

1987

The academic achievement of student-athletes in the football, wrestling and basketball programs at the University of Northern Iowa 1976-1984

Charisse L. Brown
University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©1987 Charisse L. Brown

Follow this and additional works at: <https://scholarworks.uni.edu/grp>



Part of the [Education Commons](#)

Recommended Citation

Brown, Charisse L., "The academic achievement of student-athletes in the football, wrestling and basketball programs at the University of Northern Iowa 1976-1984" (1987). *Graduate Research Papers*. 2106.

<https://scholarworks.uni.edu/grp/2106>

This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

The academic achievement of student-athletes in the football, wrestling and basketball programs at the University of Northern Iowa 1976-1984

Abstract

In recent years, the problems of intercollegiate athletic programs have received increasing attention. Some of these problems are essentially non-academic in nature, e.g., the use and abuse of recreational drugs and steroids by student-athletes, point-fixing by college basketball players who were involved with professional gamblers, and seemingly endless violations of National Collegiate Athletic Association regulations governing the recruitment of student-athletes.

THE ACADEMIC ACHIEVEMENT OF STUDENT-ATHLETES IN THE
FOOTBALL, WRESTLING AND BASKETBALL PROGRAMS AT THE
UNIVERSITY OF NORTHERN IOWA 1976-1984

A Research Paper

Presented to

The Department of Educational Administration
and Counseling

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

by

Charisse L. Brown
April 1987

TABLE OF CONTENTS

CHAPTER I

THE PROBLEM	
Statement of the Problem	1
Limitations of the Study	2
Definition of Terms	2

CHAPTER II

REVIEW OF RELATED LITERATURE	4
Intercollegiate Athletics: Historical Background	4
Intercollegiate Athletics: Present Status:	7

CHAPTER III

DESIGN OF THE STUDY	12
The Sample	12
Gathering the Data	12
The Comparison Group	13

CHAPTER IV

THE FINDINGS	15
------------------------	----

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY	21
Summary of the Data	22
Recommendations for Further Study	22

List of Tables

1.	Graduation Rates and Academic Status of	16
	UNI Student-Athletes	
2.	Graduation Rates of UNI Student-Athletes	17
	by Sport	
3.	Graduation Rates of UNI Student-Athletes	18
	by Race and Sport	
4.	Academic Status of UNI Student-Athletes	19
	Who Left the University Before	
	Completing Degree Requirements	
5.	Cumulative Grade Point Averages of	20
	UNI Student-Athletes	

Chapter 1

The Problem

In recent years, the problems of intercollegiate athletic programs have received increasing attention. Some of these problems are essentially non-academic in nature, e.g., the use and abuse of recreational drugs and steroids by student-athletes, point-fixing by college basketball players who were involved with professional gamblers, and seemingly endless violations of National Collegiate Athletic Association regulations governing the recruitment of student-athletes.

As troublesome as these issues are, others are of even greater concern to academe, because they impact directly on the educational mission and academic integrity of institutions of higher education. For example, there have been flagrant abuses of transfer credits to keep student-athletes eligible for competition. There is evidence that many student-athletes are admitted with admission test scores and high school grades well below the achievement levels of non-athletes. It is generally acknowledged that many student-athletes' classroom performance is minimal, just enough to maintain eligibility, and that the graduation rate of student-athletes in some programs is alarmingly low.

Statement of the Problem

The purpose of this study was to examine the academic success and general academic achievement of students participating in

the football, wrestling and basketball programs between the years 1976 and 1984 at the University of Northern Iowa (UNI). Specifically, this study addressed the following questions: How many of the student-athletes graduated in five years or less? Was there a difference in the graduation rates of student-athletes by race and sport? How many of the student-athletes who did not graduate left the University in good standing academically? What were the cumulative grade point averages of the student-athletes? How many of the student-athletes were placed on academic suspension, probation, or warning?

Limitations of the Study

UNI competes with NCAA Division I and I-AA institutions. Therefore, the results of this study can only be generalized to institutions of similar size and level of intercollegiate competition.

This study does not provide follow-up information concerning students who withdrew from UNI for non-academic reasons. In addition, the study does not provide data concerning the relationship between the high school and college academic achievement of student-athletes. These limitations offer direction for future research.

Definition of Terms

Student-Athletes - Students who were listed on eligibility rosters for the basketball, football or wrestling programs from 1976-1984.

Academic Success - For purposes of this study, academic success was defined as: a) graduation from UNI in five years or

less, or b) a cumulative grade point average of 2.00 (4.00 = A) or greater for non-graduates.

Academic Warning - A status which indicates that a student is one to five grade points deficient of the number necessary for a 2.00 grade point average at UNI.

Academic Probation - A status which indicates that a student is 6 to 13 grade points deficient of the number necessary for a 2.00 grade point average at UNI.

Academic Suspension - A status which indicates that a student is 13 or more grade points deficient of the number necessary for a 2.00 grade point average at UNI.

In Good Standing - A student in good standing at UNI has a cumulative grade point index of at least 2.00 for all college work.

Chapter 2

Review of Related Literature

The relationship between academe and intercollegiate athletes has been uneasy from its inception; allegations of professionalism and an overemphasis on winning existed almost from the beginning. However, it was the charge that the presence of athletic competition on campuses of higher learning corrupted the academic integrity of the academy which brought the greatest protest from faculty. Charges that student-athletes are primarily athletes, and only secondarily students, pre-date modern times. Thus, the phrase, "majoring in eligibility," is not unique to the present but can be traced to the "roving athlete" who took advantage of recruitment violations and adjusted admissions policies which began with the establishment of intercollegiate athletic programs at institutions of higher learning.

Intercollegiate Athletics: Historical Background

Ryan (1929) sought to explore the issue of amateurism in intercollegiate athletic programs. Charges by faculty, university administrators and members of the athletic community that intercollegiate athletic programs were dangerous, and interfered with the pursuit of scholarship by the student body, were also examined. He found that there was an element of professionalism in many intercollegiate athletic programs, as exhibited by the over-emphasis on winning, player recruitment and paid athletic staff.

Intercollegiate athletic programs in American society had their origins in the 19th century, with the rise of spectator sports such as running, sailing, wrestling, shooting matches and foot races (Bucher, 1965; Ryan, 1929). The first intercollegiate sporting event occurred in 1852 when a crew race was organized between Harvard and Yale. The next intercollegiate sport was baseball; the first contest was in 1859 between Amherst and Princeton. The first game of intercollegiate football was played between Rutgers and Princeton on November 6, 1869 (Bucher, 1965).

The period 1870-1885, immediately following the Rutgers-Princeton game, was marked by the increasing popularity of intercollegiate football and baseball and by strong faculty resistance to the pursuit of these non-educational activities. While spectators filled the arenas, faculty decried the evils of athletics and the non-educational value of sports in higher education. Despite the resistance of faculty, students organized competition intramural and extramural with nearby colleges (Bucher, 1965; Moore, 1954; Ryan, 1929).

The period 1886-1906 was characterized by the expansion of intercollegiate athletic programs, due to their popularity with students and spectators, and by the emergence of physical education as a viable academic discipline (Bucher, 1965). The expansion of athletic programs resulted in extensive player recruitment, larger athletic budgets, paid athletic staff, numerous injuries in football, and larger spectator crowds.

Because of these developments, particularly the financial burdens caused by larger staff and better equipment, the student-managed teams began to solicit and accept larger operating donations from the alumni. In return, the alumni began to assume more power and influence over the operation and management of these programs (Bucher, 1965).

With the onset of paid staff and larger budgets, unethical practices escalated. Skilled athletes were openly recruited by captains and team managers. Offers of nominal employment were made to athletes; promises of social gain and future athletic success were used to lure athletes to colleges and universities. It was also common practice for larger universities to recruit athletes openly from smaller liberal arts colleges. Athletes transferred from one school to another without penalty and maintained playing eligibility on a team in spite of enrolling in only one course a term (Bucher, 1965; Moore, 1959; Ryan, 1929).

Because of these abuses, athletic governing bodies emerged to restore credibility to amateur intercollegiate athletic programs. The Intercollegiate Association of Amateur Athletics in America in 1875, Intercollegiate Football Association in 1876, Western Conference (Big Ten) in 1895, and the National Collegiate Athletic Association in 1905 were established to set standards for player eligibility and fair play in intercollegiate sports (Bucher, 1965; Moore, 1957).

Early measures included the restriction of competition to full-time college students, limiting competition to four years of eligibility, penalizing football players one year of eligibility for not continuing in regular attendance at the college for two-thirds of any year in which they played, and requiring one year of residency for transfer students before granting eligibility (Bucher, 1965). To date, many of these measures are considered only marginally successful in light of the continued abuse still evident in the recruitment, admission and retention of athletes at institutions of higher learning.

Intercollegiate Athletics: Present Status

The foundations of college sports in the United States have been shaken by revelations of academic compromises made in the interest of intercollegiate athletics. Among the unethical practices that have been uncovered are: falsified transcripts, athletes receiving credit for courses not taken, and the financial and academic exploitation of athletes (Edwards, 1969; Purdy, Eitzen and Hufnagel, 1982). Research suggests that while coaches publicly espouse that their athletes are students first and athletes second, their primary interest is to keep the players eligible by whatever means necessary.

These practices are numerous enough to lead some to conclude that corruption of academic ideals is endemic in universities with major sports programs (Sage and Eitzen, 1982). A ten year study at Colorado State University (Purdy, Eitzen and Hufnagel,

1982) found that athletes as a whole were consistently less prepared than the general student population, as manifested by lower grade point averages and graduation rates. Specifically, black athletes experienced a graduation rate of 20 percent, compared to 35 percent for white athletes. In addition, black athletes graduated at a rate of 40.5 percent compared to 48.6 percent for white non-athletes. Studies indicate that as many as 65 to 76 percent of the black student athletes and 30 to 35 percent of the white student athletes may never graduate from college (Edwards, 1984).

In a Michigan State University study, it was found that 49 percent to 60 percent of the student-athletes in various sports had graduated over a five-year period as compared to 70 percent of the general student population (Webb, 1968). Harrison (1976) found that less than 20 percent of the football players who entered North Texas State University from 1966 to 1971 went on to obtain degrees from the University. A study at the University of New Mexico (1980) revealed that only 21 percent of the football players had graduated since 1970. Other graduation rates cited in the study were: 24 percent for track and wrestling and 28 percent for basketball. Given these statistics, it is not surprising that many believe intercollegiate athletes are majoring in "eligibility" as opposed to education. This view of the student-athlete, and the data which support it, perpetuate the fallacy that athletes are intellectually incapable of succeeding in higher education and the current view that winning is all important (Edwards, 1969; Sack, 1977; and Theil, 1982).

These contentions have prompted great concern in the academic and intercollegiate athletic communities. The National Collegiate Athletic Association has recently implemented the controversial Proposition 48 which specifies a total of 11 academic courses for high school athletes and minimum SAT/ACT scores of 750 and 15, respectively, for potential intercollegiate athletes. Critics of Proposition 48 maintain that it does not address the issues of illegal recruiting, preferential treatment in the admission process, retention, and overall academic capabilities of intercollegiate athletes. Proponents maintain that Proposition 48, by specifying 11 academic courses and minimum ACT and SAT scores, is securing a level of preparedness which will allow high school student-athletes to compete academically at the collegiate level. Whatever one's position, both sides agree that Proposition 48 makes an attempt to address the underpreparedness of intercollegiate athletes by setting academic standards for student-athletes at the high school level.

In addition, the National Association of Academic Athletic Advisors was founded in 1976. Its membership grows steadily as institutions become aware of the special needs of student-athletes. More full- and part-time positions are being created for those who are charged with maintaining the institution's academic and moral integrity. Student-athletes are systematically exposed to academic advisors who provide information on university services, tutoring, remediation, course advising, counseling, and placement upon graduation. Additionally, many academic

advisors to athletes are involved in orientation, serve as liaisons with faculty, and monitor the overall academic progress of student-athletes. The presence of these academic advisors at institutions of higher learning reinforces the institution's "contractual" agreement with student-athletes, i.e., a college education in return for four years of athletic competition (Golden, 1980; Mihalich, 1980).

Consistent with this concept is the effectiveness of the University of Michigan's student-athletic academic support program. Walter and Smith (1986) reported that only two football players have failed to graduate for academic reasons since 1981. The backbone of the Michigan program lies in the philosophy that every athletic recruit has the "right stuff," no matter how low his SAT scores may be, to succeed academically as well as on the playing field. The Michigan program utilizes strategies which involve the total assessment of the student-athlete's potential to succeed and implementation of a program which ensures that he succeeds academically. Key components of the program include: an assessment of the student's reading and writing abilities during the orientation process; assignment to a specialist in reading, learning skills, writing and math instruction; monitoring the student's progress; individual and instructional sessions; and psychological support.

Leach and Connors (1980) recommended a similar program for black student-athletes on predominantly white campuses. Their recommendations include: the establishment of stress-and time-

management programs which will assist the student in the handling of the dual role of student and athlete, peer counseling and personal adjustment programs to assist in social and academic adjustment to college, and programs to foster an appreciation for, and development of, study skills/academic skills. Finally, research indicates that for academic assistance programs to establish credibility, they must be associated with an academic department. This communicates that the student-athlete is, first and foremost, a student.

Implicit in the implementation of Proposition 48, and the emergence of athletic academic advisors and academic support programs for student-athletes, is the acknowledgement by colleges and by athletic associations that a problem does exist. These actions indicate that the institutions and the associations are taking measures to maintain the integrity necessary for athletics and academia to co-exist.

Chapter 3

Design of the Study

In this chapter are described the research sample, data gathering procedures, and the comparison groups.

The Sample

The sample of 168 student-athletes was drawn from a population of 199 student-athletes listed on the eligibility rosters of the UNI football, basketball and wrestling teams from 1976-1984. This population was selected because it represents the revenue-producing sports. The sample of 168 consisted of 100 football players, 52 wrestlers and 16 basketball players.

Thirty-one student-athletes were not included in the study for the following reasons: ten were admitted to the University prior to 1976, admissions data were unavailable for eight, and information on academic progress was unavailable for thirteen student-athletes.

Gathering the Data

Research data on graduation, cumulative grade point average, and academic warning, probation, and suspension were obtained from the records of the UNI Registrar's Office. Date of admission, ACT scores and race were gathered from the UNI Admissions Office.

Registrar's Office data were obtained from the on-line computer system installed in 1983 and, when necessary, from the students' hard-copy records. Admissions Office data were

obtained from the on-line system, microfiche records, and from the actual admissions application. Permission to utilize these sources was obtained from the appropriate administrators.

The subjects were "tracked" during their academic careers to determine if they were placed on academic probation, warning or suspension; whether they graduated from the University; and their cumulative grade point average.

The individual student was protected from identification by any person examining the group data at the conclusion of this study. A need was anticipated for identification by name and student number during the process of gathering data in order to locate student records. The data were gathered, analyzed, and presented in table form to address specific research questions. their cumulative grade point average.

The Comparison Groups

Two comparison groups were used: students who entered the Iowa Regents universities as freshmen in the Fall, Spring and Summer terms of 1975-76 and those who entered as freshmen in the Fall of 1980. Information about the comparison groups was obtained from the 1975-76 and 1980 Regents Persistence Studies.

The purpose of these studies was to provide data pertaining to the enrollment, persistence and academic performance of undergraduate students who were enrolled at the University of Northern Iowa, Iowa State University, and the University of Iowa, either as freshmen direct from high school or as transfer students. Student data, obtained from the appropriate

administrative offices of the Regents universities, consisted of status (new freshman, transfer), sex, high school rank in class, American College Test composite score, earned degree at UNI or other Regents university, length of time spent at the university of current enrollment, cumulative and mean G.P.A. and academic status. Information was also obtained from a selected sample of the students who did not receive a bachelors degree from the University of Northern Iowa, Iowa State University, or the University of Iowa.

The 1975-76 Regents Persistence Study included entering freshmen, of whom 849 graduated. The 1980 Persistence Study consisted of 2054 entering freshmen, of whom 991 graduated. The 849 graduates and 991 graduates comprised the comparison groups.

Chapter 4

The Findings

The research data facilitated academic achievement comparisons between student-athletes and student-non-athletes and among subgroups of student-athletes.

As shown in Table 1, a total of 87 (51.8%) of the 168 student-athletes graduated in a four, five or six year period; a vast majority of the 87 (89.7%) graduated in either four or five years. The 1975-76 Regents Persistence Study revealed that 849 (41.0%) of the 2,048 freshmen graduated, 94 percent, in five years or less. The 1980 Regents Persistence Study found a graduation rate of 48 percent, and 93 percent of the students who graduated did so within five years. Therefore, the academic success of student-athletes, as measured by graduation from college within five years, compares favorably with that of student-non-athletes. However, student-non-athletes were more likely to graduate in four years with graduation rates of 68 percent and 57 percent for the 1975-76 and 1980 groups, respectively, compared to 16.1 percent for the student-athletes.

The 1975-76 and 1980 Regents Persistence Studies showed that nine percent and eight percent, respectively, of the comparison groups were academically suspended, compared to 14.9 percent of the student-athletes in this study.

Table 1
 Graduation Rates and Academic Status of
 UNI Student-Athletes

Category	Number	Percentage
Students-athletes who graduated	87	51.8
Four years	14	16.1
Five years	64	73.6
Six years	9	10.3
Student-athletes placed on academic suspension	25	14.9
Student-athletes placed on academic probation/warning	23	13.7

Table 2 shows that basketball players were the most successful in terms of graduation rate (75.0%), followed by wrestlers (57.7%) and football players (45.0%). The graduation-within- five-years rates were 68.7 percent, 52.0 percent, and 40.0 percent, respectively, for basketball players, wrestlers, and football players.

Table 2
Graduation Rates of UNI Student-Athletes by Sport

Sport	Graduates								
	4 years			5 years		6 years		T %	
	N	N	%	N	%	N	%		
Football	100	8	8.0	32	32.0	5	5.0	45	45.0
Basketball	16	3	18.7	8	50.0	1	6.2	12	75.0
Wrestling	52	3	5.8	24	46.2	3	5.8	30	57.7

Table 3 indicates that white student-athletes experienced greater academic success in terms of graduation than did black student-athletes. Twelve (30%) of the black student-athletes graduated and 47 (47.5%) of white student-athletes graduated in a four, five or six year period, a substantial difference of 17.5 percent. These data are consistent with the statistical data presented in the literature.

Table 3
 Graduation Rates of UNI Student-Athletes
 by Race and Sport

Category	*N	Graduates	Percent
Black Football Players	31	8	25.8
White Football Players	53	21	39.6
Black Wrestlers	3	0	--
White Wrestlers	39	21	53.8
Black Basketball Players	6	4	66.7
White Basketball Players	7	5	71.4
All Black Student-Athletes:	40	12	30.0
All White Student-Athletes:	99	47	47.5

* Race was not identified by all student-athletes

Table 4 shows the academic status of student-athletes who left the University before completing degree requirements. Thirty-four percent of the football players, 28.8 percent of the wrestlers, and 12.5 percent of the basketball players left in good standing, i.e., with a cumulative grade point average of at least 2.00. About 30 percent of all student-athletes who did not graduate left the University in good standing. The 1975-76 and 1980 Regents Persistence Studies indicated that 58 percent and 59 percent, respectively, of the general student population who did not graduate left the University in good standing.

Table 4

Academic Standing of Student-Athletes Who Left the
University Before Completing Degree Requirements

Sport	N	Left in Good Standing	
		N	Percent
Football	100	34	34.0
Wrestling	52	15	28.8
Basketball	16	2	12.5
TOTAL	168	51	30.4

Table 5 shows that 138 (82.1%) of the student-athletes had cumulative grade point averages of 2.00 or better at the time of graduation or when they left the University, whereas only 30 (17.9%) were not in good standing. The 1975-76 and 1980 Regents Persistence Studies reported mean cumulative grade point averages of 2.98 and 2.97, respectively, for the comparison groups compared to a mean grade point average of 2.43 for the 168 subjects of this study.

Comparing the student-athletes by sport, 21 football players (21.0%) had cumulative grade point averages below 2.00, whereas there were only two basketball players (12.5%) and seven wrestlers (13.5%) who failed to earn at least a 2.00 grade point average.

Table 5

Cumulative Grade Point Averages of Student-Athletes

	Football		Wrestling		Basketball		Totals	
	N	%	N	%	N	%	N	%
3.50 - 4.00	2	2.0	2	3.8	1	6.3	5	3.0
3.00 - 3.49	9	9.0	7	13.5	2	12.5	18	10.7
2.50 - 2.99	32	32.0	20	38.5	4	25.0	56	33.3
2.00 - 2.49	36	36.0	16	30.8	7	43.8	59	35.1
1.50 - 1.99	17	17.0	4	7.7	2	12.5	23	13.7
1.00 - 1.49	4	4.0	3	5.8	0	-	7	4.2

Chapter 5

Summary, Conclusions and Recommendations

Summary and Conclusions

In this chapter, the research findings are summarized and conclusions supported by the data are presented. Also included are recommendations for further research relative to the academic achievement of student-athletes.

The data support the following answers to the following research questions:

- 1) How many of the student-athletes graduated in five years or less?

Seventy-eight (46.4%) of the student-athletes graduated in five years or less; additionally, nine (5.4%) graduated in six years. Based on these data, it appears that student-athletes are graduating at a rate comparable to that of the general student body, 41 percent for the 1975-76 comparison group and 48 percent for the 1980 comparison group.

- 2) Was there a difference in the graduation rates of black and white student athletes?

In all sports, white student-athletes experienced higher graduation rates than black student-athletes. Overall, black student-athletes graduated at a rate of 30 percent as compared to 47.5 percent for the white student-athletes.

- 3) What were the cumulative grade point averages of the student-athletes?

The 168 student-athletes in this study were successful academically in that the majority (138, or 82.1%) were able to maintain cumulative grade point averages greater than or equal to 2.00. However, the student-athletes had a mean cumulative grade point average of 2.43 compared to 2.98 for the 1975-76 comparison group and 2.97 for the 1980 comparison group.

- 4) How many of the student-athletes who did not graduate in five years had a cumulative grade point average of 2.00 or better?

Thirty of the student-athletes who did not graduate had cumulative grade point averages of less than 2.00: twenty-one football players, seven wrestlers and five basketball players. Football players accounted for the largest number and percentage of non-graduates with less than a 2.00.

- 5) How many student-athletes were placed on academic warning, probation, or suspension?

Twenty-five (14.9%) of the student-athletes were placed on academic suspension at some point in their career, and twenty-three (13.7%) were placed on academic warning or probation. In comparison to the general student population, 9 percent of the 1975-76 group and 8 percent of the 1980 group were academically suspended.

In summary, 78 student-athletes (46.2%) graduated in five years or less, and 51 (30.4%) did not graduate but left the

University in good standing. Therefore, a vast majority of the student-athletes (129, or 76.8%) experienced academic success.

Recommendations for Further Study

Although the University of Northern Iowa football, basketball and wrestling programs appear to be meeting their educational obligations to student-athletes, it is recommended that additional research be undertaken to determine the relationship between high school preparation and academic achievement by student-athletes at the University of Northern Iowa, to investigate the differences in academic achievement by student-athletes in the various sports, and to examine the differences in academic achievement between black and white student-athletes.

References

- Bucher, C. A. and Dupee, R. K. (1965). Athletics in school and colleges. New York: The Center for Applied Research in Education.
- Edwards, H. (1969). The revolt of the black athlete. New York: The Free Press.
- Edwards, H. (1984). The black "dumb jock," an American sports tragedy. The College Board Review, No. 131, Spring 1984.
- Golden, C. (1980). Supervising college athletics - the role of the chief student affairs officer. Rethinking services for college athletes. Jossey-Bass Publishers.
- Harrison, J. H. (1976, April). Intercollegiate Football Participation and Academic Achievement. Presented at the Annual Meeting of the Southwestern Sociological Association. Dallas, TX.
- Leach, B., & Conners, B. (1980). Pygmalion on the gridiron: The black-student athlete at a white university. Rethinking services for college athletes. Jossey-Bass Publishers.
- Mihalich, J. C. (1984). College sports: Decisions for Survival. Rethinking services for college athletes. Jossey-Bass Publishers.
- Moore, J.H. (1967). Football's ugly decades, 1893-1913. Smithsonian Journal of History.

- Purdy, D.; Eitzen, S.; & Hufnagel, R. (1982). Are athletes also students: The educational attainment of college athletes. Social Problems, 29, (4).
- Ryan, W. (1929). The Literature of American Schools and College Athletics, 24, The Carnegie Foundation for the Advancement of Teaching.
- Sack, A. L. (1977). Big Time College Football: Whose Free Ride? Quest, 27, 87-96.
- Sack, A. and Thiel, R. (1977). College Football and Social Mobility: A Case Study of Notre Dame Football Players, Sociology of Education, 52, 60-66.
- Sage, P. S., & Eitzen, G. H. (1982). Sociology of American Sports. 2nd Edition. Dubuque, Iowa: Wm. C. Brown Company.
- Walter, T., & Smith, D. (1986, Winter). Taking athletes across the academic finish line. Educational Record. 67,(1).
- Webb, H. (1968). Social backgrounds of college athletes. Presented at the National Convention of American Association of Health, Physical Education, and Recreation. St. Louis, MO.
- Wielenga, J.; Kelso, P.; Sjoblom, J.; Jones, K.; Dallam, J.; & Hanson, M. (1982, July). Persistence at the State Universities. A Study of the 1975-76 Entering Class of Undergraduate Students Who Enrolled at the University of Northern Iowa, Iowa State University, and the University of Iowa.

Wielenga, J.; Sjoblom, J.; Jones, K.; Dallam, J.; & Hanson, M.

(1984, July). Persistence at the State Universities. A Study of the 1980 Entering Class of Undergraduate Students Who Enrolled at the University of Northern Iowa, Iowa State University, and the University of Iowa. Unpublished manuscript.