aspects of participating in sport, and these may be different for males than for females. Mathes and Battista (1985) and Curry and Weiss (1989) noted that women rated competition lower and social experience higher as motives for participating in physical activity and sport. Whitson (1990) argues that sport (especially if combative in nature) "ritualizes aggression and allows it to be linked with competitive achievement and, in turn, with masculinity" (p. 28). Thus, as gender specific traits begin to change for both men and women in our society, perhaps the motivations of males and females in athletics will transform also.

The results of this study should alert athletic academic advisors and administrators. The priority of academics over athletics is a necessary goal for male student-athletes, regardless of whether they are competing at the Division I or III level. Male student-athletes, more so than their female counterparts, must be sensitized to the value of attaining their college degrees and putting forth conscientious efforts to achieve their goals.

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APPENDIX

SAMPLE QUESTIONNAIRE

Situation 1: You are on a weekend competition road trip. You have competed already on Friday and Saturday. Your last competition on Saturday ended at 4:00 p.m. You have approximately 6-8 hours of open time left on Saturday. Your first midterm is on Monday at 9:00 a.m. and it comprises 40% of your grade in that class. Your only preparation for this midterm thus far has been going to class and taking notes. Your choice for the next 6-8 hours of the day would be:

- a. After eating, read and take notes on as much if not all of the material for the Monday midterm.
- b. After eating, read a portion of the material for the midterm and review my notes.
- c. After eating, read a portion of the material for the midterm and then relax.

- d. After eating, relax and do something not requiring a good deal of concentration such as reading a newspaper or magazine.

Situation 2: You are doing pre-registration for the upcoming term. You know that this term will be your most demanding for your sport. The NCAA minimum for eligibility is 12 units. (An average class load is 15 units.) In choosing your class schedule, there is one class that you must take as a requirement for your major. This class is only offered once a year and will put you at 15 units. Assuming you could get all of those classes you want, you would:

- a. Take the class that is only offered once a year. [Total = 15 units]
- b. Take the class, but be sure that at least one other class is not very rigorous. [Total = 15 units]
- c. Take the class, but be sure to take all the other classes that aren't as rigorous. [Total = 15 units]
- d. Not take the class, and be sure to have the minimum 12 units.

Situation 3: A field trip, which happens to conflict with a competition, has been planned for one of your classes. The field trip is offered only once during the quarter and has a write-up which is not part of your final grade. The athletic competition is against an average opponent. Your choice would be:

- a. To go on the field trip, letting the coach know.
- b. To go on the field trip, with the coach's approval.
- c. To try and find some way of "making up" what is missed on the field trip.
- d. To miss the field trip.

Situation 4: It is the end of your fourth year of school and you have finished your last season of eligibility. You find that you need more than one term's worth of units to finish your Bachelor's degree. Your options (assuming there would be necessary school funding from parents, relatives, job, etc.) are:

- a. Go back to the university and finish the necessary units as soon as possible.
- b. Travel, take time off, and return to finish the units necessary for the degree.
- c. Accept a job offer in your sport that might not be available one year from now.

- ___ d. Turn professional in your sport, assuming this option exists.

Situation 5: Final examinations are one week away (dead week). For each of your classes your grade going into the final is between a "B" and a "C." The finals can determine all grades one full letter above or below the grade you currently hold (e.g., Hi: "A," Lo: "D"). In deciding how much time to spend in preparation for the exams, your expectations and demands on yourself would be:

- ___ a. To spend as much time studying as was spent during the rest of the term so that the classes are passed and I could possibly keep the grades I currently have (and stay athletically eligible).
- ___ b. To spend more time studying than during the regular term so as to ensure that for at least some classes my grades will be the same or better than they now stand.
- ___ c. To spend much more time than during the regular term so as to ensure that for all classes my grades will be better than they now stand.
- ___ d. To spend as much time as is feasibly possible in order to achieve the highest possible grade in every class.

Situation 6: Your plans for rooming next year need to be done within a week. As you are a popular and likeable person, you have many options to choose from. These housing options are:

- ___ a. A dormitory or apartment with non-athletes who are above average students.
- ___ b. A fraternity or sorority with non-athletes who are average students.
- ___ c. A fraternity or sorority with team members who are average or less than average students.
- ___ d. An apartment with team members who are average or less than average students.

Situation 7: Your day has started off on the "wrong foot." Your alarm did not go off so that, at best, you would only be able to attend half of an early morning class. This same class is offered at a time that starts in the middle of practice for your sport. It is close to the midterm so there may be "more" important material being covered in the class. However, the athletic practice is close to an upcoming competition. Your choice would be to:

- ___ a. Go to the repeat afternoon class interfering with practice.

- ___ b. Go to half the class and half the repeat afternoon class, making as much of the athletic practice as possible.
- ___ c. Go to half the morning class and get the rest of the notes from another student in the class.
- ___ d. Not go to class that day and get the notes from another student in the class.

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