

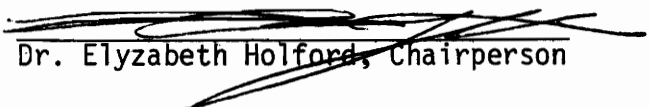
RESTRUCTURING ATHLETIC GRADUATION ANALYSIS
AT VIRGINIA TECH

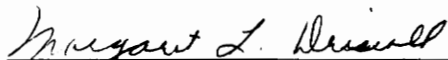
by

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Restructuring Athletic Graduation Analysis at Virginia Tech

by

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Physical Education

(ABSTRACT)

The National Collegiate Athletic Association (NCAA) passed legislation requiring its member institutions to publish their graduation rates. Institutions may now count athletes as graduates if they have earned degrees from another institution.

The purpose of this study was to assess a graduation rate that included those athletes, with at least a 2.0 QCA, who departed Virginia Tech between 1975 and 1985. An additional purpose was to determine why these athletes left.

There were seventy eligible participants who received questionnaires via mail. Forty questionnaires were returned, of which, thirty one were usable.

Seventy nine percent of the responding athletes earned a degree from another institution. Of these athletes, ninety seven percent enrolled at another institution within one academic year of leaving Virginia Tech.

Forty two percent of the responding athletes chose their sport of participation as the major reason for departing, followed by Virginia Tech in general, and personal reasons.

Table of Contents

Chapter One.....	1
Introduction.....	1
Purpose.....	2
Statement of Problem.....	2
Delimitations.....	3
Justification.....	4
Definitions.....	5
Summary.....	7
Chapter Two.....	8
Review of the Literature.....	8
Introduction.....	8
NCAA.....	10
Graduation Rate Reform.....	11
Current Graduation Rates.....	13
Summary.....	14
Chapter Three.....	16
Methodology and Procedures.....	16
Introduction.....	16
Subjects.....	16
Instrumentation.....	17
Procedure.....	19
Analysis of Data.....	19
Summary.....	21

Table of Contents Continued

Chapter Four.....	22
Results and Discussion.....	22
Introduction.....	22
Study Results.....	22
Adjusted Graduation Rates.....	24
Time between leaving Virginia Tech and enrolling at another school.....	30
Reasons for leaving Virginia Tech.....	30
Summary.....	30
Chapter Five.....	34
Conclusions and Recommendations.....	34
Introduction.....	34
Conclusions.....	34
Recommendations.....	35
Summary.....	37
References.....	39
Appendix A (Questionnaire).....	41
Appendix B (Initial Letter).....	43
Appendix C (Reminder Letter).....	44
Appendix D (Follow Up Letter A).....	45
Appendix E (Follow Up Letter B).....	46
Vita.....	47

List of Tables

Table One	
Profile of Subjects used in Study.....	18
Table Two	
Summary of Survey Results.....	23
Table Three	
Analysis of Usable Questionnaires.....	25
Table Four	
Graduation Rate by Sex, Race, Residency.....	26
Table Five	
Current and Adjusted Graduation Rates.....	28
Table Six	
Time between leaving Virginia Tech and enrolling in another institution.....	31
Table Seven	
Reasons for Departing Virginia Tech.....	32

CHAPTER ONE

Introduction

College athletics and academics can no longer be mentioned in the same sentence without several skeptical eyebrows being raised. Recent scandals, such as the one at Memphis State University, where only 6 of 58 basketball players graduated between 1973 and 1983, have left a permanent blackspot on college athletics (Saroff, 1986). This however, is not the only incident to occur at Division IA institutions. The most recent allegations of academic wrongdoings have been leveled against the University of Texas, University of Georgia, University of Akron, Temple University, and the University of Missouri (Gup, 1989). This problem is not one of isolated incidents, but appears to be widespread throughout college athletics.

Graduation rates have now become a major weapon in the recruiting war. Schools such as Notre Dame and Duke openly publicize their above average graduation rates when recruiting prospective student athletes. Recently, national and state legislators submitted legislation that would require universities to provide prospective student athletes access to the school's graduation rate (Lederman, 1989). At the federal level, this movement has been led by Senator Bill Bradley, Democrat from New Jersey, and former National Basketball Association star. The House of Representatives version was sponsored by Rep. Ed Towns, Democrat from New York.

In response to growing political pressure to publicize individual school's graduation rates, the NCAA passed Proposal 24 at the 1990 NCAA National Convention. This proposal, now ratified as a bylaw, states:

The Association's national office annually shall publish the admissions and graduation rate and shall identify the information on an institution specific basis. Member institutions shall provide to prospects, prospects' parents, and to the prospects' high school and two year college coaches information contained within the report (NCAA, 1990).

Purpose

The purpose of this study was to assess a graduation rate that included those athletes who, while maintaining at least a 2.0 cumulative quality credit average (QCA), chose to leave Virginia Tech between 1975 and 1985 without receiving a degree. An additional purpose of this study was to determine these former athletes' reasons for leaving Virginia Tech. This study refers to student athletes as athletes and the general student population will be labeled as nonathletes.

Statement of the problem

Between 1975 and 1985, 70 scholarship athletes, who had a cumulative QCA of 2.0 or better, chose to discontinue their full time enrollment at Virginia Tech without receiving a degree. There has been no attempt to determine why these

athletes left or what happened to their academic career after leaving Virginia Tech. This study attempted to ascertain the answers to three questions.

1. What were the reasons these former athletes left Virginia Tech?
2. Did they continue their education at another college or university?
3. Did they complete degree requirements at another college or university?

Delimitations

The subjects of this study were limited to

1. Scholarship athletes at Virginia Polytechnic Institute and State University (Virginia Tech).

2. Seventy scholarship athletes at Virginia Tech who maintained at least a cumulative GPA of 2.0 and left between 1975 and 1985 without earning a degree. This limitation was chosen because the athletes' GPA of at least 2.0 indicates they had potential to graduate from Virginia Tech had they chosen to stay.

3. Athletic scholarship records were not computerized until the 1975 school year, allowing access to scholarship recipients and their addresses. Therefore, 1975 was chosen as the base year for this study. The year (1985) was chosen allowing athletes who left Virginia Tech at least five years to enroll and possibly graduate from another college or university.

Justification

An area of great concern to administrators is the retention rate of athletes. A school's graduation rate is a direct reflection of the school's ability to retain its athlete population through to graduation. In 1988, the College Football Association (CFA), the only organization which currently publishes individual school graduation rates, revealed that the average retention rate for its member institutions between 1977 and 1986 was 69.3%, with a low of 67.7% in 1978 to a high of 70.8% in 1986 (CFA, 1988). The retention of scholarship football players at Virginia Tech is well above the national CFA average. Virginia Tech retains 86.7% of its scholarship freshman football players with the retention rate ranging from 77% in 1984 to 100% in 1988 (Via, 1988). The national average retention rate for other scholarship athletes is not available at the present time.

At the NCAA's 1990 convention Bylaw 24 was passed requiring all member institutions to publish their scholarship athlete graduation rates by 1992. At the present time, the NCAA allows member institutions to calculate graduation rates by two methods. The first method allows the institution to count only those athletes who enter and graduate from the same institution (NCAA, 1989).

The second method counts those athletes who enter the institution, but who graduate from another accredited institution. Currently Virginia Tech uses the

first method, which results in a less than exemplary graduation rate for some individual varsity sports. By determining how many of the selected 70 scholarship athletes of this study have received a college degree, Virginia Tech can adjust its graduation rate to reflect the degrees received by these athletes. In addition, the questionnaire may indicate problems which are unique to athletes at Virginia Tech.

Definitions

Division IA.-- For an institution to be classified as Division IA, it shall sponsor a minimum of eight varsity sports, including football, in Division I. The institution shall schedule and play at least 60 percent of its football games against members of Division IA football (NCAA, 1989).

Quality Credit Average (QCA).-- The QCA is determined by dividing the total number of quality credits earned by the total number of hours attempted (Harder, 1989).

Academic good standing.-- An institution establishes a criteria whereby a student makes satisfactory progress toward a degree program and is, therefore, eligible to continue enrollment at that institution (NCAA, 1989).

College athlete.-- An athlete is one who participates in a sport for the educational, physical, mental, and social benefits derived there from and for whom participation in that sport is an avocation (NCAA, 1989).

Recruited athlete.-- A prospective college athlete who, has started classes for the ninth grade and has been recruited by any institutional staff member or representative of the institution's athletics interests is considered a recruited athlete (NCAA, 1990).

Scholarship athlete.-- Financial aid is received by the athlete as a result of direct athletic participation (NCAA, 1989).

Graduation Rate.-- The report includes the institution's graduation rate for the entering freshman class that began attendance as full-time, regularly matriculated, degree seeking students at the institution six years prior to the regular fall term that includes the October 1 deadline, for both recruited athletes and students generally. For purposes of this legislation, the "graduation rate" shall be based upon the number of athletes who entered the member institution within five academic years of the date of initial enrollment (NCAA, 1989).

Adjusted Graduation Rate - The report includes the institution's adjusted graduation rate for recruited athletes in each sport. In calculating the adjusted graduation rate, transfer athletes shall be counted as part of the class completing degree credit equivalent and accepted by the certifying institution at the time of transfer. An athlete who left the institution while in good academic standing and who would have met the satisfactory progress requirements for athletic eligibility, can be included.

Athletes who did not graduate within the specified five year period but who continue to be enrolled as full time students at the same institution and maintain satisfactory progress toward a specific baccalaureate degree, shall not be included (NCAA, 1989).

Summary

Collegiate athletic programs have come under heavy fire from the public concerning the less than sterling academic records of student athletes. The media displays universities as large uncaring institutions who use college athletes to generate revenue then carelessly discard the student when their usefulness has expired. The main weapon used in this assault by the media is an institution's graduation rate. This study was an attempt to track and accurately assess the graduation statistics of 70 scholarship student athletes who left Virginia Tech between 1975 and 1985 without a bachelors degree.

CHAPTER TWO

Review of the Literature

Introduction

College athletics has received an abundance of negative publicity in the last five years. Universities and colleges have been perceived as "factories" which produce an imperfect product: college athletes. Studies have shown athletes to be academically poor when compared to the general student population and more devoted to athletics than academics (Kiger and Lorentzen, 1986).

In response to increasing public pressure, Congress proposed legislation requiring publication of graduation rates (Bradley, 1989). The NCAA responding to both public and political pressure passed a bylaw, which in essence, is a mirror image of the proposed national legislation requiring the publication of graduation rates.

A poll conducted by the Washington Post examined the condition of collegiate athletics. Eighty-two college presidents admitted that their schools had been involved in recruiting violations, 13 confessed to under-the-table payments to athletes and three listed point-shaving and other gambling violations. Thirty-six presidents said that there was drug use among athletes, 37 detailed lower academic standards for athletes and 23 said that discipline problems for athletes are being overlooked (Cramer, 1986).

Time Magazine ran an investigative report concerning major college athletics in its April 3, 1989 edition. The authors stated that the following reforms could help end the exploitation and hypocrisy that now scars college athletics:

1. Colleges should have the same entrance and academic requirements for athletes as for other students, while reaffirming their commitment to admitting minority and other disadvantaged students.
2. Athletic dormitories should be abolished. They only reinforce the isolation of players from the rest of the university community.
3. Practice time should be reduced
4. All freshmen should be ineligible to play or practice.
5. Games should be scheduled on weekends only.
6. Coaches should be paid on the same scale as faculty members and made eligible for tenure.
7. A greater portion of revenues from college sports should go into the general university fund, rather than remain within the athletic department.
8. NCAA should require coaches to come forward when they learn of violations. Penalties should be stiffened for all rule breakers (Gup, 1989, p.56).

College athletics has become such a financial bonus for universities and colleges that an athlete's academic performance is secondary to his or her athletic performance.

A study conducted by researchers at Utah State University examined the academic performance by athletes and nonathletes in the Rocky Mountain region. The findings of the study indicate that there are academic performance differences between athletes and nonathletes. Athletes, as a group, had lower mean high school grade point average and college entrance exam scores than nonathletes, already putting them at a disadvantage (Kiger & Lorentzen, 1986).

Among the athletes used in the Kiger and Lorentzen (1986) study, minority athletes had the poorest academic performance. In contrast, the minority nonathletes had similar academic performance records to the general nonathlete population. The authors indicated that if it were not for athletics, these students would not be in college. Kiger and Lorentzen (1986) concluded that if athletic departments are indeed committed to complying with NCAA academic reforms, then minority students deserve special consideration with academic programs developed specially for student athletes.

National Collegiate Athletic Association

In response to increasing public pressure, the NCAA initiated a survey of 4000 students and athletes at 42 Division 1A institutions. The survey was conducted by the Center for the Study of Athletics at the American Institutes for Research at the request of the NCAA President's Commission (Sullivan, 1989).

The study reported that, on the average, athletes have a lower grade-point average than nonathletes. Of all athletes, football and basketball players have, on the average, the lowest grade point averages. More importantly it was reported that academics were not the athlete's top priority, making it harder to get the grades they are capable of getting (Sullivan, 1989).

In an effort to spare institutions embarrassment, the NCAA does not publish individual graduation rates. The rates are broken into several categories but no individual institutions are listed. This omission is for good reason. Very few colleges and universities wish their individual graduations rates to be published, because of the spotlight being placed on their programs. Only a few powerhouses such as Duke, Georgetown, Notre Dame, and Providence College graduate more than 95 per cent of their athletes (Gup, 1989).

Graduation Rate Reform

The public outcry against college athletics has led to a host of proposed reforms. These critics have voiced suggestions including paying college athletes, shortening the playing season, mandatory red shirting for the first year, reduction in practice time or even drastic measures such as eliminating athletic scholarships (Gup, 1989). Senator Bill Bradley, a former NBA and collegiate star, introduced legislation requiring a university to allow public access

to its graduation rate. The Student Athlete Right to Know Act requires colleges and universities receiving Federal financial assistance to report graduation rates annually to the Secretary of Education, including the graduation rates of athletes broken down by sport, race, and sex. The Act also calls for reporting the proportion of students who earn a degree within five years, reported by sport, race, and sex. The proposed Act would require schools to report:

1. Statistics on students who receive athletic scholarships broken down by field of study, type of degree received, and sport.
2. The number of athletes who earn a degree within five years, broken down by sport, sex and race.

The above information on graduation rates and degrees conferred for all students will be broken down in a similar manner.

3. The information contained in the report to all high school athletes being recruited by the school as athletic scholarship candidates (Bradley, 1989, p. 4).

In addition, The Student Athlete Right to Know Act requires the Secretary of Education to compile and publish the information for individual colleges and universities and aggregate information for athletic conferences recognized by the NCAA and the National Association of Intercollegiate

Athletics (NAIA). This information will also be available to high school guidance counselors and principals. In testimony before the United States Senate, Senator Bradley stated:

The Student Athlete Right to Know Act is one small step forward in straightening out these priorities. I seek to strengthen the role of education rather than weakening the role of athletics (Bradley, 1989, p. 3).

However, in the aftermath of the 1990 NCAA convention, Senator Bradley plans to alter the Student Athlete Right To Know Act to exclude all NCAA member institutions including those in Division III. The Student Athlete Right to Know Act will not be withdrawn until the NAIA and the nation's junior colleges also agree to voluntarily reveal graduation rates (NCAA News, 1990).

Current Graduation Rates

According to statistics provided by the NCAA, the mean graduation rate for large public universities is 49.1%. The mean graduation rate for all scholarship athletes at large public universities is 43.7%. For schools in the Southern region (which includes Virginia Tech), the mean graduation rate for all scholarship athletes is 41.9% (NCAA Academic Reporting, 1988).

National graduation rates for individual varsity sports, excluding football, are currently not available. The graduation rate in 1988 for the CFA, of which Virginia Tech is a member, was 49.8%, a decrease of less than one percent

from the previous year (CFA, 1989). The survey involved the freshman class of 1983, including those who entered at that time but who did not receive financial aid until after their initial year or who transferred from another institution and subsequently received a grant-in-aid.

The University of Kentucky obtained a 90% success rate graduating 18 of 20 of its football players included in the survey. Twelve other institutions graduated 70% or more of the football players that enrolled in 1983 (CFA, 1989).

Summary

Reforms in college athletics are occurring at a staggering rate. The American public has turned its attention to collegiate athletics resulting in pressure to change a system that allows an athlete to graduate college while being functionally illiterate. Proposed reforms in college athletics have ranged from reduced practice time to paying college athletes. These proposed changes for college athletics have come from the media, college administrators and even the Federal Government.

As a result of recruiting athletes as performers first and students second, many institutions do not graduate a majority of their athletes. Therefore individual graduation rates for institutions are not published. However, increasing political pressure from Senator Bradley from New Jersey, has resulted in the NCAA passing legislation

requiring its member institutions to provide prospective athletes with the school's graduation rates. These rates must include such variables as sex, race, and sport of participation.

No matter how many reforms are proposed, the athletes themselves must not be overlooked. According to two studies, Kiger and Lorentzen and the NCAA Presidents' Commission, athletes are not receiving the academic attention that is necessary for success. These studies also indicated that if it were not for athletics, these "student" athletes would not be enrolled at a college or university.

CHAPTER THREE

Methodology and Procedure

Introduction

Information used to determine Virginia Tech's graduation rate has come from official university records, such as the Department of Athletics, the Office of the Registrar, and old athletics records in the Office of Scholarship and Financial Aid. These records indicate a median graduation rate of 59.2% for Virginia Tech students (Harder, 1988). Virginia Tech athletes have a median graduation rate of 57.2% (Harder, 1989). Of those who graduated, 75.8% of all athletes took more than four academic years to complete their degree, while 30.7% took more than five years (Harder, 1989).

The purpose of this study was to assess a graduation rate for those athletes who, while maintaining at least a 2.0 cumulative quality credit average, chose to leave Virginia Tech between 1975 and 1985. An additional purpose of the study was to determine these former athletes' reason(s) for leaving Virginia Tech. This chapter details the subjects, instrumentation, procedures, analysis of data and a summation.

Subjects

A total of four hundred and thirty eight undergraduate scholarship athletes left Virginia Tech, between 1975 and 1985, without receiving their academic

degree. Of these, 70 left with a cumulative QCA of 2.0 or higher, which indicates that they probably could have stayed at Virginia Tech if they had chosen to do so. These 70 athletes who left Virginia Tech between 1975 - 1985, while maintaining at least a 2.0 QCA were eligible to be included in Virginia Tech's adjusted graduation rate and were the subjects of this study (Table 1). The names and last known addresses of the subjects were provided by the Athletic Department and Virginia Tech records under the Freedom of Information Act.

Instrumentation

An initial questionnaire was constructed from interviews with Dr. Martha Harder, Associate Director of the Office of Scholarship and Financial Aid for Athletics (Appendix A). The initial questionnaire was sent to ten of the former student athletes for use as a pilot study. It was determined prior to the study that ten participants be chosen to receive the pilot questionnaire. The participants' student identification numbers were listed from 1 to 70 in ascending numerical order based upon their year of departure from Virginia Tech. A random number chart was used to select the first ten (10) numerals listed in the chart less than 70. The participants assigned to these numerals were chosen to receive the pilot questionnaire.

Six of the ten questionnaires mailed in the pilot survey were returned. All the questions listed on the pilot

Table 1 Subject Profile of Survey

Sport	Male	Female	Black	White	Other
Baseball	9	0	0	9	0
Basketball	1	6	2	5	0
Football	23	0	6	17	0
Golf	3	0	0	3	0
Hockey	0	3	0	3	0
Swimming	5	6	0	11	0
Track/Field	3	1	1	3	0
Tennis	3	0	0	3	0
Volleyball	0	3	0	3	0
Wrestling	4	0	0	4	0
Total	51	19	9	61	0

questionnaire were responded to in the proper manner, indicating that recipients understood the language and syntax of the questionnaire. The data received from the pilot study was joined with the population of this final study for data analysis. Those participating in the pilot study were not sent a repeat questionnaire.

Procedure

Each of the remaining participants (60) on the list was sent a packet containing the questionnaire (on DP-SCAN) with a cover letter (Appendix B). The letter explains the purpose of the research. An addressed stamped return envelope was also included. Each DP - SCAN sheet was number coded to insure the recipient's confidentiality.

Dillman (1979) recommends that one week after the questionnaire is mailed, a post card or letter be mailed as a reminder to all subjects. A follow up letter was developed (Appendix C). This researcher decided that three weeks after the initial mailing, another letter (Appendix D) and another copy of the original survey would be sent to any non-respondents. As a final effort to contact participants, the decision was made to send a fourth letter (Appendix E) with a copy of the original survey by certified mail, approximately seven weeks after the initial mailing.

Analysis of Data

A frequency distribution and percentages were used to calculate the responses to each question.

In order to determine why these athletes chose to leave Virginia Tech, a frequency and percentage display was presented for questions 25 through 37. These responses were placed on the display, indicating the most frequent selections among the possible reasons for leaving Virginia Tech.

Those athletes who indicated that they received a bachelor's degree from an accredited institution, were designated as degree recipients in the following areas:

1. the sport in which the athlete participated
2. the year of entry into Virginia Tech
3. the demographic designation (i.e. race, gender, in/out state student).

The data was also used to determine the average length of time between an athlete's departure date from Virginia Tech and that athlete's enrollment at another college or university.

The number of athletes who indicated they had received a degree, was then added to the number of scholarship athlete degree recipients from Virginia Tech, in the period between 1975 and 1985. Those scholarship athletes who received a degree were divided by the total number of athletes eligible for a degree, resulting in the adjusted graduation rate for each sport between 1975 and 1985. The total number of athletes in this study who indicated they had received a

bachelor's degree were combined with the existing number of athlete degree recipients, to calculate Virginia Tech's adjusted graduation rate.

Summary

Between 1975 and 1985, 70 scholarship athletes withdrew from Virginia Tech even though they were maintaining at least a cumulative GPA of 2.0 and could have academically continued their enrollment. These 70 students were surveyed in an attempt to determine whether or not they graduated from another institution and their reasons for leaving Virginia Tech. This chapter detailed the subjects, instrumentation, procedures, and the methods of analysis which were used to further the purpose of this study. The primary method of analysis utilized was frequency of responses by sport, academic year of entry to Virginia Tech, race, gender, and residency. Additionally, an adjusted graduation rate for the period between 1975 and 1985 was calculated to include those scholarship athletes who continued their education and graduated from another institution.

CHAPTER FOUR

Results and Discussion

Introduction

This chapter is a report of the results of the survey conducted in May, 1990. First, there is a discussion and summary of the results from the study including the analysis of the usable questionnaires, followed by the graduation rate by subjects' race, gender, and residency. This section is followed with the current and adjusted graduation rates for Virginia Tech athletes. The next section displays the average length of time these athletes took between leaving Virginia Tech and enrolling in another institution. A discussion of why these athletes may have left Virginia Tech follows. The chapter is concluded with a summary of the results.

Study Results

Table 2 is a summary of the results from the May 1990 survey. Forty of the seventy surveys mailed were returned (57%) and of these 31 (44%) were deemed usable. Nine certified mail receipts were returned from the postal service labeled "undeliverable". Twenty four of the respondents (79%) earned bachelor's degrees from another college or university, while 7 (21%) did not. One hundred percent of the females (10) who returned the questionnaires indicated they had received a degree, compared with 66.6% (14) for males. Twenty three (79%) of the white responding athletes indicated they had earned a degree, while one (50%) of the black

Table 2
 Summary of Results from May 1990 Survey

Total of Questionnaires Returned	40	(57%)
Total Number of Usable Questionnaires	31	(44%)
Number of respondents earning a degree	24	(79%)
Number of respondents NOT earning a degree	7	(21%)

Frequency Distributions

	Received Degree		Did not	
	N	PCT.	N	PCT.
Sex				
Male	14	66.6%	7	33.3%
Female	10	100 %	0	
Race				
White	23	79.1%	6	20.9%
Black	1	50.0%	1	50.0%
Residency				
In state	10	71.4%	4	28.6%
Out of State	14	82.4%	3	17.6%

Returned Questionnaires by Sport of Participation

Baseball.....	0-----	2
Basketball.....	3-----	0
Football.....	7-----	3
Golf.....	1-----	2
Hockey.....	1-----	0
Swimming.....	6-----	0
Tennis.....	0-----	0
Track/Field.....	3-----	0
Volleyball.....	2-----	0
Wrestling.....	1-----	0

respondents had earned a degree. Out of state residents returned 82.4% (14) of the questionnaires, compared with 71.4% (10) for in state residents.

Golf team members had the most returned usable questionnaires, 100%, followed by track/field participants, 75%, and volleyball players, 66%. Swim team members were fourth (55%), followed by football (43%), basketball (42%), hockey (33%), wrestling (25%), baseball (22%), and tennis (0%), (Table 3). The response rate for male participants ranged from a low of 22% to a high of 100%. The female response rate was similar, ranging from 33% to 100%. Blacks did not exceed a 16% response rate (16% in football) (Table 3). There were no black respondents in basketball and track/field. However, there were seven sports in which there were no eligible black questionnaire recipients (Table 3). White respondents in golf and track/field equaled the 100% mark. The lowest category for white recipients was tennis (0% returned), followed by baseball (22%) (Table 3).

Adjusted Graduation Rates. Graduation percentages for race, gender, and residency are not categorized by academic year of entrance and sport of participation. Rather they are generalized to provide an overview of the athletic program at Virginia Tech. Table 4 shows the current graduation rate percentages, as well as the adjusted graduation rate percentages for race, gender, and residency as a result of the information acquired through this study.

Table 3 Analysis of Usable Questionnaires

Sport	# returned	Male	Female	Black	White	Overall
Baseball	2	22%	N/A	N/A	22%	22%
Basketball	6	100%	33%	0%	60%	42%
Football	10	43%	N/A	16%	52%	43%
Golf	3	100%	N/A	N/A	100%	100%
Hockey	1	N/A	33%	N/A	33%	33%
Swimming	6	60%	50%	N/A	54%	55%
Track/Field	3	66%	100%	0%	100%	75%
Tennis	0	0%	N/A	N/A	0%	0%
Volleyball	2	N/A	66%	N/A	66%	66%
Wrestling	1	25%	N/A	N/A	25%	25%

Notes: N/A indicates there were no questionnaire recipients in this category.

This table represents the percentage of respondents for each category listed.

Refer to Table One for subject profile used in this study.

Table 4

Graduation Rate by Sex, Race, Residency

<u>Category</u>	<u>Current Rate</u>	<u>Adjusted Rate</u>
Sex		
Male	55.9%	56.2%
Female	63.0%	63.3%
Race		
White	62.9%	63.2%
Black	36.2%	36.2%
Other	53.8%	53.8%
Residency		
In state	61.5%	61.6%
Out of state	50.9%	51.1%

(Current rates provided by Office of Scholarship and
Financial Aid)

The female athlete graduation rate (63%) is slightly higher than the graduation rate for male athletes (55.9%). The graduation rate for white and instate students is higher than the graduation rate for black and out of state students (Table 4).

The adjusted graduation rate by race was only slightly affected due to the small numerical size of this study ($n=70$) and the number of respondents ($n=31$). In addition, there were only two black respondents (Table 2).

Residency graduation rate percentages increased in an unequal manner, even though the respondents to the survey were almost equal in both categories (Table 4). This is due to the large number of scholarship athletes from within the state of Virginia.

Baseball and tennis graduation rates were not adjusted by the results of this study (Table 5). The responses revealed that several baseball and tennis team members have enrolled in other institutions, however, they have not received a bachelor's degree. In this study, football players (7) were the most frequent degree recipients followed closely by swim team members (6) (Table 5). However, only 31% of the eligible football participants had received degrees, and among eligible swim team participants, 55% had received a degree. The eligible hockey participant had the highest adjusted graduation percentage (100%), and eligible tennis

Table 5 Graduation Rate By Year of Entry and Sport of Participation

AY/ENT	Baseball		Basketball		Football		Golf		Swimming		N1
	N1	ADJ PCT	N1	ADJ PCT	N1	ADJ PCT	N1	ADJ PCT	N1	ADJ PCT	
75-76	5	60.0(3)	2	50.0(1)	29	58.6(17)	2	100(2)	7	85.7(6)	3
76-77	7	42.9(3)	4	75.0(3)	35	51.6(18)	6	83.3(5)	4	50.0(6)	5
77-78	7	85.7(6)	6	33.3(2)	36	47.2(17)	5	20.0(1)	4	75.0(3)	4
78-79	10	50.0(5)	11	54.5(6)	28	46.4(13)	3	66.6(2)	N/A	N/A	3
79-80	6	66.7(4)	7	42.9(3)	31	61.3(19)	2	100(2)	N/A	N/A	12
80-81	7	42.9(3)	8	50.0(4)	35	54.3(19)	5	60.0(3)	N/A	N/A	2
81-82	4	50.0(2)	8	62.5(5)	46	37.0(17)	5	40.0(2)	N/A	N/A	6
82-83	12	66.7(8)	6	16.7(1)	26	46.2(12)	3	100(3)	N/A	N/A	4
83-84	5	80.0(4)	9	55.6(5)	29	44.8(13)	2	50(1)	N/A	N/A	4
84-85	6	33.3(2)	3	0	18	5.6(1)	1	100(1)	N/A	N/A	3

Notes:

(N1) - Number of entrants by sport and academic year

PCT() - Percentage of graduates per sport and academic year, () number of graduates

ADJ() - Adjusted graduation rates for sport and academic year resulting from study, () number of graduates

Table 5 Continued

AYENT	Tennis		Track		Volleyball		Wrestling		Hockey	
	N1	PCT	N1	PCT	N1	PCT	N1	PCT	N1	PCT
75-76	3	66.7(2)	4	100(4)	2	100(2)	7	71.4(5)	2	100(2)
76-77	5	60.0(3)	6	83.3(5)	2	100(2)	8	50.0(4)	0	0
77-78	4	50.0(2)	9	44.4(4)	0	0	5	80.0(4)	4	75.0(3)
78-79	3	66.7(2)	9	55.6(5)	3	66.7(2)	5	80.0(4)	2	100(2)
79-80	12	41.7(5)	8	100(8)	4	75.0(3)	6	66.7(4)	3	33.3(1)
80-81	2	100(2)	7	28.6(2)	1	100(1)	6	66.7(4)	2	0
81-82	6	50.0(3)	9	66.7(6)	1	0	6	66.7(4)	8	62.5(5)
82-83	4	50.0(2)	12	25.0(3)	1	100(1)	1	0	3	100(3)
83-84	4	75(3)	6	66.7(4)	2	0	0	0	1	0
84-85	3	0	3	33.3(1)	2	50(1)	0	0	1	100(1)

participants were last with 0%. In the overall program, non-revenue sports graduated 63.9% of their participants, while revenue sports have a graduation rate of 49.7%.

Time between leaving Virginia Tech and enrolling at another college or university. Table 6 shows that 79% of the respondents who left Virginia Tech enrolled at another college or university. Of these, 97% enrolled within one academic year of leaving Virginia Tech and none of the respondents waited more than two academic years.

Reasons for leaving Virginia Tech. Respondents to the survey indicated three main reasons for departure from Virginia Tech (Table 7). Forty-two percent of the athletes surveyed cited the sport of participation as the main reason for leaving, followed by Virginia Tech in general (37.0%) and third was personal reasons (29.6%). The rest of the responses were distributed among the other categories, except for tutorial and support services which did not illicit any responses.

Summary

Graduation rate percentages increased slightly which is possibly due to the large athlete population and the small sample size used in this study. However, the graduation rate percentages for a majority of the sports were altered by a substantial amount. Graduation percentages based on race, gender, and residency increased slightly, but

Table 6

Length of time between departing Virginia Tech and enrolling at another college or university

Responding athletes enrolled at another institution

<u>N</u>	<u>PCT.</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Low</u>	<u>High</u>
22	79.0	1.6818	.99457	1.0	4.0

	<u>N</u>	<u>cumPCT.</u>
(1) enrolled next available semester	14	66.3
(2) waited one semester	2	76.7
(3) enrolled within one academic year	5	97
(4) enrolled after two academic years	1	100
(5) enrolled after three academic years	0	100
(6) enrolled after four or more academic years	0	100

() indicates the numerical value assigned the variable on the questionnaire

TABLE 7

REASONS FOR DEPARTING VIRGINIA TECH	NO. OF RESPONDENTS	PCT.
25. Virginia Tech in General	10	37%
26. Sport of Participation	11	42.3%
27. Athletic Administration	4	14.8%
28. Academic Reasons	5	18.5%
29. Chosen Course of Study	3	12%
30. Financial Difficulties	3	11.5%
31. Tutorial Assistance	0	0%
32. Individual Support Services	0	0%
33. Family/Personal Reasons	8	29.6%
34. Medical Reasons	2	7.7%
35. Playing Performance	5	22.7%
36. Tired of School	3	12.5%
37. Professional Contract	2	8.3%
* Respondents chose all which applied		

were also affected by the large athlete population and the size of this sample.

Ninety-seven percent of the responding athletes who graduated from another college or university, enrolled within one academic year of leaving Virginia Tech. In all, twenty four respondents indicated they had earned a bachelor's degree at the time of this study.

Almost all the respondents who participated in this study chose either the sport in which they played or Virginia Tech in general as the reason for leaving school. The third most frequent response cited was personal or family reasons.

CHAPTER FIVE

Conclusion and Recommendations

Introduction

This chapter contains conclusions and recommendations drawn from this study and suggestions for future research based on this material. There are three main conclusions that can be drawn from this research, (1) of the respondents to this study, who left Virginia Tech while maintaining a 2.0 cumulative GPA, 79% received a bachelor's degree from another college or university, (2) 97% of the respondents enrolled at another institution within one academic year of leaving Virginia Tech, and (3) a majority of the athletes left Virginia Tech because of the school in general or the sport which they played.

Conclusions

The graduation rates for a majority of the sports at Virginia Tech increased as a result of this study. In a comparison of revenue sports (football, basketball(both sexes)), scholarship football players have a higher graduation percentage. Among non revenue sports (all others), volleyball players have the highest graduation percentage. In the overall program, non revenue sports graduate 63.9% of their participants, while revenue sports have a graduation rate of 49.7%. Several theories have been formulated to explain this discrepancy. It must be noted, however, there are no specific conclusions on the issue which can be drawn from this study.

Of the responding athletes who enrolled at another college or university, 97% did so within one academic year of leaving Virginia Tech. This possibly indicates they were not "tired" of school, rather they were "tired" of Virginia Tech in general or Tech athletics. Only 12.5% of the respondents indicated they were tired of school, however, 30.7% cited Virginia Tech as a contributing factor in their decision to leave school. The questionnaire listed several subgroups concerning Virginia Tech (i.e. academic, tutorial and support services, course of study), but none of these areas received overwhelming support. This may indicate the respondents found areas outside "academic life" which did not satisfy them enough to remain at Virginia Tech.

The leading factor chosen by the respondents for leaving Virginia Tech was the sport in which the athlete participated. However, the subgroups under athletics (athletic administration and playing performance) received less than 15% of the responses. It seems the athletes' enjoyed the program as a "whole", but were displeased with certain elements, possibly the coaching staff or the sport's impact on academic performance. The primary conclusion indicates that the respondents were not happy at Virginia Tech, therefore they enrolled at another institution.

Recommendations

This author's primary recommendation is to mainstream athletes into the general student population. Even though

Virginia Tech does not have an athletic dormitory per se, a majority of the on campus athletes are housed in one facility. Allowing athletes to interact with the general student population may foster understanding between the two groups and affords athletes the opportunity to learn there is more to college than athletics. The results indicated that athletes received sufficient academic and athletic encouragement yet they were lacking support away from the classroom and playing field. Interacting with students other than fellow athletes may provide the needed social interaction.

The athletic administration must not allow itself to become complacent and lazy. Overall, Virginia Tech has implemented excellent programs to retain and graduate as many athletes as possible. These programs include increased staffing for tutorial services and mandatory "study hall".

In addition, the athletic department should implement an annual follow up program to track athletes who depart from Virginia Tech. This program would determine which athletes if any, returned to another college or university, and their progress towards a degree. A program such as this would be necessary to accurately determine Virginia Tech's athlete graduation rate.

This type of research should be conducted in a longitudinal manner. A properly conducted study could indentify scholarship athletes who have received bachelor's degrees but are currently listed as still enrolled. There are several possible extensions to this research. A study could be designed to track athletes who left Virginia Tech without graduating but did not maintain a cumulative 2.0. Another study could expand the original questionnaire to determine if any of the athletes used in this study have earned post graduate degrees and if so, when, where, what area of study?, explore indepth the exact reason why a particular athlete chose to leave Virginia Tech, poll particular groups of athletes (i.e. women, men, black, white) to determine if there are common factors why these athletes left Virginia Tech. All of the afore mentioned ideas could expand understanding into the life if a Virginia Tech athlete.

Summary

For revenue sports the graduation rate for football players increased the greatest amount as a result of this study. Among non-revenue sports, the swim team members' graduation rate increased the greatest amount. However, in comparison, non-revenue sports graduate more participants than do revenue sports.

This survey indicated that a majority of the athletes responding to this study, enrolled at another college or

university within one academic year of departing Virginia Tech. This seems to reveal the responding athletes were not tired of school, rather they were not satisfied with Virginia Tech.

Of the responding athletes who departed from Virginia Tech and enrolled at another college or university, 97% of the respondents enrolled within one academic year. None of the responding athletes waited longer than two academic years.

A majority of the athletes chose the sport of participation and Virginia Tech in general as the two main reasons for leaving Virginia Tech. This may indicate they were unsatisfied with Virginia Tech in general, therefore they enrolled at another institution.

There is a vast amount of research that can be implemented using this study as a model. Further research can discover other athletes who have received degrees and indicate more precisely the reasons why these athletes left Virginia Tech.

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APPENDIX A

VIRGINIA TECH LEARNING RESOURCES CENTER			ID NUMBER	FORM	SEAT NO	GROUP
INCORRECT MARKS ⊖ ⊙ ⊗ ⊘	CORRECT MARK ⊙ ⊙ ⊙ ⊙	USE NO. 2 PENCIL				
NAME	COURSE	DATE	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙	⊙	⊙ ⊙ ⊙ ⊙	⊙
<p>This questionnaire concerns your academic career at Virginia Tech. Please feel free to answer all questions honestly as all responses will be kept confidential. Your answers will be pooled with the responses of other people involved in this survey and used as a group. Please return this form by March 5, 1990. USE A NO.2 PENCIL TO MARK RESPONSES.</p> <p>1. Ethnic Origin: 1) White 2) African American 3) Other</p> <p>2. Sex: 1) Male 2) Female</p> <p>3. Were you an in-state student? 1) Yes 2) No</p> <p>4. When was your last academic year at VT? 1) 1975 - 1976 6) 1980 - 1981 2) 1976 - 1977 7) 1981 - 1982 3) 1977 - 1978 8) 1982 - 1983 4) 1978 - 1979 9) 1983 - 1984 5) 1979 - 1980 10) 1984 - 1985</p> <p>5. Did you continue your education at another college or university? 1) yes 2) no - go to question #9</p> <p>6. How soon did you enroll at another school after leaving VT? (choose the most appropriate answer) 1) The next available semester 2) Waited one semester 3) The next academic year 4) After two academic years 5) After three academic years 6) After four or more academic years</p> <p>7. Have you received a Bachelor's Degree from another college or university? 1) Yes 2) No</p> <p>8. In which academic year did you receive your first Bachelor's Degree? 1) 1975 - 1976 6) 1980 - 1981 2) 1976 - 1977 7) 1981 - 1982 3) 1977 - 1978 8) 1982 - 1983 4) 1978 - 1979 9) 1983 - 1984 5) 1979 - 1980 10) 1984 - 1985</p>			1	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
			2	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
			3	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
			4	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
			5	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
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			9	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
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			11	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙		
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23	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙					
24	⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙ ⊙					

OVER PLEASE

APPENDIX A, Continued

9. Which of the following were factors in your decision to leave Virginia Tech?
(CHOOSE ALL THAT APPLY)

Start Here ↗

- (25) Virginia Tech in general 1) Yes 2) No
- (26) Sport in which you participated 1) Yes 2) No
- (27) Athletic Administration 1) Yes 2) No
- (28) Academic reasons 1) Yes 2) No
- (29) Chosen course of study 1) Yes 2) No
- (30) Financial difficulties 1) Yes 2) No
- (31) Tutorial assistance 1) Yes 2) No
- (32) Individual support services 1) Yes 2) No
- (33) Family/Personal reasons 1) Yes 2) No
- (34) Medical reasons 1) Yes 2) No
- (35) Playing performance 1) Yes 2) No
- (36) Tired of school 1) Yes 2) No
- (37) Professional contract 1) Yes 2) No

PLEASE LIST ANY ADDITIONAL FACTORS THAT WERE NOT LISTED ABOVE -

- 1.
- 2.
- 3.

Thank you very much for you time and effort with this questionnaire. Your responses will be kept confidential and will be generalized for analysis.

25 ○○○○○○○○○○○○

26 ○○○○○○○○○○○○

27 ○○○○○○○○○○○○

28 ○○○○○○○○○○○○

29 ○○○○○○○○○○○○

30 ○○○○○○○○○○○○

31 ○○○○○○○○○○○○

32 ○○○○○○○○○○○○

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36 ○○○○○○○○○○○○

37 ○○○○○○○○○○○○

38 ○○○○○○○○○○○○

39 ○○○○○○○○○○○○

40 ○○○○○○○○○○○○

41 ○○○○○○○○○○○○

42 ○○○○○○○○○○○○

43 ○○○○○○○○○○○○

44 ○○○○○○○○○○○○

45 ○○○○○○○○○○○○

46 ○○○○○○○○○○○○

47 ○○○○○○○○○○○○

48 ○○○○○○○○○○○○

Appendix B

Dear Former Hokie,

The National Collegiate Athletic Association (NCAA) has recently passed legislation requiring its member institutions to publish their graduation rates for scholarship athletes. This legislation will affect Virginia Tech.

As a former scholarship athlete at Virginia Tech, it is very important to determine your academic career after leaving Virginia Tech. The NCAA allows schools to count athletes as graduates, if they have received a degree from another university or college. In order to calculate an accurate graduation rate, it is important that your questionnaire be returned for this study. I am trying to determine the graduation rate for Scholarship athletes, between 1975 and 1985.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so I can check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

If you have any questions regarding the questionnaire, please write or call me. My telephone number is 703-552-8781. If your name was incorrectly chosen for this survey please indicate your year of graduation from Virginia Tech, and return the questionnaire.

Sincerely,

Mark Pooley
Graduate Student
D 37 Heritage
Blacksburg, VA 24060

Appendix C

Dear Former Hokie,

Last week a questionnaire about your academic career after leaving Virginia Tech was mailed to you.

If you have already completed and returned it to me, thank you very much. If not, please do so today. Because of the small sample chosen for this survey, it is very important that your questionnaire be included in this study.

If you did not receive the questionnaire, or it was misplaced, please contact me (703-552-8781) and I will send you a replacement immediately.

Sincerely,

Mark Pooley
Graduate Student

Appendix D

Dear Former Hokie,

About three weeks ago I wrote you concerning your academic career after leaving Virginia Tech. As of today I have not received your completed questionnaire.

I am conducting a study to determine Virginia Tech's graduation rate for scholarship athletes.

I have written you again because of the significance of your questionnaire in the usefulness of this study. In order for the results of this survey to be accurate, it is essential that each person in the sample return their questionnaire.

In the event that the questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Sincerely,

Mark Pooley
Graduate Student
D 37 Heritage
Blacksburg VA 24060

Appendix E

Dear Former Hokie,

I am writing you about my study of former Virginia Tech scholarship athletes. I have not received your completed questionnaire.

This is the first study of this type that has ever been conducted. The large number of questionnaire returned is very encouraging. In order for this study to be accurate, your questionnaire must be included.

Because of the importance of your questionnaire, I am sending this letter by certified mail to insure delivery. In case my earlier letters did not reach you, a replacement questionnaire has been enclosed. Please complete and return it as quickly as possible.

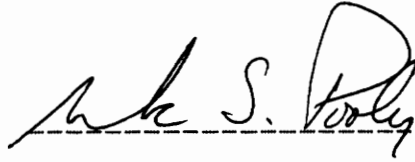
Your contribution to the success of this study is greatly appreciated.

Sincerely,

Mark Pooley
Graduate Student
D 37 Heritage
Blacksburg, VA 24060

Vita

Mark S. Pooley was born on December 13, 1965 in Augusta Georgia. He attended Socastee High School in Myrtle Beach, South Carolina and later earned a Bachelor's of Science Degree in Business Administration from Newberry College, located in Newberry South Carolina. He was a graduate student at Virginia Tech from 1988 to 1990. While at Virginia Tech he was a Graduate Teaching Assistant in Health, Physical Education and Recreation.

A handwritten signature in cursive script that reads "Mark S. Pooley". The signature is written in black ink and is positioned above a horizontal dashed line.

Mark S. Pooley