

Academic Performance and Achievement of Selected Track Athletes

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ABSTRACT

Data on all first time in college (FTIC) track athletes at a major southeastern university over a ten-year period were examined to compare variables of gender, ethnicity, admission scores (high school grade point average and SAT/ACT scores), terminal academic major, graduation rates, and cumulative university grade point averages with those FTIC in the general student body. Reports generated from the university's student database and data from the Registrar's Office were examined. Results of this descriptive and exploratory study may provide valuable information to academic and athletic communities that may help to debunk myths of student-athletes, guide policy, and improve programs.

INTRODUCTION

The focus on the relationship between intercollegiate athletics and academics continues to be provocative and controversial. Headlines in major newspapers "Graduation Rate Drops for Division I Athletes" (Asher, 1998) and titles in academic journals such as, "Athletes on Top-Ranked Teams Lack Grades and Test Scores of Other Students" (Naughton, 1997), "Graduation Rates Hit Lowest Level in 7 Years for Athletes in Football and Basketball" (Suggs, 1999c), and "Scandals Force Colleges to Reassess Roles of Academic Advisers for Athletes" (Suggs, 1999d) underscore the attention this issue has brought.

The interdependent relationship between higher education and athletics has been a focus of discussion since the publication of American College Athletics, a comprehensive and landmark study (Savage, Bentley, McGovern, & Smiley, 1929). Four major national studies completed between 1929 and 1993 have explored the relationship between higher education and athletics. These four studies, American College Athletics (Savage, Bentley, McGovern, & Smiley, 1929), Special Committee on Athletic Policy (1952), An Inquiry into the Need for and Feasibility of a National Study of Intercollegiate Athletics (Hanford, 1974), and the three reports of the Knight Foundation Commission on Intercollegiate Athletics completed between 1991 and 1993 (Knight Foundation, 1991, 1992, 1993) are noteworthy for their depth and impetus for reform in intercollegiate athletics. All of these studies were concerned with the integrity and role of both academics and athletics. Also, these national studies

focused on how higher education incorporates athletics into its mission, as well as concern for the students who must reconcile their dual roles as a student of higher education and intercollegiate athlete.

Profiles (college admission scores and graduation rates) of student-athletes in the revenue producing sports are constantly under scrutiny in the popular and academic literature. The USA Today, Chronicle of Higher Education, and the NCAA all publish graduation rates of football and men's basketball. Many of these articles make inferences to all student-athletes based on the academic successes or failures of athletes participating in these two sports. These inferences often reinforce the stereotypical perception of the student-athlete as a "dumb jock." College faculty and students at "big-time" athletic universities as well as colleges where scholarships are not available are consistent in their perceptions that student-athletes do not meet the same academic standards as the general student population (Edwards, 1984; Engstrom & Sedlacek, 1991; Engstrom, Sedlacek, & McEwen, 1995; Jones, 1998; Sailes, 1993; Sperber, 1990). While the annual graduation rates report published by the NCAA includes the graduation rates for women's sports (basketball and track/cross country) and men's sports (baseball and track/cross country) individually, the remaining non-revenue sports are combined into an "other" category. Combining non-revenue sports (i.e., soccer, swimming and diving, tennis, and volleyball) encourages generalizations to all athletes. Consequently, analysis of the separate sports and their participants is difficult.

The media and the research literature provide coverage of the football and basketball programs' successes and challenges. Currently, 30% of the student-athlete population at this major southeastern public university participate in men's basketball and football. The remaining 70% of the student-athletes participate in non-revenue sports, which historically have been essentially unstudied and obscure.

Attitudes Toward Student-Athletes

The words "dumb jock" portray student-athletes in the minds of many in the general public, administrators in higher education, athletic staff, college faculty, students and even in the minds of student-athletes themselves (Edwards, 1984a; Engstrom & Sedlacek, 1991; Engstrom, Sedlacek, & McEwen, 1995; Jones, 1998; Sailes, 1993). Are student-athletes really less intelligent than the general college student population or is this a stereotype perpetuated and reinforced in the media? Intercollegiate athletics, in the minds of many, is synonymous with football and men's basketball. The constant media attention on these two sports and the academic difficulties of some of their participants reinforce the "dumb jock" stereotype for all student-athletes. Consider the 1997 headline in the Chronicle of Higher Education, "Athletes on Top-Ranked Teams Lack Grades and Test Scores of Other Students." Just reading the headline, the reader assumes the statement to be reflective of all intercollegiate student-athletes. However, the article focused solely on comparing high school grade point averages and SAT/ACT scores of top 25 men's basketball and football collegiate athletes compared to those of 1996 entering freshmen. Published research on the non-revenue or Olympic sports and their participants is lacking.

Recent highly publicized incidents regarding student-athletes' academic performance contribute to the perception of the student-athlete as less competent academically. For example, at the University of Minnesota, members of the athletic academic advisor department completed class assignments for members of the men's basketball team (Suggs, 1999e). A similar incident was investigated at the University of Tennessee, involving the football team only to later find no merit (Farrey, 1999). Sperber (1990) described dishonest measures that are taken so prospective student-athletes can be eligible for competition as freshmen. They include cheating on SAT/ACT exams, substitute test takers, and using fake transcripts (Sperber, 1990). The academic abuses that occur at the secondary school level are used to increase the chances that a prospective student-athlete will be noticed by college recruiters (Hanford, 1974). The Chronicle of Higher Education annually publishes an article that lists the number of schools under NCAA sanctions and the reason. Further examination of these violations at 22 institutions reveals schools penalized for tampering with grades of student-athletes, academic fraud by coaches, certification of ineligible athletes, inflated grades for coursework not completed, and improper enrollment of athletes in correspondence ("22 Institutions Under NCAA Sanctions," 1998). An audit requested by Texas Tech found 76 of its athletes in 8 sports competed while ineligible over the last 6 years mainly due to academic problems (McGraw & Reeves, 1997).

Even with the many reforms and improvements in intercollegiate athletics that have taken place since the landmark Knight Commission reports in 1991, some colleges and universities continue to exhibit low graduation rates among their student-athletes and have difficulty adhering to NCAA eligibility requirements and academic regulations. This contributes to the "dumb jock" perception surrounding student-athletes. This and other continued problems are largely the reason the Knight Commission has been re-convened in this new century.

The perception of student-athletes as "dumb jocks" is evidenced in the attitudes of faculty and college students described in the literature such as, student-athletes are not as smart as other college students, student-athletes are not as well prepared initially to enter college, and student-athletes take easier classes or majors to maintain their eligibility (Edwards, 1984a; Engstrom & Sedlacek, 1991; Engstrom, Sedlacek, & McEwen, 1995; Jones, 1998; Sailes, 1993; Sperber, 1990). Research has noted that these beliefs and attitudes result in prejudice and discrimination against student-athletes (Anderson & South, 1993; Edwards, 1984a; Engstrom & Sedlacek, 1991; Engstrom, Sedlacek, & McEwen, 1995; Harris, 1993; Jones, 1998; Sailes, 1993; Sperber, 1990). Many of the attitudes toward student-athletes are racially based since there are a disproportionate number of Black athletes participating in football and men's basketball (Anderson & South, 1993; Engstrom, Sedlacek, & McEwen, 1995; Harris, 1993; Sperber, 1990). The constant headlines and focus on these revenue-producing sports and their student-athletes' lower admission scores and lower graduation rates, reinforce the "dumb jock" and racially based stereotypes. Therefore, as a matter of survival in a discriminatory environment, many student-athletes are forced to choose between academic or athletic success (Adler & Adler, 1985; Meyer, 1990; Purdy, Eitzen, & Hufnagel, 1985; Sack, 1987; Simons, Van Rheenen, & Covington, 1999). There are many ethnicity- and gender-based stereotypes about athletes in general;

however, a discussion of these complex and emotionally charged issues is beyond the scope of this paper.

Majoring in Eligibility

The perception that student-athletes take easier classes just to remain eligible for competition has been supported by the literature. Brede and Camp (1987) examined a sample of Division I football and male basketball players. Their data revealed that “majoring in eligibility” was one of several common methods of academic survival. At the University of Cincinnati, 7 of 13 student-athletes on the 1998-99 men’s basketball team were majoring in criminal justice (a major with the lowest number of total hours required) (Suggs, 1999a). Knapp and Raney (1990) studied a random sample of majors pursued by baseball, men’s basketball and football players at the University of Nevada at Las Vegas between 1978 and 1987. They found that the majority of their course work (15%) was in physical education followed by English (8%). Of the 25-35% of Black student-athletes who graduate, 60-65% of them graduate either with physical education degrees or in “Mickey Mouse” jock majors specifically created for athletes and generally held in low esteem. Compare that to the White athletes who graduate: only 33% of them have a “Mickey Mouse” major (Edwards, 1984a). Thomas Haskell, a professor of history who has advocated tougher admission standards for athletes at Rice, believes academic advisors for student-athletes suggest enrollment only in classes where the student-athlete will succeed, rather than where they will receive “an authentic education” (Naughton, 1997b).

Prediction of Academic Performance

The quest continues to find the best means for predicting academic performance in college. Predictors in academic performance include high school grade point average (HSGPA), college entrance exam scores (SAT or ACT), ethnicity, gender, and other non-academic variables. Some examples of non-academic variables or non-cognitive variables, as they are currently referred to in the literature, include gender, ethnicity, goals, support systems, and community involvement (Sedlacek & Adams-Gaston, 1992; Ting & Robinson, 1998). College admission policies, NCAA initiatives, participation in a revenue or non-revenue sport, and an institution’s graduation rate also influence academic performance. Researchers have noted that the topic of academic achievement of student-athletes has been researched for over 50 years, with conflicting findings based on the methodology utilized (Brede & Camp, 1987; Mathiasen, 1984). Methodologies and populations varied greatly, i.e., examining first semester success or first and second semester success or graduation rates based on any number of academic and/or non-academic variables. Some of the literature revealed academic or cognitive factors such as HSGPA and/or SAT/ACT scores were the best predictors of success, or explained the most variance (Mouw & Khanna, 1993). While others supported the combination of other factors, such as study habits, personality traits, family variables or life events, in other words non-cognitive or non-academic variables. Gender and ethnicity were important research factors in measuring achievement in HSGPA, college entrance exams, university grade point average, and graduation rates (Sellers, 1992; Ting & Robinson, 1998). Basically, the research supports common sense—students who perform better in

high school will in turn perform better on college entrance exams, and in turn will perform better in college (Mouw & Khanna, 1993). The vast majority of research centered on White male student-athletes or male student-athletes who participated in football or basketball.

STATEMENT OF THE PROBLEM

There was very little focus at this major southeastern public university on 70% of the student-athlete population, the non-revenue participants. Therefore, the focus of this study was to examine demographic variables (gender and ethnicity) and academic variables ((HSGPA), SAT or ACT scores, terminal academic major, cumulative university grade point average (UGPA), and graduation rates) among student-athletes in one representative non-revenue sport, track/cross country who matriculated as FTIC from 1983 through 1993.

METHOD

Academic Records

The data for this study were comprised of the academic records of first time in college (FTIC) track/cross country student-athletes who matriculated between 1983 and 1993. FTIC students are those undergraduate students who matriculated to receive a baccalaureate degree. Transfer student-athletes were not included largely because HSGPAs and college entrance exam scores were not consistently available. International students were also not included because of the unavailability of college entrance exam scores and the incompatibility of HSGPAs. This particular descriptive study focused on men and women's track/cross country because of greater homogeneity of gender as well as ethnic variability. For the period studied, a total of 256 participants were identified, 141 males and 115 females from track/cross country rosters. Approval for the project was obtained from the university Registrar. Approval of the Human Subjects Committee was not required as the data was reported in an aggregate manner and without identifiers.

Timeframe

The timeframe for this study was from 1983 to 1993 because both women's and men's intercollegiate athletics were under the governance of the NCAA. To obtain the most current information and in keeping with the current NCAA graduation allowance of six years, 1993 was chosen as the endpoint of the research timeframe.

Data Set

A Microsoft Access database of student-athletes was developed from track/cross country team rosters housed in the selected university's Registrar's Office. The rosters were reviewed in chronological order to accurately identify student-athletes who may have walked-on and appeared on an early roster, but were then identified as cut on a later roster during the same year. Rosters were available from 1980 through the current year. The type of information on each roster varied with each year and with the requirements of the governing athletic association at that time.

Team rosters were chosen over participation lists to create the list of student-athletes. Participation lists were only available through the Athletics Compliance Office for the timeframe 1988-current, while team rosters were available from 1980. There are advantages and disadvantages to using either list. For example, rosters contained names of redstart athletes who may or may not have participated and walk-ons that only practiced. Whereas, participation lists contain only the names of student-athletes who actually played.

The Regional Data Center database, which contains demographic and academic information on all surveyed students, was utilized as a tool in identifying student-athletes who initially were unable to be found by name or number. Using the master student database, students who underwent a name change were identified and then could be included in the student-athlete database.

A query of the Microsoft Access student-athlete database was performed to determine all track/cross country FTIC student-athletes who matriculated as FTIC between 1983 and 1993. The social security numbers from the query were then matched with the social security numbers in Regional Data Center Database to supplement and verify information. The HSGPA, SAT/ACT scores, cumulative university grade point average, major, gender, and ethnicity from Regional Data Center Database were used to create the student-athlete reports. Conversion tables were used to convert outdated major codes to current major codes. Those students who took honors courses or a higher level sequence of courses received more credit.

The Regional Data Center Database was queried by a programmer to obtain the data for the general student population. The query parameters included all first time in college students who matriculated between 1983 through 1993 and the other study variables (HSGPA, SAT/ACT scores, cumulative university grade point average, major, gender, and ethnicity).

Data Analysis

All data for the two groups were compared and analyzed for each year 1983-1993. Statistical analysis using descriptive statistics (mean, median, standard deviation, percent, and mean differences) was performed in SPSS Version 8.0 for Windows.

RESULTS

Data for the non-revenue student-athlete group was comprised of 115 or 44.9% females and 141 or 55.1% males for a total of 256 (see Table 1). The general student body data, contained 34,068 students of whom 19,491 or 57.2% were female and 14,577 or 42.8% were male (see Table 1). When comparisons were performed using the ethnicity variable, meaningful comparisons were calculated only on students in the White and Black ethnicity groups since the student-athlete sample had a very small number of participants in all of the remaining ethnicity groups. For example, there were no track/cross country student-athlete participants in the Alaskan/Native American group.

TABLE 1

Demographic Profile for Track/Cross Country Student-Athletes and General Student Body 1983-1993

Gender / Ethnicity	Track / Cross Country Student-Athletes		General Student Body	
	N	Percent	N	Percent
Female	115	44.9%	19,491	57.2%
Male	141	55.1%	14,577	42.8%
Gender Total	256	100.0%	34,068	100.0%
White	166	64.8%	28,853	84.7%
Black	84	32.8%	3,200	9.4%
Hispanic	5	2.0%	1,351	4.0%
Asian/Pacific Islander	1	0.4%	584	1.7%
Alaskan/Native American	0	0.0%	67	0.2%
Other	0	0.0%	13	0.0%
Total	256	100.0%	34,068	100.0%

ACADEMIC PROFILE

HSGPA

Track/cross country student-athletes had a mean high school grade point average (HSGPA) of 3.02 and a median of 3.00 (see Table 2). There was one missing HSGPA score in the White male ethnicity category. Comparing the ethnicity subgroups, White track student-athletes had a higher mean HSGPA than Black track student-athletes. As previously noted, the Hispanic and Asian/Pacific Islander student-athlete subgroups were small and consequently were not used in comparisons. White and Black female track student-athletes had higher mean HSGPAs than male student-athletes of the same ethnicity which is illustrated in Table 2. Although not demonstrated in the table, all the distributions were positively skewed suggesting a slightly greater concentration of scores lower than the mean.

The general student body mean HSGPA score was 3.22 while the median was 3.20. Of the 34,068 participants in the general student body sample, 215 were missing HSGPA scores. Since the number of participants in the Hispanic and Asian/Pacific Islander samples are limited, analysis comparison of HSGPAs will focus on only White and Black students.

Females in the general student body had higher mean HSGPAs than males. Higher mean HSGPAs were also noted for White and Black female students in the general student body subgroups when compared with their male counterparts as can be seen in Table 2. Overall, White students in the general student body had higher mean HSGPAs (2.68) than Black students (2.20). The mean HSGPAs for White and Black students in the general student body were positively skewed suggesting a slightly greater concentration of scores lower than the mean. Table 3 illustrates the HSGPA mean differences between the general student body and track/cross country student-athletes by ethnicity and gender.

TABLE 2**HSGPA and University GPA Scores for Track/Cross Country Student-Athletes
and General Student Body 1983-1993**

Subgroup	N	Mean HSGPA	Mean HSGPA	Standard Deviation	N	Mean University GPA	Median University GPA	Standard Deviation
Men's Track/Cross Country Total	140	2.98	2.90	0.61	141	2.48	2.49	0.70
White Male Track/Cross Country Total	106	3.05	3.05	0.63	107	2.58	2.56	0.65
Black Male Track/Cross Country Total	31	2.74	2.70	0.52	31	2.07	2.22	0.70
Women's Track/Cross Country Total	115	3.08	3.10	0.23	115	2.67	2.75	0.23
White Female Track/Cross Country Total	59	3.18	3.20	0.61	59	2.85	2.98	0.69
Black Female Track/Cross Country Total	53	2.95	2.90	0.55	53	2.45	2.46	0.65
Male General Student Body Total	14,486	3.10	3.00	0.60	14,577	2.50	2.62	0.84
White Male General Student Body Total	12,416	3.13	3.10	0.59	12,483	2.54	2.65	0.83
Black Male General Student Body Total	1,127	2.79	2.70	0.61	1,134	2.07	2.15	0.78
Female General Student Body Total	19,367	3.31	3.30	0.57	19,491	2.73	2.86	0.81
White Female General Student Body Total	16,281	3.34	3.30	0.56	16,370	2.79	2.92	0.79
Black Female General Student Body Total	2,054	3.08	3.00	0.53	2,066	2.27	2.38	0.78
Track/Cross Country Total	255	3.02	3.00	0.61	256	2.56	2.57	0.70
General Student Body Total	33,853	3.22	3.20	0.59	34,068	2.63	2.76	0.83

HSGPA Similarities

White and Black female students in both the track/cross country student-athlete and general student body groups had higher mean HSGPAs than their male counterparts. Similarly, White students had higher mean HSGPAs in both the track/cross country student-athlete and general body samples when compared to Black students in the track/cross country student-athlete and general student body groups.

Admission Scores

Of the 256 track student-athletes, 78% took the SAT while 52% took the ACT. The admission score data are presented in Table 3. The mean SAT score for track student-athletes was 1039 with a median of 1050. Male track student-athletes, in general, performed better on the SAT (1068) than did their female counterparts (1004). Further, White and Black track males scored higher on the SAT (1097 and 939 respectively) when compared to their female counterparts (1075 and 900). The ACT scores for track student-athletes were symmetrical with a mean and median of 22. However, the male track student-athletes' performance on the ACT (23) was almost identical to that of female student-athletes (22). Mean ACT scores for White male and female non-revenue student-athletes were the same (23), while the mean ACT for Black male non-revenue student-athletes were higher (21) than their female counterpart (19).

TABLE 3

Mean Differences on HSGPA, SAT, ACT, and University GPA Between General Students and Track/Cross Country Student-Athletes by Ethnicity and Gender 1983-1993

Subgroup	Mean Difference HSGPA	Mean Difference SAT	Mean Difference ACT	Mean Difference University GPA
White Male GS versus White Male T/CC	0.08	53	1	-0.04
White Female GS versus White Female T/CC	0.16	43	1	-0.06
Black Male GS versus Black Male T/CC	.05	57	-1	0
Black Female GS versus Black Female T/CC	.13	63	0	-0.18
General Student versus T/CC Student-Athlete	0.2	79	2	0.07

GS = General Student

T/CC = Track/Cross Country Student-Athlete

Table 4 illustrates the distribution of SAT and ACT scores by gender and ethnicity in the general student body from 1983 through 1993. The mean and median SAT scores for the general student body were 1118 and 1110 respectively. The ACT scores for the general student body were symmetric with a mean and median of 24. Of the 34,068 participants in the general student body, 17,370 (51%) took the SAT, 5,622 (16.6%) took the ACT, 10,902 (32%) took both the SAT and ACT, and 134 or .4% did not take either exam. Because of the small number of participants in the Hispanic and Asian/Pacific Islander samples, comparison of SAT scores focused only on White and Black students.

White students had higher mean scores on both the SAT (1132) and ACT (25) than did Black students in the general student population (975 and 20). Mean SAT scores for male students (1138) were higher than female students (1102). However, both males and females in the general student body scored equally well on the ACT with means and medians of 24. In the gender and ethnicity (White and Black) subgroups, the mean SAT scores for males (1150 and 996) were higher than their female (1118 and 963) counterparts. Table 3 illustrates the SAT and ACT mean differences between the general student body and track/cross country student-athletes by ethnicity and gender.

SAT Similarities

Males in the track/cross country student-athlete (1068) and general student body (1138) samples performed better on the SAT than their female counterparts (1004 and 1102 respectively). White and Black male track/cross country student-athletes as well as those in the general student body had higher mean SAT scores than their White and Black female counterparts.

TABLE 4**SAT and ACT Scores for Track/Cross Country Student-Athletes and General Student Body 1983-1993**

Subgroup	N	Mean HSGPA	Mean HSGPA	Standard Deviation	N	Mean University GPA	Median University GPA	Standard Deviation
Men's Track/Cross Country Total	109	1068	1060	139	76	23	23	4
White Male Track/Cross Country Total	85	1097	1100	126	56	24	23	4
Black Male Track/Cross Country Total	21	939	930	118	17	21	20	3
Women's Track/Cross Country Total	90	1004	1015	171	56	21	21	4
White Female Track/Cross Country Total	52	1075	1080	137	23	23	23	4
Black Female Track/Cross Country Total	36	900	890	167	32	20	20	3
Male General Student Body Total	12,432	1138	1130	129	6,552	24	25	4
White Male General Student Body	10,781	1150	1140	120	5,549	25	25	3
Black Male General Student Body	826	996	990	147	573	20	19	4
Female General Student Body Total	15,840	1102	1100	124	10,012	24	23	4
White Female General Student Body	13,571	1118	1110	114	8,282	24	24	3
Black Female General Student Body	1,422	963	960	126	1,199	20	20	3
Track/Cross Country Total	199	1039	1050	157	132	22	22	4
General Student Body Total	28,272	1118	1110	128	16,564	24	24	4

SAT Differences

The relationship between SAT scores of students in the general student body and non-revenue student-athletes remained consistent across gender and ethnicity for White and Black FTIC students.

ACT Similarities

Black males and females in the general student body had the same ACT mean of 20. The mean ACT for Black females in the track/cross country and general student body samples was the same (20).

ACT Differences

Black male track/cross country student-athletes had a higher mean ACT score (21) compared to Black male students in the general student body (20). The opposite was true for White females and males track/cross country athletes whose ACT means were 23 and 24 respectively compared to White females (24) and males (25) in the general student body.

University GPA

Table 2 illustrates the mean and median university GPA scores for students in track/cross country and the general student population. The mean university GPA for the student body was higher (2.63) compared to track/cross country student-athletes (2.56). However, when examining means by ethnicity, White and Black track/cross country students had higher university GPA means compared to their counterparts in the general student body and Black males in both groups had a mean university GPA of 2.07. Table 3 illustrates the University GPA mean differences between the general student body and track/cross country student-athletes by ethnicity and gender.

University GPA Similarities

In both samples, the highest mean university GPA score was seen in the White ethnicity group. Focusing only on the gender subgroup, in each sample, females had higher university GPA means than males. When comparing samples by gender and ethnicity subgroups together, White females had a higher university GPA mean. Black females, whether in the track/cross country student-athlete or general student body sample, had higher university GPA means than their Black male counterparts. However, Black males in the track/cross country student-athlete and general student body samples had the same university GPA means (2.07).

University GPA Differences

Males in the general student body had a higher university GPA mean (2.50) than did male track/cross country students' (2.48). The mean university GPA for women in the general student body was higher, 2.73, than for women in the track/cross country student-athlete sample, 2.67. Black track/cross country females had a higher university GPA mean compared to Black females in the general student body (2.45 and 2.27 respectively).

Graduation Rates

Graduation rates among the track/cross country student-athlete and general student body samples and their subgroups are illustrated in Table 5. Track/cross country students (69.9%) had a higher graduation rate compared to the general student body (64.5%).

Graduation Rate Similarities

Both male and female track/cross country student-athletes graduated at higher rates (70.9% and 68.7% respectively) than their general student body counterparts (61.9% and 66.4%). Black females in both the track/cross country and general student body samples graduated at higher rates than their male counterparts (73.6% vs. 54.8% for track/cross country student-athletes and 60.5% vs. 50.0% for the general student body).

Graduation Rate Differences

Male track/cross country student-athletes graduated at a higher rate (70.9%) compared to their female counterparts (68.7%). Conversely, data revealed higher graduation rates for females in the general student body (66.4%) compared to males (61.9%). White general student body females (67.2%) graduated at a higher rate than their track/cross country counterpart (64.4%). Black female track/cross country students (73.6%) had a higher graduation rate compared to White female track/cross country students (64.4%) and Black females in the general student body (60.5%).

TABLE 5
Graduation Rates and Years to Graduation of Track Student-Athletes versus
General Student Body 1983-1993

Subgroup	N	Graduation Rate	Mean Years to Graduation	Median Years to Graduation	Standard Deviation
Men's Track/Cross Country Total	100	70.9%	4.59	4.00	1.02
White Male Track/Cross Country Total	80	74.8%	4.53	4.00	0.89
Black Male Track/Cross Country Total	17	54.8%	4.82	5.00	1.51
Women's Track/Cross Country Total	79	68.7%	4.56	4.00	1.34
White Female Track/Cross Country Total	38	64.4%	4.24	4.00	0.63
Black Female Track/Cross Country Total	39	73.6%	4.90	5.00	1.74
Male General Student Body Total	9,024	61.9%	4.57	4.00	1.17
White Male General Student Body Total	7,869	63.0%	4.53	4.00	1.14
Black Male General Student Body Total	567	50.0%	5.05	5.00	1.51
Female General Student Body Total	12,939	66.4%	4.26	4.00	0.95
White Female General Student Body Total	10,998	67.2%	4.22	4.00	0.91
Black Female General Student Body Total	1,250	60.5%	4.60	4.60	1.17
Track/Cross Country Total	179	69.9%	4.58	4.00	1.17
General Student Body Total	21,963	64.5%	4.39	4.00	1.05

ACADEMIC MAJOR

The top 5 academic majors (with ties) for track/cross country students and students in the general student body are illustrated in Table 6. There are three majors both groups have in common: Biological Science, English, and Risk Management/Real Estate. Forty one percent of the academic majors of track/cross country student-athletes were accounted for, while 35% of the academic majors of the general student body were accounted for in Table 6. Therefore, wide variability exist in the remaining over 60% of the academic majors of both samples. Of the 256 track/cross country student-athletes, 13 or 5.1% and 134 out of 34,068 or .4% of the general student body majored in Physical Education. This is in direct contrast to the stereotypical belief described in the literature that student-athletes major in only one subject (Edwards, 1984, Engstrom & Sedlacek, 1991; Engstrom, Sedlacke, & McEwen, 1995; Jones, 1998; Sailes, 1993; Sperber, 1990).

TABLE 6

Top 5 Academic Majors for Track/Cross Country Student-Athletes and General Student Body 1983-1993

Track/Cross Country Student-Athletes

Major	N	Percent
Biological Science	19	7.4%
Risk Management/Real Estate	17	6.6%
Criminology	15	5.9%
Marketing	14	5.5%
Undecided	14	5.5%
Physical Education	13	5.1%
English	13	5.1%

General Student Body

Communication	2,479	7.3%
Risk Management/Real Estate	2,449	7.2%
Biological Science	1,883	5.5%
Psychology	1,840	5.4%
Social Science	1,714	5.0%
English	1,710	5.0%

DISCUSSION

This study demonstrated that the academic achievement of track athletes at a major public southeastern university over a ten-year period did not consistently conform to the previous limited findings in the literature regarding non-revenue sports. Higher means in HSGPA, ACT/SAT scores, and cumulative university GPA did not necessarily mean higher graduation rates. The higher graduation rates among Black females compared to White females who had higher means in HSGPA, university GPA, SAT and ACT, but lower graduation rates, may be explained by the fact that historically track has been one of the few opportunities which was accessible and available to Black female athletes (Smith, 2000). However, some results were similar to the literature such as lower academic achievement among Blacks. Minorities, in general, do not perform as well on standardized college entrance exams. Minority student-athletes, based on initial eligibility requirements (HSGPA and SAT/ACT scores) report to college with lower scores (Harris, 1993; Sellers, 1992).

Over the ten-year timeframe there was a general upward trend in means for HSGPAs, university GPAs, SAT and ACT scores. These results reflect higher university admissions standards and National Collegiate Athletic Association initial eligibility standards for student-athletes during the ten years examined.

The literature notes minority male student-athletes are more likely to participate in revenue sports (Kiger & Lorentzen, 1986). That finding explains the distribution of ethnicity in this study of non-revenue participants, White 64.8%, Black 32.8%, Hispanic 2%, and Asian/Pacific Islander .4%. Coakley (1998) stated that presently over 90% of African American women participating in intercollegiate sports perform on track and field and basketball teams.

The terminal academic majors chosen by participants in this study help debunk the "dumb jock" perception that student-athletes majors are less academically challenging (Edwards, 1984a; Engstrom & Sedlacek, 1991; Engstrom, Sedlacek, & McEwen, 1995; Jones, 1998; Sailes, 1993; Sperber, 1990).

This study was noteworthy because it focused on a population of college student-athletes that has received extremely little research. Additionally, this study is unique with the inclusion of track/cross country student-athletes regardless of whether they received athletics aid (full or partial athletics scholarship) and for the timeframe examined, a ten-year period, at one public university. Sufficient evidence has been presented in this paper to suggest that the "dumb jock" generalizations being made to student-athletes based on data from revenue sports is invalid. Results in this study may not match others since transfer and international students were not included.

Future research on participants in non-revenue sports is especially necessary. Examples of studies which could be performed include: a longitudinal work using random samples of different schools which would allow generalizations and inference, replication of this study, plus including a comparison to the general student body.

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