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The NAAAA: 10 Years Old and Changing

Brian Mand and Harold J. Fletcher
Florida State University

The field of athletic advising has a short but noteworthy history. In the summer of 1975, at Michigan State University, Frank Downing and Clarence Underwood convened a meeting of advisors in order to form a national organization (F. Downing, personal communication, January, 1985). Initially known as the National Athletic Counselor's Association (NACA), the organization held its first official convention in St. Louis in 1976 and declared its purpose to be that of helping student athletes maintain their eligibility and achieve an education terminating with graduation (Downing, 1981).

The need for advisors of athletes was obvious following rulings by the NCAA regarding academic eligibility requirements and the eligibility of the most academically vulnerable athlete, the freshman. Most early advising was done by men from the football coaching staff, but times and advisors were changing. As noted by Kurpius and Rose (1982), in the 1970's universities such as Indiana, Nebraska, and Washington began hiring women with academic (not athletic) credentials for advising. And, probably because of scandals in the late '70's, universities began placing administrative control of advising in the academic community. These changes were monitored but not very systematically, the only report being that of a mail survey by Brennan (1983).

It seemed appropriate, therefore, to conduct a second survey in an attempt to identify trends and changes in the field of academic advising as it celebrates its tenth anniversary.

Method

At the conclusion of the opening general session of the 1986 NAAAA convention, survey forms were distributed to those in attendance. The president urged completion of the survey, stating that its purpose was to identify parameters of the association's membership and of their jobs. In the event that an institution had more than one representative at the meeting, the president asked that only the director of the advising program complete the survey. He further requested that divisional status be written at the top of the survey (an item omitted on the survey form). The president gave general instructions and answered questions that arose while the survey was being completed.

Survey Instrument

Based on the work of Brennan (1983), the survey was printed on both sides of a single sheet of 8½ x 11 inch paper and contained items relating to characteristics of the respondents and of their current appointments (see table 1 for items). Most of the items required simply checking appropriate categories. Respondents were required to provide information on only the items of total budget, tutoring budget, and number of full-time advisors at their institutions. Respondents also checked any of 37 descriptive duties for which they were responsible (see table 2 for these duties taken from Brennan). In addition to the items shown in table 1, respondents also checked whether they were employed full time or part time.

All information was provided anonymously; neither name nor institutional affiliation were requested.

Preliminary Analyses and Decisions

From approximately 120 in attendance, 102 returns were collected. One was rejected because the respondent indicated that he was an affiliate member and director of admissions, not an advisor.

Of those who provided the requisite information, most were employed full time (92 percent) and most were at Division I schools (85 percent). We decided, therefore, to analyze just the returns of advisors working full time at Division I schools.

Unfortunately, despite the request to write division affiliation on the return, 21 respondents failed to do so. Rather than excluding all these returns, the first author examined the returns of all who indicated Division I affiliation and noted the pattern of responses to items of budget, number of full-time advisors, and salary. He then assigned Division I affiliation to those returns which clearly showed the same pattern. This procedure rescued 13 returns.

These screening decisions reduced the usable returns to 72 from advisors who indicated both full-time employment and at Division I schools. While this sample surely represents the majority of advisors in the field, the reader should note that the data are from probably the most senior academic advisors who attended the national meetings.

With only 72 usable returns, categories were combined on certain items to reduce the number of zero frequencies. For example, the item regarding academic field originally included Business. Because only two respondents indicated the field, the category was combined with Other. Similar combinations resulted in the categories listed in table 1. The academic field labeled Psychology in table 1 included on the survey the fields of counseling, psychology, and student affairs, and this field should consequently be interpreted loosely as psychological.

Results

All data were coded for computer analyses using programs available with

the Statistical Package for the Social Sciences (SPSS).

Table 1.
Percentages Reported by 72 (or N) Full-time Academic Advisors of Athletes in Division I Schools Attending the 1986 NAAAA Meeting

Advisor Variables	
Age	Sex
14% 30 or less	56% Male [68%]
58% 31 through 40	44% Female [32%]
28% over 40	
Highest Degree Earned	Academic Field
26% Doctorate [21%]	39% Education
61% Master's [64%]	14% Phys. Ed.
13% Bachelor's [15%]	19% Psychology [15%]
	28% Other [21%]
Coaching Experience	Years Employed (N = 70)
25% Football/basketball	41% less than 3 [40%]
11% Other sports	21% 3 through 5 [34%]
64% None [42%]	37% more than 5 [26%]
Appointment Variables	
Salary	Total Budget (N = 38)
15% \$15,000 to \$20,000 [22%]	24% less than \$51,000
14% \$21,000 to \$25,000 [30%]	26% \$51,000 to \$100,000
29% \$26,000 to \$30,000 [28%]	24% \$101,000 to \$150,000
19% \$31,000 to \$35,000	26% more than \$150,000
22% more than \$30,000	
Tutoring Budget (N = 42)	No. Full-time Advisors (N = 54)
31% less than \$11,000	33% 1
26% \$11,000 to \$20,000	28% 2
10% \$21,000 to \$30,000	19% 3
33% more than \$30,000	20% 4 or more
Budget Source (N = 69)	Salary Source
71% Athletic dept.	61% Athletic dept. [76%]
19% Other depts.	28% Other depts. [20%]
10% Split	11% Split [4%]
Immediate Supervisor	Office Location Facility
67% Athletic dept. [76%]	74% Athletic [94%]
33% Other [24%]	26% Academic [6%]
Faculty Rank (N = 65)	First Full-time Advisor
23% Yes [16%]	42% Yes [39%]
77% No [84%]	58% No [61%]
No. Responsibilities (see table 2)	
17% less than 14	24% 19 to 23
35% 14 to 18	25% more than 23

Note: Brennan's 1983 percentages in square brackets.

Descriptive Analyses

Table 1 contains the percentage of responses to each category of the items surveyed. On items completed by fewer than 72 respondents, the number is given in parentheses.

To summarize advisor variables, the majority of these advisors were between 31 and 40 years old, had been employed for less than five years, had master's or doctoral degrees, and had no coaching experience. Men constituted a slight majority, and only half were from the historically traditional fields of education or physical education. Today's academic advisors may be characterized, therefore, as well-educated young men and women from various disciplines who have recently been hired for academic advising skills and not for knowledge of athletics.

If we can assume that Brennan sampled similar advisors, some notable trends can be discerned by comparing the present results to those reported three years ago by Brennan (in square brackets). There are now more women advisors, more trained in fields other than education, more with no coaching experience, and slightly more with doctoral degrees.

To summarize appointment variables, the median reported salary was between \$26,000 and \$30,000. Only about half of the respondents were able (or willing) to provide budget information, and these reported total budgets ranging from \$7,000 to \$333,000 (median \$100,000) and tutoring budgets ranging from \$1,000 to \$200,000 (median \$18,000). Salary and budgets were funded primarily by the athletic department. Most advisors reported to the athletic director, and most had offices in the athletic facility. The majority did not have a faculty appointment, and while more were not the first full-time academic advisor hired, only one or two advisors were reported on staff. Most advisors were responsible for 14 to 23 separate duties.

It appears, therefore, that these advisors represented primarily large schools with substantial budgets and with established academic advising programs controlled largely by the athletic department.

The field, however, appears to be changing. In contrast to Brennan's earlier results, we note higher salaries paid from athletic departments to advisors. Advisors were less likely to have offices in the athletic facility and less likely to answer directly to the athletic department but more likely to have faculty status. Athletic advising appears to be becoming more of a shared university responsibility.

Job Analysis

Respondents were asked to check any of 37 activities for which they were responsible. Table 2 contains those activities, ranked according to the percentage of advisors indicating responsibility for each.

The respondents did discriminate among the activities. Hence, we can note some general characteristics of the work of academic advisors. Most advisors serve both men and women athletes directly, apparently offering more personal counseling than either career/vocational advice or tutorial

assistance. At the same time, these advisors have heavy managerial duties, including monitoring, coordinating, supervising, and preparing budgets. Less consistently mentioned is the role of liaison between the athletic department and various university offices. As it probably should be, academic advisors are generally not involved in teaching, faculty committees, non-academic athletic department committees, and coaching.

Table 2.

Percentage of 72 advisors indicating responsibility for each rank-ordered activity.

%	Responsibility
97	1. academic monitoring
96	2. serve men's athletic program [96%]
96	3. liaison: athletic department and faculty [92%]
92	4. personal counseling
92	5. serve non-scholarship student-athletes [60%]
90	6. serve women's athletic program [78%]
88	7. coordinate tutorial program [88%]
79	8. athletic department academic performance research
75	9. provide career and vocational counseling [72%]
74	10. supervise assistants, graduate assistants, interns
72	11. tutoring
71	12. liaison: athletic department and admissions [88%]
69	13. coordinate summer orientation
69	14. recruiting
60	15. interpreter of NCAA and conference rules [62%]
60	16. academic awards
60	17. develop budget
58	18. university committees
54	19. summer programs [46%]
50	20. preparation of certification of eligibility [48%]
46	21. get high school transcripts and 2.0 letters [38%]
44	22. supervise textbook distribution program [44%]
42	23. liaison: athletic dept. and financial aid office [46%]
42	24. department academic meetings
32	25. liaison: athletic dept. and housing office [36%]
32	26. prepare petitions
29	27. faculty advisory committee
28	28. athletic committee
26	29. publications
19	30. teaching
19	31. athletic alumni activities
19	32. special admission committees
7	33. faculty senate
7	34. coordinate financial aids agents law
7	35. senior jobs committee
3	36. athletic residence halls
1	37. coach

Note: Brennan's 1983 percentages in square brackets.

Interestingly, 69 percent of these advisors reported responsibility in the area of recruiting. Apparently the existence of an academic advising program is regarded by athletic departments as an inducement to the recruiting of athletes.

A comparison of the present percentages to those of Brennan is again interesting. The validity of both surveys is supported by the similarity of the percentages in so many categories. Where there are differences, they are understandable. More advisors are serving non-scholarship athletes and women athletes, as one would predict with increasing size of academic advising programs and with the emergence of women's athletic programs.

Correlational Analyses

To characterize further the field of athletic academic advising, correlations were computed among the advisor variables in table 1 and between the advisor and appointment variables. All variables were reduced to the categories indicated in table 1, and for these categorical relations Chi Square (CS) analyses are reported along with either the Phi measure of correlation between variables with two categories each or Cramer's V, a more appropriate measure of relationship between variables with more than two categories. Like the common Pearson correlation coefficient, r , the Phi and V coefficients indicate the strength of the relationship between the two variables. Also reported is P, the probability of obtaining that one correlation by chance (i.e., when in fact there is no relationship). Complete data tables are given only for those relationships with P values equal to or less than .05, not to suggest formal statistical tests of hypotheses, but merely to indicate reasonably reliable relationships which can and should be tested more formally with future surveys. With 96 correlations computed, one would expect five to have $P < .05$ by chance alone. Where less reliable but interesting trends were noted, these trends are described verbally to suggest targets for future and larger surveys. The correlational analyses are presented in order of the advisor variables listed in table 1.

Age. Salary and coaching experience were reliably related to age. The specific data shown in table 3 indicate that older advisors earn higher salaries and have more experience coaching football or basketball.

While no other variables were reliably related to age, the following trends were noted. Older advisors are mostly men but younger advisors are mostly women (60 percent of those older than 31 were men while only 30 percent of those less than 31 were men). Older advisors are more likely to have doctoral degrees (40 percent of oldest versus 20 percent of youngest), to have been trained in the traditional areas of education and physical education (65 percent of oldest versus 20 percent of youngest), and to have been the first full-time advisor (60 percent of oldest versus 30 percent of youngest). These senior advisors have been employed longer and now are more likely to have faculty rank (41 percent of oldest versus 22 percent of youngest), to be working with more academic advisors (86 percent of oldest versus 44

percent of youngest reporting two or more), and to be at the schools with total budgets over \$100,000 (67 percent of oldest versus zero percent of youngest).

To summarize, senior academic advisors have coaching experience in the revenue-producing sports and they have higher salaries. They tend to be men, trained in education or physical education, with advanced degrees, with faculty rank, who appear to be working in the larger academic advising programs.

Table 3.

Variables related to age (cell % = row %)

	Salary x \$1,000					
	15-20	21-25	26-30	31-35	>35	
<31	6 60.0	2 20.0	1 10.0	1 10.0	0 0	10 13.9
31-40	5 11.9	5 11.9	19 45.2	6 14.3	7 16.7	42 58.3
>40	0 0	3 15.0	1 5.0	7 35.0	9 45.0	20 27.8
	11 15.3	10 13.9	21 29.2	14 19.4	16 22.2	72 100.0

CS = 36.85

DF = 8

$P < .001$

V = .51

	Coaching Experience (F/B = Football or Basketball)			
	None	F/B	Other	
<31	7 70.0	0 0	3 30.0	10 13.9
31-40	27 64.3	10 23.8	5 11.9	42 58.3
>40	12 60.0	8 40.0	0 0	20 27.8
	46 63.9	18 25.0	8 11.1	72 100.00

CS = 9.89

DF = 4

$P < .042$

V = .26

Importantly, however, contrasts between the senior and junior advisers suggest some interesting trends in the field of athletic academic advising. In

contrast to senior advisers, the most junior members are likely to be women who do not have coaching experience in the revenue-producing sports, who are not trained in the traditional fields of education or physical education, and who are being hired without the doctoral degree, apparently by schools with smaller academic advisement programs and limited budgets.

Sex. The data for three variables reliably related to sex of advisers are shown in table 4, an inspection of which reveals that men advisers enjoyed higher salaries, reported more responsibilities, had more experience coaching football or basketball, and were less likely to be the first full-time adviser hired.

Table 4.
Variables related to sex (cell % = row %)

	Salary x \$1,000					
	15-20	21-25	26-30	31-35	>35	
Men	3 7.5	3 7.5	13 32.5	8 20.0	13 32.5	40 55.6
Women	8 25.0	7 21.9	8 25.0	6 18.8	3 9.4	32 44.4
Total	11 15.3	10 13.9	21 29.2	14 19.4	16 22.2	72 100.0

CS = 10.84
DF = 4
P < .028
V = .39

	Coaching Experience (F/B = Football or Basketball)			
	None	F/B	Other	
Men	18 45.0	17 42.5	5 12.5	40 55.6
Women	28 87.5	1 3.1	3 9.4	32 44.4
Total	46 63.9	18 25.0	8 11.1	72 100.0

CS = 16.21
DF = 2
P < .001
V = .47

	First Full-Time Academic Advisor		
	Yes	No	
Men	12 30.0	28 70.0	40 55.6
Women	18 56.3	14 43.8	32 44.4
	30 41.7	42 58.3	72 100.0

CS = 4.02
DF = 1
P < .045
PHI = .26

	Number of Responsibilities				
	<14	14-18	19-23	>23	
Men	3 7.5	15 37.5	13 32.5	9 22.5	40 55.6
Women	9 28.1	10 31.3	4 12.5	9 28.1	32 44.4
	12 16.7	25 34.7	17 23.6	18 25.0	72 100.0

CS = 7.97
DF = 3
P < .046
V = .33

While not reliably related to sex, several other variables suggested a basis for the salary relationship. Men, for example, tended to be older (only eight percent were less than 30 years old) than were women (22 percent). Men were generally employed longer (45 percent over five years) than were women (28 percent). Women advisers tended to be less educated (19 percent with only bachelors' degrees) than were men advisers (eight percent). And more men (34 percent) were at schools with the largest total budget (\$150,000) than were women (14 percent).

In contrast to women advisers, therefore, men advisers have higher salaries, more responsibilities, more coaching experience in the revenue-producing sports, and are less likely to be the first full-time academic adviser in their schools. Men advisers tend to be more formally educated and older, and they appear to be advising at the larger schools with successful athletic programs and more established advising programs.

Highest degree earned. Only salary was reliably related to highest degree earned, and the data, given in table 5, indicate that advisers with higher

degrees generally earned higher salaries.

Weaker relationships include the previously mentioned tendency for the men to have higher degrees (63 percent of the doctorates, 57 percent of the masters', and 33 percent of the bachelors'). Advisors were also more likely to have faculty status with the higher degree (35 percent with doctorate, 23 percent with master's, and zero percent with bachelor's). Finally, those with doctorates were generally working in situations with more full-time advisors.

Table 5.
Variables related to highest degree earned (cell % = row %)

	Salary x \$1,000					
	15-20	21-25	26-30	31-35	> 35	
Doctorate	1 5.3	2 10.5	2 10.5	4 21.1	10 52.6	19 26.4
Master's	7 15.9	8 18.2	17 38.6	7 15.9	5 11.4	44 61.1
Bachelor's	3 33.3	0 0	2 22.2	3 33.3	1 11.1	9 12.5
	11 15.3	10 13.9	21 29.2	14 19.4	16 22.2	72 100.0

CS = 20.87

DF = 8

P < .0075

V = .38074

In summary, it appears as though the doctoral degree leads to higher salary, faculty status, more responsibilities, and probably positions in schools with larger academic advising programs.

Academic field. Faculty rank and coaching experience were reliably related to academic field. The data, shown in table 6, indicate that advisors with academic training in psychological fields were more likely to have faculty rank than were those from the remaining fields, especially education, and that advisors who reported any coaching experience were mostly from the academic fields of physical education and, to a lesser degree, education.

Less reliably related to academic fields were the variables of years employed, age, number of responsibilities, and salary source. More advisors from the fields of education and physical education (50 percent each) were employed more than five years while only 23 percent from psychology and 21 percent from other fields were employed that long. The athletic department was the primary salary source for those from education (75 percent) and physical education (60 percent) while only 50 percent of those from psychology and other fields were paid by that department exclusively. Finally, above-average number of responsibilities were reported by 71 percent of those from psychology fields, 70 percent from physical education,

46 percent from education, and only 25 percent from other fields.

In summary, advisors from the traditional fields of education and physical education are less likely to have faculty rank, are more likely to have coaching experience, are more likely to be paid by the athletic department, and are more likely to have been employed longer.

Table 6.
Variables related to academic field (cell % = row %)

	Faculty Rank		
	Yes	No	
Education	2 7.7	24 92.3	26 40.0
Physical Ed	3 30.0	7 70.0	10 15.4
Psychology	6 50.0	6 50.0	12 18.5
Other	4 23.5	13 76.5	17 26.2
	15 23.1	50 76.9	65 100.0

CS = 8.64

DF = 3

P < .034

V = .36

	Coaching Experience (F/B = Football or Basketball)			
	None	F/B	Other	
Education	16 57.1	8 28.6	4 14.3	28 38.9
Physical Ed	2 20.0	5 50.0	3 30.0	10 13.9
Psychology	12 85.7	2 14.3	0 0	14 19.4
Other	16 80.0	3 15.0	1 5.0	20 27.8
	46 63.9	18 25.0	8 11.1	72 100.0

CS = 14.85

DF = 6

P < .022

V = .32

Coaching experience. The only variable not previously mentioned that was reliably related to coaching experience is office location (CS = 7.68, DF

= 2, $P < .022$, $V = .33$), and the data indicate simply that advisors were more likely to have offices located in the athletic facility if they had coaching experience in football or basketball (89 percent) or in other sports (100 percent) than were those who reported no coaching experience (63 percent).

To summarize, advisors with coaching experience are likely to be older men from education and physical education and to have offices in the athletic buildings.

Years employed. Table 7 contains the data for three variables which were reliably related to the number of years employed. These data indicate that longer-employed advisors reported larger total budgets, were more likely not to have faculty rank, and worked with more advisors.

Table 7.
Variables related to years employed (cell % = row %)

	Overall Budget x \$1,000				
	<51	51-100	101-150	>150	
<3 yrs	7 50.0	1 7.1	4 28.6	2 14.3	14 38.9
3-5 yrs	1 14.3	1 14.3	3 42.9	2 28.6	7 19.4
>5 yrs	0 0	8 53.3	2 13.3	5 33.3	15 41.7
	8 22.2	10 27.8	9 25.0	9 25.0	36 100.0

CS = 17.40
DF = 6
 $P < .008$
 $V = .49$

	Faculty Rank		
	Yes	No	
<3 yrs	10 41.7	14 58.3	24 38.1
3-5 yrs	1 6.7	14 93.3	15 23.8
>5 yrs	2 8.3	22 91.7	24 38.1
	13 20.6	50 79.4	63 100.00

CS = 10.49
DF = 2
 $P < .005$
 $V = .41$

	Number of Full-Time Academic Advisors				
	1	2	3	4	
<3 yrs	11 55.0	4 20.0	2 10.0	3 15.0	20 38.5
3-5 yrs	4 40.0	1 10.0	1 10.0	4 40.0	10 19.2
>5 yrs	2 9.1	10 45.5	7 31.8	3 13.6	22 42.3
	17 32.7	15 28.8	10 19.2	10 19.2	52 100.0

CS = 16.76
DF = 6
 $P < .010$
 $V = .40$

A number of less reliable but interesting relationships were also noted. As with total budget, reported tutoring budget was generally lower for the recently employed advisors who also indicated trends away from the athletic department as budget funder and salary source and away from the athletic director as the immediate supervisor. Not surprisingly, there was a tendency for the longer-employed advisors to have more responsibilities and larger salaries. More surprisingly, there was a tendency to move away from the traditional fields of training, Education and Physical Education, by the most recently employed (73 percent of those employed more than five years indicated these traditional fields, but only 38 percent of those employed less than three years indicated those fields). Finally, the proportion of women advisors has increased, from 35 percent of those employed for more than five years, to 47 percent of those employed for three to five years, to a majority of 55 percent of those employed less than three years. Like age, this variable of length of employment provides evidence of trends in the field of athletic academic advisement—and trends are evident in the results of this survey. Women are entering the field and are being hired, apparently, by schools with emerging programs, i.e., those with smaller budgets and fewer full-time advisors. These schools seem more likely to offer faculty rank to advisors with non-traditional training. Moreover, the athletic departments of these schools apparently share the financial responsibility for, and control over, these programs.

Discussion

The results of this survey, combined with those of Brennan, indicate clearly that this young field is changing. Academic advising of athletes is no longer the sole prerogative of huge athletic departments and their male coaching staff. Apparently smaller schools are hiring advisors for their

athletes, and they are hiring young people with ability to advise and/or manage advising programs and not necessarily with formal training in athletics or even in the traditional areas of education. In a very positive sense, athletic advising is achieving autonomy and recognition by the entire university community.

These trends are encouraging for the athlete, for the advisor, and for the field. By sharing responsibility for advising with academic departments, athletes are more likely to encounter advisors professionally trained to handle their specific problems, and these cooperative programs should foster a more accurate and positive image of student athletes. With more schools recognizing the need for athletic advising, and with more cooperative programs in schools, job prospects look good. Schools are apparently paying well and are offering faculty status to appropriately trained young people. Finally, if the field is indeed in a state of transition, it seems appropriate to define the field by developing training programs which will lead to graduate degrees in the field of academic advising of athletes. Such programs will necessarily be interdisciplinary, requiring training in teaching basic skills (reading, writing, and mathematics) and general self-learning skills. Clinical counseling, vocational counseling, and management skills also seem appropriate. And certainly knowledge of rules governing intercollegiate athletics is necessary. It is not too soon to think of doctoral training in this changing field.

But while the field is changing, it is imperative to know how it is changing. To that end, we recommend that a standardized survey be conducted every two years, that it be mailed to all advisors, and that all advisors be encouraged to complete and return the survey.

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About the Authors

Brian Mand is past president of NAAAA and has served on the organization's Executive Board since 1980. Mand is currently completing his doctoral degree in Athletic Administration with a minor in Counseling and Sport Psychology at Florida State University, where he is also Student Affairs Coordinator for Athletics.

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Proposition 48— College Admissions Tests: Friend or Foe?

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Abstract

Proposition 48—College Admission Tests: Friend or Foe?

This article reviews the background of college admissions tests, specifically the SAT and the ACT. The primary discussion refers to the SAT, though some discussion generalizes to the ACT. Whether or not admission test scores can properly be used for minority students, especially those involved in intercollegiate sports, is discussed. The special problems dealing with collegiate preparation, especially for blacks, are presented.

Proposition 48— College Admission Tests: Friend or Foe?

Some black leaders have decried the adoption of Proposition 48 by the NCAA as "patently racist." A primary objection seems to be the inclusion of scores on college admission tests, specifically, the SAT and the ACT, as a part of the regulation. However, there are some who say that this may have positive potential for the black community. The evaluation of these positions can best be handled by looking at the nature of the SAT and ACT, and results of ethnic or racial subgroups within the population. The SAT has been criticized more heavily; possibly, because it is an older test and dates back to a time of unenlightenment about racial differences and to a history of having been used by the most selective schools. The primary discussion here is about the SAT, because of its history. The ACT was not published until 1959 and has been criticized less heavily. However, the two tests are positively correlated and some discussion generalizes to both tests.

Secondly, the relationship between the athlete, his academic status, background, expectations, and his race is examined. The use of the male pronoun is used throughout this article because, at this time, most of the problems associated with being a "jock," especially a black "jock," are primarily male. There are many reasons, two of which are (1) the recruiting of female athletes is seldom perceived to be as aggressive, and (2) probably the most telling, is the hoped-for riches to be gained from playing male professional sports. This, of course, does not mean that the female is

completely immune, now or in the future, from suffering some of the same problems.

Standardized tests were developed early in the 20th century. At that time scientists were beginning to develop instruments for the measurement of individual differences. It was obvious from observation that not every one was alike, not only in appearance but in behavior. Scientists wanted to find ways of analyzing these differences, hypothesizing that if researchers understood these differences better, people could be helped to lead happier, more productive lives. Betz (as cited in Delworth, 1980)

America's entry into World War I provided the test developers with a unique opportunity to demonstrate the uses of these fairly new devices. One problem present with most new developments or products is determining their limits. In the beginning, many of those using the tests were satisfied with them, since they were only looking at the high scores, which are reasonably reliable; however, the meaning of the low score was not completely understood and some serious errors in interpretation occurred. Unfortunately, some of the leading experts of the day were firmly convinced by the data they had found that the differences they saw in scores between racial and ethnic subgroups were due entirely to inherited factors, something some of the experts called the "germ plasm." The data from the results of the Army tests, the National Intelligence Test, was broken down into racial and ethnic subgroups and used by racists of that day to decry the inferiority of most racial and ethnic subgroups. Because of this, some have felt the tests were intended for the purpose of belittling minorities. Though they were certainly used in this way at one time, this does not mean that was the purpose for which they were intended. The errors, the unreliability of some low test scores, were not understood by some, even with the public statements made by men, such as Carl Campbell Brigham, the "father of the SAT," who stated in the New York Times, December 4, 1938 (cited in Saretzky, 1982):

The original and fallacious concept of the I.Q. was that it reported some mysterious attribute but now it is generally conceded that all tests are susceptible to training and to varying degrees of environmental opportunity. The tests measure a result and not its origin. Different types of tests will vary in their sensitivity to environmental opportunity, and it is ridiculous to claim that any test score is related to the germ plasm, and that alone. (p. 17).

When the SAT was developed in 1926, the "selective" colleges needed no help in keeping minorities or anybody else out. What they needed was a method of selecting the best of the large group of students, who otherwise could not qualify for admission; therefore, any implication that it was developed as a racist tool is unwarranted. Cronbach (1975) writes of the SAT:

On many fronts, a procedure that came in as an impartial application of scientific findings about talent is now under bitter attack. The irony is all the greater in that the attack comes largely from those who speak for the poor. Proponents of testing, from Thomas Jefferson onward, have wanted to open doors for the talented poor, in a system in which doors often are opened by parental wealth and status. (p.1)

One further point is made by Ravitch (1984) in explaining that the original College Entrance Examination Board tests were based on specific courses that the colleges and universities who used them thought provided the necessary preparation for college. The old tests covered specific works in literature and aspects of history thought important by educators subscribing to the tests and consequently taught by the "prep" schools. The SAT, in order to provide a more democratic opportunity for public high school students to demonstrate their potential to the colleges of their choice, developed a curriculum-free verbal portion and went to a multiple choice format.

Admissions tests can claim to show aptitude for learning because those who score high have shown they have an aptitude for learning, by doing so. Many people fail to understand that the high scores show aptitude for learning but low scores *do not* as clearly show a lack of aptitude.

Achievement tests can show what the student has learned and what he has not learned. If he has not learned a given skill, the test does not purport to claim that a student is incapable of learning, merely that he, apparently, has not yet done so. This points out to teachers, parents, and students which areas especially need work. It will be up to teachers, administrators, parents, and students to see that they have been exposed to, or taught, material thought necessary to prepare students for their futures.

There are true stories about the high-scoring student who flunks out of college. This particular instance is easily explained by the student getting involved in things he considers more interesting than studies or, for whatever reason, ceasing to function as a student, often neither going to class nor studying. There is another, less simplistic, explanation to this problem, a statistical explanation. If only students with combined SAT scores of 1500 or above are put in one class which will be graded across the entire grading scale, A through F, there are going to be some students who scored very high on the SAT, but who have failed a college course (Astin, 1984; Baird, 1984; Chickering, 1972).

The stories of students who have low scores that eventually do well need to be analyzed to determine the factors interfering with test performance initially, and to determine if the changes the student made are applicable to other students. There is, of course, the corollary to the previously mentioned statistical explanation. If an institution has a large number of students who

are in the bottom quartile or decile of those taking the SAT and are graded on a curve, there are going to be some low-scoring students who are getting A's in college.

The reasons a student might receive a low score on an achievement test are numerous. Several of the main reasons are: (1) the student was overtired or ill and was not functioning at his normal level, (2) the student suffered from test anxiety, (3) the student may not have been prepared to take the test and did not understand the instructions, (4) the student may be a very slow worker and hurt by the timed aspect of the test, (5) the student may have had weak academic preparation, or (6) the student may be unable to master the concepts tested. While several of these problems are not unsolvable, nor do they speak to any inherent lack of ability, the fact remains that, regardless of the reasons for a lower-than-average performance, the student will still have to compete against other students who do not have the same problems to overcome. These tests give students a chance to compare themselves against others so that they can be more likely to find that good college "fit" that Astin (1984) indicates is important for good college adjustment.

The short-term problems of being sick, tired, not understanding the directions, can be solved reasonably easily and a high score should be obtainable on retest. If the problems are more difficult to solve—poor academic preparation or severe test anxiety—then help needs to be given to overcome these problems. The inclusion of a high percentage of blacks in college remedial programs is cited as an example of being unfair to blacks. The problem that appears here, as in most aspects of this situation, is in the lack of understanding of the difference between findings and the causes of the findings. It is a finding that a larger percentage of blacks than whites needs remedial instruction; the reason still needs to be identified. The nature of remedial instruction, or the need for it, seems to need restating. Remedial instruction is for those who are not so well prepared as they should be. The assumption is not made that they cannot be prepared, quite the opposite: the assumption is that when the instruction is given to remedy the deficiencies previously exhibited, preparation will be satisfactory.

Cole (1984) reports that workshops were established by the NAACP for 215 low-income black youths in the 11th and 12th grades in New York City, San Francisco, and Atlanta. They worked on sharpening the reasoning and analytical skills of the students in verbal and math content areas and generally improved on the test-taking skills of the students. The clinics reported an average improvement of 50-100 points in five of the six clinics held. The pre-workshop and post-workshop tests used SAT test-type items. Five groups is a rather small number to make broad generalizations from, but it certainly indicates this is a positive approach.

These and other findings indicate that better preparation yields better test scores. When the idea of coaching clinics first appeared, there were those who said coaching does no good, and even if you get some score

improvement, the knowledge will be short lived. The first part of this would be true if all students were assumed to have had the same previous academic exposure. The second part deals with the idea of "cramming" in general. Most of these coaching clinics deal with two separate areas: (1) learning the subject matter and (2) developing test-taking techniques. Test-taking techniques need to be taught someplace. If the student has had no previous instruction, there is a high probability that improvement will be noted. Results that show there is little retention of specific subject matter should surprise no one, and can hardly be used as a reason for not studying, since similar results have been shown during the taking of college courses (Hodgkinson, as cited in Sandeen, 1976, p.65).

Cole (1984) stated that 50 percent of the enrollment in commercial coaching schools came from families with incomes in excess of \$30,000. The NAACP should be commended for their coaching clinics for the underprivileged, but to imply that students' scores are caused by the ability to pay for expensive coaching may again be interpreting findings as causes. It is a finding (Berry, as cited in Edwards, 1983) that students from higher socioeconomic backgrounds tend to score higher than those from lower socioeconomic backgrounds, regardless of race. One reason is pointed out by Baird (1984) in reporting that SAT scores and family income are both related to parental level of education. Mathematics states that two variables related to a common variable will be related to each other, mathematically. However, a causal relationship between the two variables cannot be assumed from this equation alone. The causes for many of these findings are complex and need to be investigated in depth but, most important, we must not take mere mathematical relationships to be those of cause and effect.

Lay and Wakstein (1985) investigated the relationship between race, academic ability and self-concept of ability. There are indications that white and black students do not use quite the same measuring sticks. Two possible explanations are given: (1) "interpersonal mediation" or "reference group" theory, which states that persons compare themselves only with those with whom they identify; (2) "subcultural encapsulation" theory stating that groups can preserve positive self-images by adopting a "system blame" excuse to explain any low self-perceptions. Possibly what we are seeing here is some of this "system blame" rationalization which whites, having no group identification, are denied. Smith & Allen (1984) found that black students who had lower levels of identification with black culture were higher achievers and reported higher levels of satisfaction.

Generally, we are a culture which likes to have heroes and causes with which to identify. It is not suggested that all should sever their ties of loyalty to any racial or ethnic group to which they belong, merely that they do not view every event only in relation to racial or ethnic origins.

When the overall average SAT and ACT scores declined, parents, educators, and policy makers demanded a return to the basics. Undoubtedly,

not all the suggestions made at this time were good ones. but the point is, the blame was put on the students' preparation, not on the students, nor on the system that evaluated their preparation. The answer to the problem of able children obtaining low college admissions test scores seems to lie with the system doing the preparing, directly or indirectly.

The figures surfacing in the furor surrounding Proposition 48 could give black leaders the ammunition they need to demand better education for their people. It does more harm than good for black leaders to oppose college admission standards with as much vehemence as they do. It gives the impression that they think that black students are incapable of meeting intellectual standards. Objective evidence does not support such an idea.

When analyzing a student's preparation, it is not fair to look just to the classroom teacher; a lot of variables must be examined. Is the climate of the school conducive to the process of education? Do the parents see an education as the key to success? Are the necessary skills offered in the schools? How many students take advantage of the "harder" courses?

It is suggested that some black athletes at the elementary and secondary levels were more likely to be placed in less demanding academic courses and were promoted without serious regard to skills development (Edwards, as cited in Ervin, Saunders, Gillis, & Hogrebe, 1985). It seems that potentially bright students, because of their athletic involvement and race, may not be receiving the encouragement and guidance necessary to develop fully their intellectual capabilities.

Children should no longer be "socially" passed along from grade to grade, not learning to read. Research in the mechanics of teaching reading is still needed, and one way or another we must teach reading in the elementary school so that it can be used to teach the skills necessary in more advanced classes. Making sure that students have the skills necessary to advance from grade to grade is probably going to require some form of competency testing. Competency tests can serve three purposes: (1) assess the skill levels of the students, (2) give them extra practice in taking achievement-type tests, and (3) diagnose any areas of particular difficulty.

Reading is vitally important to all other classes but now math courses taken and math competencies gained seem to be more discriminating than any other specific skill. Jones (1984) found that mathematics preparation, as represented by SAT scores, is directly related to the number of mathematics courses taken in high school. Blacks tend to take fewer high school math courses than whites and score lower on the SAT. However there are strong indications that much of this difference would disappear (Jones, 1984) if more black students took more high school math. Jones refers to the Education Commission of the States Task Force recommendation, that three years of high school math school be required, as being important. This could be especially important for blacks, since they do not seem to have been voluntarily electing to take as many math courses as the white students.

Baird (1984) found that three or more years of math was positively related to high-level SAT scores but unrelated to family income. Lay and Wakstein (1985) found that, in general, a larger number of students, both black and white, perceived themselves to be below average in math skills. Stuart (1985) noticed that the biggest difference in the preparation of the students in her study was in math courses taken.

The ACT (1985) and SAT (1985) booklets specifically state that they test over concepts taught during the first three years of high school math, two years of algebra and a year of geometry. Some colleges expect more than this preparation: some of their divisions expect trigonometry and include calculus on their placement tests.

It has been reported for some time that there are shortages of teachers in math and math-related science courses. In writing about mathematics education Kline (1982) cites a study by the Educational Testing Service:

As late as 1954 the elementary school teachers who were interviewed feared and hated mathematics. Naturally this influenced their teaching. Half of 370 teachers tested could not tell when one fraction was larger than another. Thus, the teachers knew less than they were required to teach. (p.26)

The lack of comfort with the subject of mathematics among some teachers, past or present, can help foster the perception of math as difficult and not much fun, which can in turn cut down on the number of math majors in college and then math teachers for our elementary and secondary schools. It is true that abstract mathematical concepts are difficult for some people to master, but most colleges expect some degree of proficiency. Mathematics is also the least susceptible to cultural bias.

One important question raised was whether or not parents see education as the key to success. Edwards (1983) sees this as a significant problem. Melvin Oliver (cited in Edwards, 1984) reports that black families are four times more likely than white families to view their children's performance in athletics as the "stepping stone" to a professional career, and the key to success. The black professional athlete is the most visible successful black individual within the frame of reference of most black children. Though there are positive aspects to the situation, the black community needs to be aware of how small the odds are of a student becoming a professional athlete. Edwards (1983), states that "fewer than 2,400 black Americans can be said to be making a living in professional athletics today."

Parents who are not themselves educated should not feel they have nothing to offer. Support is vital. Ender (1983) found opinions of and support from parents, siblings, friends, and teammates very important to student-athletes. If parents let student-athletes know they expect them to attend classes and work at academics as well as athletics, it has a very positive effect.

It may be that the argument over admissions test scores will fall into the background when Proposition 48 takes full effect and student-athletes will

have to not only score a combined 700 on the SAT or 15 on the ACT but will have to achieve a 2.0 GPA for a set of 11 core courses. It may be that before long, second-year algebra or chemistry or senior composition may be the "jock courses" instead of the generic "basketweaving" now identified as such. This will not only be good for student-athletes but for other students in the high schools who are neither competitive athletes nor potential college students.

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Athletes and Academic Performance: A Study of Athletes at an NCAA Division I Institution

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Abstract

The academic records of the athletes at a major Division I program were examined for the academic year 1980-81. The athletes were categorized by sex, grant-in-aid status, race, and as participating in either a revenue or non-revenue sport.

The study documents that female athletes perform well academically. White male athletes achieve at their predicted grade point average. However, the results indicate that there is a specific problem area within the athletic population, specifically, the black athletes participating in football and basketball. The black student-athlete is often less prepared and experiences more serious academic problems than the white student-athlete.

Athletes and Academic Performance: A Study of Athletes at an NCAA Division I Institution

Recently, the relationship between athletics and academics has come to the forefront of national news and national concern. In January, 1983, at its national convention, the National Collegiate Athletic Association (NCAA) passed legislation requiring that prospective college athletes score at least 700 on the SAT test or 15 on the ACT test and earn at least a 2.0 grade point average in 11 selected high school college-preparatory courses (math, English, science, and social science) in order to participate in intercollegiate competition during their freshman year. This legislation follows several years of concern about the weaknesses of high school and college requirements for academic eligibility and years of abuse of academic standards. In 1986, the NCAA amended the legislation to include a floating scale, which allows for a higher grade point average to compensate for a lower test score or a higher test score to compensate for a lower grade point average. When a 2.2 or higher grade point average is achieved the minimum acceptable test score then becomes 660 on the SAT or 13 on the ACT.

This legislation, however, has resulted in heated debate among educators on both sides of the issue. Many black college presidents argue that these requirements discriminate against the black athlete and will have a negative impact on the role of blacks in college athletics. Others argue that aid based

on athletic ability encourages student exploitation and the recruitment of athletes with little or no academic ability. Major criticisms of college athletics are aimed at the revenue-producing sports (football and basketball) and sports which may serve as minor leagues for the pros. If the criticisms and concerns have validity, the greater the potential revenue production of the sport, the greater the chances for exploitation of the athletes. It would also follow that the greater the athletes' actual or perceived chances of pursuing professional athletic careers, the more readily they will allow themselves to be exploited.

Belief in the myth that sport participation is a path of upward social and economic mobility creates a vulnerable attitude where the athlete, especially the black athlete, is left open to exploitation. Harry Edwards (Edwards, 1973; Coakley, 1982), a black sociologist, is concerned with the fact that, in the past 20 years, colleges have allowed "money" sports—football and basketball—to become farm systems for the professional leagues.

Many athletes have embraced another myth—that the sole purpose of attending college is to make the pros (Underwood, 1980). Students who are extremely weak academically are often invited into college to pursue the improbable dream: to become one of the less than two percent of college players who make it into the NFL or NBA. In 1980, there were fewer than 1,000 black athletes making a living in professional sports (Underwood, 1980). However, black American culture has fostered the belief that professional sports are a way out of the ghetto, not only for that athlete but for his entire family.

News reports describe isolated incidents of athletes, especially black athletes, being recruited and attending college with little chance of academic success. However, few studies have thoroughly investigated the academic records of athletes at major universities. This study examines the records of athletes at one major Division I program. Because of the sensitivity of the data, the institution will not be further identified. It is hoped, however, that the results of this study may serve to further the debate regarding the impact of the new legislation on all athletes, not just the black athlete.

The study was conducted to test the following hypotheses:

1. There are differences in the academic performances of male and female athletes.
2. There are differences in the academic performance of male athletes participating in revenue sports (football and basketball) and male athletes participating in non-revenue sports.
3. There are differences in the academic performance of minority and non-minority athletes.
4. There are differences in the academic performance of athletes receiving grant-in-aid and no grant-in-aid.

For the purposes of the analyses each athlete was classified according to four independent variables. First, the athlete was classified as either male or

female. Second, the sport the athlete participated in was defined as revenue or non-revenue. Men's football and men's basketball are the only sports defined by the NCAA as revenue sports. All others are considered non-revenue sports. The third independent variable was the athlete's grant-in-aid status. The athlete was classified as receiving full, partial or no grant-in-aid. The fourth independent variable was the athlete's minority status. Black athletes were defined as minority, and white athletes were defined as non-minority. No other racial groups were present in the sample.

Table 1 presents selected grade point averages for the three sex-revenue combinations. Male revenue-sport athletes include only athletes participating in football and basketball, the main revenue-producers at most major universities. All other male athletes were defined as male non-revenue athletes. All female athletes were defined as female non-revenue athletes. The female athletes achieved significantly higher ($p < .01$) than either male non-revenue or male revenue athletes on all academic measures. In addition, the male non-revenue athletes achieved significantly higher ($p < .05$) than their male revenue counterparts on each of the grade point averages.

Table 1
Selected Grade Average for Sex-Revenue Combinations

	Total Ave		BER Ave		Total Ave in Season		Predicted Grade Ave	
Female								
Non-Rev	2.87	**	2.82	**	2.88	**	2.75	**
Male								
Non-Rev	2.47	*	2.39	*	2.43	*	2.46	*
Male								
Revenue	2.25		2.08		2.09		2.27	
Overall University	2.57							

* $p < .05$

** $p < .01$

Four selected grade point averages were of primary importance. First, the total grade point average for all attempted courses was recorded. The second grade point average was the average for courses listed as Basic Education Requirements. The Basic Education Requirements (BER) consist of a core of required courses in the areas of mathematics, humanities, sciences, and social sciences. Although not every student is required to take exactly the same basic education courses, the BER average is the most consistent measure for comparing the records of student with different academic majors. The third average is the total grade point average achieved during the athlete's season of competition. The fourth measure was the predicted grade point average. The predicted grade point average was determined by using the student's high school class rank and ACT composite score. The prediction formula was the

result of a multiple regression based on the student's ACT scores and high school ranks. This average was important in determining what grades might reasonable be expected of a student.

A common impression is that grant-in-aid athletes, athletes receiving financial aid based on athletic ability, are weaker academically than non grant-in-aid athletes. Table 2 presents selected grade point averages for each grant-in-aid classification. There were three grant-in-aid categories. First, athletes may be on a full grant, including tuition, fees, and room and board. Second, the athlete may be receiving partial financial assistance, either tuition and fees, or room and board, but not both. An athlete was classified as receiving no grant if he received no aid from the athletic department. The full-grant athletes scored significantly lower ($p < .05$) than either the partial-grant or no-grant athletes on each of the four grade averages. These included the total grade point average, the grade point average for basic education requirements, the total average during the season of competition, and the predicted grade point average.

Table 2
Grade Averages by Grant-In-Aid Status

	Total Ave	BER Ave	Total Ave in Season	Predicted Grade Ave
Full Grant	2.44	2.31	2.33	2.41
Partial Grant	2.71	2.68	2.67	2.62
No Grant	2.64	2.58	2.66	2.61
Overall University	2.57			

* $P < .05$

** $P < .01$

Because the revenue-sport athletes attained lower grade point averages than the non-revenue sport athletes, it was of interest to determine the grade point averages for only the non-revenue athletes. Table 3 presents the grade point average by grant-in-aid status for the non-revenue sport athletes. After removing revenue-sport athletes, who are all full-grant athletes, from the analysis, there was no significant difference on any of the variables. Therefore, if full-grant athletes are weaker students than no-grant athletes, this is true only for revenue sports. In fact, it appears athletes in non-revenue sports perform well in comparison with the general student body, although this difference is not significant.

Table 3
Grade Averages by Grant-In-Aid Status for Non-Revenue Sports

	Total Ave	BER Ave	Total Ave in Season	Predicted Grade Ave
Full Grant	2.68	2.60	2.61	2.58
Partial Grant	2.71	2.68	2.67	2.62
No Grant	2.64	2.58	2.66	2.61

* $P < .05$

** $P < .01$

Recently, much attention has been given to the black athlete in college sports. Harry Edwards, in a "Sixty Minutes" interview, stated that the black athlete has been a victim of a system which encourages him to believe that professional athletics is his vehicle for upward mobility (Sixty Minutes, 1980). Therefore, it is important to look at the black athlete as a factor. Table 4 presents the distribution of minority athletes in each sex-revenue sport combination. It is clear that the proportion of black athletes in male revenue sports, football and basketball, dramatically exceeds the proportion of black athletes in either male or female non-revenue sports.

Table 4
Athletes in Each Sex-Revenue Combination

	Black Athletes	White Athletes	% Black
Female Non Rev	11	226	4%
Male Non Rev	16	313	5%
Male Revenue	43	61	41%

The differences between the academic performances of minority and non-minority athletes in the revenue sports were investigated. Selected grade point averages by sex-revenue combination and minority status are presented in Table 5. Because there were so few black athletes in the non-revenue sports, these averages could not be statistically interpreted and, therefore, were not presented. Therefore, the averages for the white athletes participating in male non-revenue sports were essentially equal to the averages for all athletes, black and white, participating in those sports. There were no significant differences ($p < .05$) between the white male revenue-sport athletes and the white male non-revenue sport athletes on any of the academic measures. The black male revenue-sport athletes were significantly lower ($p < .05$) than the white male athletes on all academic measures. The

female athletes were significantly higher than the white male athletes on all academic measures. It is important to note that there are significant differences among the athletes with respect to their predicted grade point averages. Thus it is unrealistic to expect the different categories of athletes to achieve the same grade averages. What may be more reasonable is to hope that each athlete achieves academically at a level comparable to or exceeding his predicted grade point average.

Table 5
Grade Averages by Sex-Rev and Minority Status

	Total Ave		BER Ave		Total Ave in Season		Predicted Grade Ave	
Female								
Non-Rev	2.87	**	2.82	**	2.88	**	2.75	**
Male	2.47		2.39		2.43		2.46	
White								
Male Rev	2.51	**	2.40	**	2.42	**	2.44	*
Black								
Male Rev	1.99		1.77		1.73		2.11	

*P<.05

**P<.01

The average ACT scores, high school class ranks, the difference between the achieved BER average and the predicted grade point average are presented in Table 6. The difference between the achieved BER and predicted grade point average is of particular importance because it may be the best measure of whether a student is attaining his academic potential. The achieved BER average and the predicted grade point average were not significantly different for female athletes, male non-revenue athletes, and white male revenue athletes.

Table 6
Predictive Scores by Sex-Rev Minority Status

	ACT Score		High School Class Rank		Difference Between Achieved BER-Predicted
Female					
Non-Rev	22.04	*	.820	*	-.07
Male	19.23		.630		-.07
White					
Male Rev	19.11	**	.637	**	-.04
Black					-.34
Male Rev	13.57		.527		

*P<.05

**P<.01

The black athlete achieved significantly lower ($p<.05$) on the earned BER average than was predicted. Female athletes achieved significantly higher ($p<.05$) ACT and high school ranks than the other athletes. It is particularly important to note that the average high school rank of the black revenue-sport athlete was the 53rd percentile, or slightly above average for the individual high school. This was not significantly different from the other male athletes at the .05 level. Yet, on the ACT test score, the black revenue athlete averaged under 14, which was significantly lower ($p<.01$) than the other male athletes. This may be a very important relationship. It indicates that it is possible for the minority student to do well in his high school, yet still not be prepared to do well on the ACT test or to survive in college courses.

Although most students at this institution take the ACT test, many take the SAT or both tests. The average SAT for black athletes was 761 and for black revenue sport athletes was 722. This compares with an average of 694 for all black students nationwide as reported recently by the SAT Board (Biemiller, 1982). The average SAT among white students nationwide and for white student-athletes at this institution were both approximately 925. The SAT Board reported these averages in an effort to enlighten the public to the magnitude of the problem which must be overcome.

It would be highly inaccurate to conclude that this athletic department has ignored the academic progress of its student athletes. There has been a comprehensive program of counseling services and academic support services, including tutorial services, in effect for almost 20 years. This program employs three full-time academic counselors and more than 60 tutors. The tutoring program has undoubtedly helped many athletes to attain their academic potential.

This research has been conducted to enable a better understanding of the academic problems facing student athletes. Although this data touches on sensitive issues, these issues must be examined if programs which will help student athletes attain their academic potential are to be improved or new approaches implemented.

Conclusions

Based on the academic data the following conclusions for athletes at this Division I program seem warranted:

1. Female athletes both predict and achieve higher than male athletes on most academic measures.
2. No significant differences were observed on academic measures between full-grant, partial-grant, and no-grant athletes participating in either male or female non-revenue sports.
3. No significant differences were observed on academic measures between white athletes in male revenue sports and white athletes in male non-revenue sports.

4. Male black athletes participating in revenue sports encounter significantly greater problems academically than male white athletes participating in either revenue or non-revenue sports.
5. Although many minority athletes are less prepared for and encounter serious difficulties with their college work, the average minority student's high school class rank was at or slightly above the median.
6. Athletes, except for black revenue sport athletes, achieve at their predicted grade averages.

Recommendations

1. Assessment of academic ability should receive high priority during the recruiting of any athlete.
2. A comprehensive program of academic assistance and tutoring should be made available to the student-athletes and should begin as early as possible.
3. In particular, the needs and academic objectives of minority athletes should be assessed.
4. Further study of student-athletes, particularly minority athletes, should be made to better understand the academic problems in this sensitive area.
5. A variety of experimental programs should be developed and tested to help athletes achieve their academic potential.
6. Similar studies should be replicated at other institutions with major athletic programs.

Discussion

This research examined the academic records of the athletes at one Division I athletic program. The results document that, at this university, female athletes perform well in the classroom. White male athletes achieve at approximately their predicted grade point average. Black male student-athletes participating in revenue sports experience more serious academic problems than white student-athletes.

It is clear that there are substantial differences in the academic and cultural backgrounds of white and black student-athletes prior to the students' college entrance. However, this study was not designed to detect a cause-effect relationship. Thus to conclude that the university, the athletic department, or any specific factor has caused the academic differences between groups is not warranted.

The results of this research indicate that there is a specific problem area within this athletic population, specifically the black male revenue athlete. In the four years that a black athlete is at any post-secondary institution, it may be impossible to unravel and correct all of the factors which have contributed to the athlete's academic problems. Yet an awareness of the problem is an important first step.

Although it is not valid to conclude that the relationships which exist among the athletes at one university also hold for athletic programs at other major universities, it is likely that similar relationships hold. Further research is needed to better understand the academic problems of student athletes. This research provides a model which can be replicated at other institutions. As others conduct similar research, the degree to which these results generalize will be more fully understood. Some may not want this type of sensitive research to be conducted. Research must be conducted if programs are to be designed and implemented to assist student-athletes, particularly minority student-athletes, attain their academic potential.

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Strong Back/Strong Mind, Mutually Exclusive?

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Abstract

Those who object to the NCAA's Proposition 48, which was passed for the purpose of making sure that athletes do not participate in athletics the first year unless they are properly prepared for college work, appear to be doing a disservice to the athletes. They seem to imply that athletes are unable to demonstrate ability, especially the black athletes. Though some black athletes do tend to score lower on admissions tests than some white athletes, the facts do not prove that athletes, black or white, as a group, are any less able, potentially, than any other group.

Strong Back/Strong Mind, Mutally Exclusive?

For many years the term "dumb jock" has had meaning for a lot of people. The adage strong back, weak mind, was considered a truism. Though these phrases were not proven by fact, they had all too wide acceptance. Unfortunately, the complaints surrounding the adoption of the NCAA's Proposition 48 have implied new credence to these old phrases.

Forty or fifty years ago, the football powers recruited from the steel mill towns of the East and the farms of the Midwest. They sought out unsophisticated young men who would not ordinarily have considered attending college. The payoff was a college education and the access to a new world of opportunity that education granted. Little was thought of professional basketball or football at that time.

Gradually, the recruiting area shifted to the big cities of the country, and to the black population. With television came a new level of exposure for professional sports. Millions of people had an opportunity to see these activities for the first time. Professional sports became a multi-million dollar business and its participants became heroes to many young boys. Young black boys and their families seem especially affected by this. Melvin Oliver (cited in Edwards, 1984) reports that black families are four times more likely than white families to view their children's performance in athletics as the "stepping stone" to a professional career, and the key to success.

Where, forty to fifty years ago, the way up in the world was signified by the college diploma, now it is viewed as the professional sports contract. Edwards (1983, 1984) states that too few black families appreciate the small

chance there is for the student-athlete to actually graduate to the pros. He states that a black student's chance of becoming a doctor is better than becoming a professional athlete. Unfortunately, high school students who see their future in professional sports, see college only as a tryout or training ground for their chosen career in professional sports. It is no surprise that large numbers of athletes in revenue-producing sports don't do well academically, considering the students' low regard for education and their perceptions about the money to be made in professional sports. To some institutions, intercollegiate athletics are an integral part of the makeup of the institution.

Clark and Trow (1966) developed four typology models to classify and explain characteristics found on different campuses. The "Collegiate" model, which is characteristically middle and upper-middle class, is found on most large state university campuses with large resident populations. It also describes most of the Division I football powers, and tends to favor the likelihood of a football and/or basketball program being important to the everyday functioning of the institution. The stereotype of college life is of the collegiate type: "a world of football, fraternities, sororities, dates, cars, drinking, and campus fun" (Peterson as cited in Sandeen, 1976 p. 51). This lifestyle is not hostile to education—it actually produces intense loyalties—but it is often indifferent to appeals to scholarly activities.

In addition to tradition, intercollegiate sports, especially football and basketball, have become important to the institutions because of the money and fame they bring. A number of studies have been done that are intended to make us think that athletic excellence and giving to the university are unrelated (Frey, 1985; Gaski, 1984). Frey's article analyzes 12 other articles, most of which say that there is no positive correlation between donations to the institution and the success of their athletic teams. One has to analyze each individual institution to really determine how much financial gain comes from a stellar program. Simple statistics involving won-lost records and alumni contributions don't necessarily tell the whole story.

In an AP story published December 27, 1985, reference is made to a story in the Washington business magazine, "Regardie's," indicating that Georgetown made an extra \$12 million during the time Patrick Ewing was playing basketball for the school. Obviously, this sum is a little speculative, but the individual figures quoted do not seem unreasonable, and the athletic department was not the only beneficiary. One area where Georgetown's revenue increased was in the number of applications for admission: that is money in the general fund, not in the coffers of the athletic department. People like to be associated with a winner, even if it is just as an alumnus or fan.

Once the stadiums or arenas are filled frequently enough that demand for tickets regularly exceeds supply, a number of options are opened. One sometimes used is to require a large contribution to the university, often the general fund, in order to purchase tickets.

For a variety of reasons, many employees and supporters of the "collegiate" type of school believe that the "old alma mater" must have the best athletes that are to be found. When athletes are looked at under the lens of the researcher's microscope, they are divided into two groups, those from revenue-producing sports (football and basketball) and those from non-revenue-producing sports (gymnastics, fencing, etc.) One further assumption is made by the media, fans, and/or coaching personnel, if a "kid" can play "BALL," nothing else matters. It doesn't matter if he can read or write or do anything academically. The "reasoning" is that since revenue-producing sports bring large amounts of money into the institution, no expense, financial, moral, or ethical, should be spared in finding the best, most exciting athletes for their school.

This type of attitude has contributed monumentally to what is perceived to be a large problem in college sports. The NCAA passed Proposition 48 to make sure that freshmen cannot play if they do not meet minimum preparations standards. The members of the NCAA's Presidents Commission and the Committee of Presidents formed by the American Council on Education have both announced determination to bring athletics back under the control of academics (Witosky, 1986).

Not everyone has agreed with the manner in which the NCAA, through the passage of Proposition 48, has attempted to deal with the aspect of unpreparedness among varsity athletes. Unfortunately, those objecting to Proposition 48 and its requirements have focused new attention on the "dumb jock" image. The opponents have not objected to the requirement for students to have a 2.0 grade point average in a core of 11 courses, but that has received little attention.

The bulk of the publicity has centered around the objections to the requirement for ACT scores of 15 or combined SAT scores of 700. It is true that blacks score lower on the ACT and SAT than whites and it is also true that poor whites and blacks score lower than middle- and upper-class blacks and whites (Baird, 1984; Barry, as cited in Edwards, 1983; Jenson, 1982). The problem is that all the objections have brought a lot of negative publicity to the student-athlete. Coaches and black leaders have been quoted with grim statistics as to how many of yesterday's great athletes would have been ineligible had Proposition 48 been in effect when they had been freshmen. This does more harm than good to the cause that Proposition 48 was intended to address: improvement of poor academic preparation by student athletes; in addition, it does not present the complete picture.

As the beginning of the 1986 season has come and gone, only a handful of athletes were actually declared ineligible for freshmen competition under the provisions of Proposition 48. Interestingly enough, in examining records from previous years, some individuals have been identified that would have been able to participate under Proposition 48, with its sliding scale, who were not able to participate as freshmen under the old rules. There were some

students, some black, who had high enough ACT scores to offset their below-2.0 GPA's.

It is ironic that both sides of the argument surrounding Proposition 48 use the term "slavery" when discussing its effect on black youth. Joseph Johnson, President of Grambling University, is quoted (Rabun, 1985) as saying, "Misguided and misdirected members of (the NCAA), embarrassed by revelations of academic problems, are reverting to slave days." Harry Edwards (1984) says, "...if black student athletes fail to take an active role in establishing and legitimizing a priority upon academic achievement, nothing done by any other party to this...tragedy will matter—if for no other reason than the fact that *a slave cannot be freed against his will.*"

In consideration of the controversy over GPA and SAT or ACT scores, Ervin, Saunders, Gillis & Hogrebe (1985) reported on a developmental program for underprepared freshmen, enrolling about 300 students per year, 15 to 20 percent of whom are involved in intercollegiate athletics. Male scholarship athletes from football and basketball in the study were observed in regard to how they would be affected by Proposition 48. The findings showed that those with higher SAT scores resolved their deficiencies more rapidly, while HSGPA was negatively correlated to the length of time taken to remediate their deficiencies. Findings such as these are one of the reasons that evaluators of high school programs are unwilling to take high school grade-points at face value, and ask for ACT or SAT. Some of the higher high school grade point averages are high because the students have taken only the easiest courses. The need to have a 2.0 GPA for 11 specific types of courses will go a long way toward solving the problem of non-comparable HSGPA's. However, this will still not obviate the need for ACT or SAT scores or some standard measuring stick, since courses, such as 10th grade English at one school, might not be comparable in regard to skills required in the corresponding course at another school.

Another study (Stuart, 1985), conducted at a large midwestern university, showed some slightly different results. This study dealt with football players enrolled at the institution from 1977-1980. The players were matched in qualities to a list of like males, except for the fact that they were not participating in any sport, on scholarship or as a walk-on. As other studies found, the athletes were less well prepared than the non-athletes, especially in math. The high school ranks were higher, for the athletes, but GPA and ACT scores were lower. The performance after two years was very similar: there were actually more of the athletes still in school than the non-athletes. The success was credited to the extensive support system for athletes on the campus.

Little has really been done to try to defend the position of the student-athlete. There are some special stresses put on student-athletes. If anyone doubts this, he need only think how it would feel to be on the football field in front of 50,000+ fans, and be booed. The athletes' experience and

expectations imposed upon them, by virtue of their position as athletes, need to be examined. The first expectation has to do with the number of hours athletes are expected to give in return for their scholarships. Most athletes at Division I schools put in considerably more hours per week in practice and playing time than do other students working for the school for room and board, or room, board and tuition. Chancellor Charles Young of UCLA stated (as cited in Witosky, 1986):

Students should not be required to spend 40 hours a week practicing and competing without any real break. That simply has resulted in having only the very most qualified students who are also athletes being able to graduate on time.

To quote James Rhatigan (1984) in speaking about Division I basketball players:

No other students are required to miss 15-20 percent of their classes to receive their scholarships, grants, or loans... For schools in post-season competition, the percentage of required absences on class days would approach 30 percent in the January-February-March period.

Rhatigan also suggests that the 12-hour minimum load requirement may be unfair, when you consider the minimum number of hours required by other students working fewer hours than the athletes, for essentially the same remuneration. Another possibility would be for universities to offer courses, open to anyone at the university, that meet twice as often for half the semester. This is often done to serve the needs of special weather conditions or special populations. So far athletes have not been one of the special populations. Coakley (1982) wrote of the inaccurate perception of some that athletes are the subjects of favoritism. There is undoubtedly concern on the part of any administrator who might have thought of this, that some elements would perceive this as the favoritism Coakley wrote about. This is an example of the double standard often applied to athletes.

Another example comes from a large midwestern university that has had very successful football and basketball teams. The players were often sought out for interviews with the media. Some of the players were well-spoken and comported themselves very well; others were obviously flustered, uncomfortable and were struggling for words. A nearby agency which dealt with public relations problems, among other things, offered to give a course to the players in order to help them prepare for interviews. The local media reported that the conference head office had become informed about this offer and told the team and the company that the deal was off unless they planned to offer the course, in the same manner, to all members of the university. If officials had required that the course be offered to all students at the university who might be in positions that could bring them in front of a TV camera, representing the university, there would have been some logic to their argument.

It is interesting that both academic involvement and athletic involvement are found to develop similar personal characteristics in students (Astin, 1984). Both groups of students develop intense loyalties to the institution and are affected less by their peers than are the average students. Since both activities take up a great deal of time, both types of students are to some degree isolated.

A new emphasis on the intellectual athlete is appearing in the news. Considering professional football defensive players, playing positions not previously known for using intellectual heavyweights, it is interesting that commentators doing 1985 NFL Chicago Bears games kept repeating how bright those players had to be to understand the complicated system. Some coaches admit that the player with whom the coaching staff has a hard time maintaining eligibility is often the same player who also fouls up on the playing field or court. It is totally illogical to assume that an individual who is able to memorize a long and complicated playbook is unable to learn other material. An overall look at the situation does not seem to indicate that schools have to accept individuals who are totally inept academically because they are athletes of unmatched skill. With the help of Proposition 48 to emphasize the expected requirements for all students planning to continue their education, it will be up to physical education and student development professionals to cooperate in developing programs that will help college students find ways to develop their minds and bodies toward reasonable career plans.

Blann (1985) studied 568 students, male and female, non-athletes and athletes, from team and individual sports, and from NCAA Division I and Division III schools. Findings were that underclass male athletes from both divisions were less able to formulate mature career and educational plans than any other group. Twenty-eight percent of the male athletes in Division I and ten percent in Division III planned to achieve professional status, while only four percent of the females in Division I and none in Division III had the same intentions. A portion of this may be blamed on the tendency found by Yiannakis as cited by Blann (1985) of the tendency to spend a significant amount of time thinking about practice, winning, and the next competition, not leaving much time for making realistic career and education plans.

Before college athletics are condemned for encouraging daydreaming and other non-productive activities, the effects of participation in other extracurricular activities need to be examined. Though no studies are cited, observation has led to the conclusion that other extracurricular activities could be substituted for athletics in these findings.

Students who are involved in drama or music or even student government can become so totally immersed in their activities, that they barely function as students. Their lower profile accounts for some of the reason that their GPAs or graduation rates are not emblazoned across the top of the nation's newspapers. Another inequity is that music or drama or other students can

major in the activity they enjoy most, that occupies the majority of their waking thought. However, when the student-athlete wants to major in physical education, people belittle the choice. This denial of the athlete's legitimate option to choose to major in the program he perhaps most enjoys, is a denial forced on no one else. As a matter of fact, little is thought about the artist who takes few courses in college outside his art, even though his chances of becoming a professional artist are very slim, maybe about the same as the athlete wanting to make "pro."

Research has shown (Mathes & Gurney, 1985) that student-athletes in revenue-producing sports are actually more interested in the academic reputation of the school than are those in non-revenue-producing sports. Regardless, students who have no idea of what they want to do, or who have no interest in anything but their sport, present a problem. A number of studies (Bradley & Wark, 1984; Munday, 1976) have shown that a lack of career decision is a common reason given for leaving school or getting poor grades.

Terenzini & Pascarella (1978) found that the two best predictors of retention in students have to do with the curriculum. They found that academic appeal, as perceived by the student, is positively correlated to retention and the amount of dullness in the academic program is negatively correlated. If one accepts as fact that all events in life are relative to one another, it is not too difficult to understand how easy it is sometimes for the academics to seem relatively dull when compared to hearing 50,000 people cheering.

In the case of athletes, they are not as likely to drop out if they perceive the curriculum to be dull, but they will do very little more than the minimum. A portion of this problem still comes back to the question of preparation. It will be up to teachers, administrators, parents and the students themselves to make sure that students enter college as well-prepared as possible. Evidence seems to indicate that athletes' academic problems are more likely to be because of motivation toward academics rather than a lack of aptitude.

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The Student-Athlete's Predicted Monetary Value to an Institution

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The Student-Athlete's Predicted Monetary Value to an Institution

During recent months articles have been published in *Washington Regardie's Business*, 1986, and *The NCAA News*, 1986, denoting the number of dollars generated by certain athletes to the financial benefit of particular institutions because of the athlete's enrollment, athletic participation and subsequent team success. It appears that information contained in these articles is misleading and incorrect. Two well-known athletes who have been involved in these projections are Doug Flutie, quarterback for the Boston College football team, and Patrick Ewing, center for the Georgetown University basketball team. This article comments on the misleading information as presented in both the Flutie and Ewing projections, identifies other factors which must be considered in such monetary projections and details the dangers of this misleading practice.

Information pertaining to Ewing's projected monetary value of 12 million dollars accruing to Georgetown University was published in *Washington Regardie's Business* magazine, a Washington, D.C., business publication. An error which was made in calculating the 12 million dollars profit to Georgetown University is the use of the base figure of \$11.00 per seat (average ticket "door price" per seat over a four-year period). Not separated or figured into their ticket "door price" was the reduced cost of tickets when bought in advance, a three-tiered ticket price, season ticket prices, student tickets, special ticket prices for special promotions and complimentary tickets. The average ticket price over the four-year period as stated by Rienzo in the "Letters" section of *The NCAA News*, April 23, 1986, was closer to \$7.02, not \$11.00 per seat. The 12-million-dollar profit would be lowered not only by the reduced per-seat cost, but also by other factors such as: sharing of profits from ticket sales, splitting tournament revenue and payment of revenue taxes.

Information pertaining to Flutie's monetary value to Boston College was published in *New England Monthly*, May, 1985. While no obvious errors are noted, it is not clear if the assumptions involved in some of the calculations considered other possibilities that might have caused a monetary increase for the institution. For example, in calculating the increased revenue from freshman applications, the *New England Monthly* article compared revenue from the freshman applications for the total of the four years directly preceding Flutie's attendance to the total of the four years during Flutie's enrollment at Boston College, attributing all of the difference in this form of revenue to Flutie's attendance. Circumstances other than Flutie's enrollment may have caused some of the difference.

A summary of the factors which need to be considered when attempting to evaluate the monetary revenue a student-athlete brings to an institution are: enrollment and admission applications preceding the enrollment of the student-athlete; the difference in per-game home attendance after the student-athlete matriculates to campus; increase or decrease in television revenues including post-season play; post-season revenues from contests; increase or decrease in sales from related paraphernalia, including clothing; and increases or decreases from concessions. However, it is important to note that all of these factors may have to be adjusted due to unique circumstances which could have caused the increase or decrease in revenues. As Figure 1 illustrates, some of the revenue changes may have occurred without the particular student-athlete enrolling at the institution and without the subsequent team success. For example, in Figure 1, area B must be excluded from projected revenues before arriving at a student-athlete's revenue value. Therefore, area A represents the increased revenues which can be attributed to a particular student-athlete.

Once the "new" revenues have been calculated, it is important to accurately deduct the necessary expenses. Examples of these deductions include: an institution sharing its bowl game and television revenues with other conference institutions and the conference office. Also, sales tax must be subtracted from the appropriate items (tickets, trinkets, food, etc.).

The dangers of publications which provide misleading information are many. First, alumni are misled and channeled into thinking that by acquiring a "blue chip" athlete the institution should substantially improve its financial status. Second, faculty members and students assume that there will be or there presently are more dollars available than actually exist. Third, student-athletes begin to think that they are of much greater financial value to the institution than is true. Fourth, budget committees at institutions may mistakenly think that athletic departments have stored or hidden monies somewhere. Last, and in a somewhat different vein, prospective student-athletes should not be misled into thinking that their monetary value is greater than it actually is. In most situations the athletic monetary value of a prospective student-athlete should be minimized, while the student's

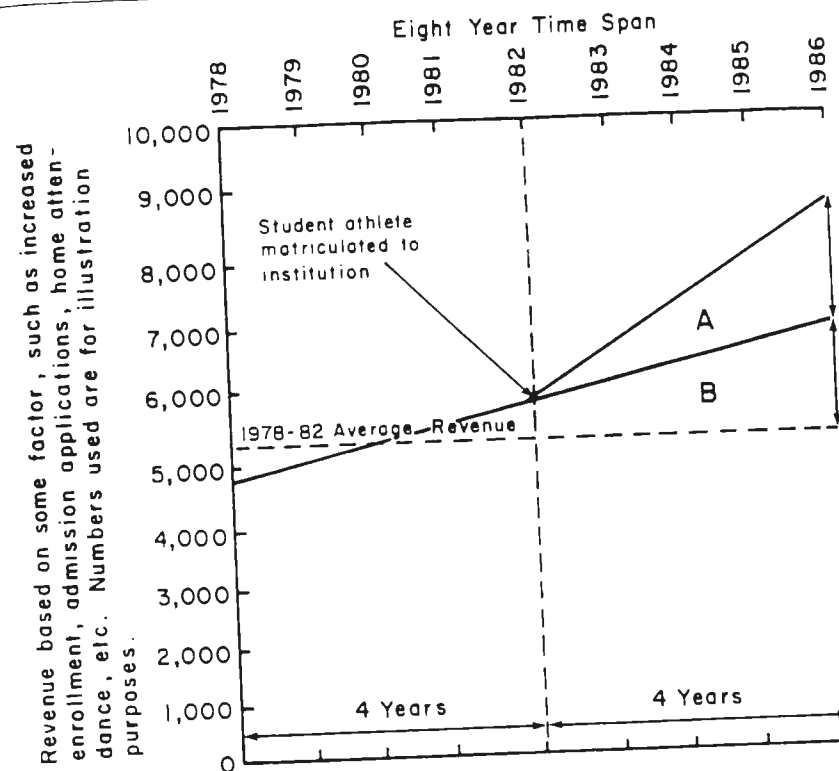


Figure 1. Example of trend considerations which must be part of analysis.

educational value should be emphasized. The student-athlete must be reminded, encouraged and assisted in developing and retaining equilibrium between displaying athletic skills and efforts to complete a degree in higher education.

It is doubtful that institutions such as Boston College or Georgetown University would argue that the two aforementioned athletes did not, by their attendance and athletic skills, bring dollars to the institution which would not have been received had the two athletes not attended their respective institutions. The question is, how much money was gained by each of the two institutions because of the two athletes? Broader questions are: What is the financial gain to an institution from the enrollment and athletic skills of an outstanding athlete? Is there a realistic plan or formula(s) which can be used in attempting to calculate the monetary value of an athlete to an institution?

It seems elementary to develop a plan or formula which can project the monetary value of an athlete to an institution. However, it is complex to

develop an individual analysis or overall process which accurately and realistically identifies those items and to what degree those items should be used to determine the monetary value of a particular student-athlete to a particular institution during a specified time period. Providing misleading information can be extremely harmful; therefore, every effort must be made to eliminate inaccurate analysis processes which project incorrect information.

It is relevant and probably important that institutions attempt to analyze the financial importance of student-athletes. For if they don't, uninformed media (as in the Ewing case) may attempt to analyze the student-athlete's financial importance, resulting in misleading information being disseminated to the general public.

Counselors and other persons who have the responsibility of communicating with the press need to be aware of how factual information is obtained, calculated and analyzed, rather than accepting the information as truly representing the situation or condition. People who are to officially comment on financial conditions related to the institution and the student-athlete have the responsibility to analyze all pertinent information.

Student-athletes need to realize that the opportunity to obtain an education and an academic degree is part of the exchange for athletic involvement. From the beginning of the recruitment process and throughout the educational experience, the academic counselor should stress the "hand-in-hand" relationship of athletics and education. Advising the student-athlete concerning athletic and academic matters needs to begin when the coach or other official representative of the institution conducts the first visit with the student-athlete. Acknowledging academics and creating an academic emphasis should be part of all recruiting visits.

Academic counselors need to accent that the student-athlete is assisting the institution by displaying athletic skills and the institution is assisting the student-athlete by providing an educational opportunity; thereby helping to provide challenging and rewarding employment possibilities following the student-athlete's active period in athletics.

Student-athletes, through their athletic experience, need to learn about courage, leadership, self-expectation, discipline, pride, sacrifice, ethics, failure and success. The optimal achievement is to create an environment whereby the student-athlete will assimilate experiences and formal education, thereby becoming an asset to one's profession and to society.

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