GRADUATION SUCCESS OF SCHOLARSHIP FOOTBALL PLAYERS
AT VIRGINIA TECH 1981-1983
by
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Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for
the degree of
MASTER OF SCIENCE IN EDUCATION
in
Health and Physical Education

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December, 1988
Blacksburg, Virginia
Graduation success of college athletes is becoming as popular a phrase in the world of college sports as is the term Proposition 48. This phrase has derived from the inability of college scholarship athletes to obtain a degree after their playing eligibilities have ended. This study focused on several variables that help determine or judge the graduating success of a student athlete. The particular variables used were SAT scores, high school GPA, college GPA, and race.

A positive relation of 93% of all students, 77% relationship for black student athletes, and 100% for non-blacks was found between SAT, high school GPA, and college GPA graduating success. It should be noted that other variables may affect the success or lack of success of a student athlete; however, these lie beyond the scope of this study.
Acknowledgements

I would like to recognize the support of the following people:

Dr. M. L. Driscoll, committee chairperson, academic advisor, and most importantly, a friend. Her guidance and wisdom gave me great support.

Dr. Jerry Via, Academic Advisor, committee member, and friend. Thanks for everything.

Dr. Larry McCluskey, a committee member, research expert, and outstanding teacher. With his guidance, figures make sense.

Ms. Alice Niles, English teacher and friend. A special thanks.

Ms. Jo Kafer and Mrs. Ann Bell, special friends without whose help this project would not have left the starting blocks.

Debi Hardee, Billy Hardee III, Valerie Hardee, and Little Vera. You guys have made this as easy as you possibly can. Thanks for the help and understanding.
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Chapter 1
Introduction and Statement of the Problem

College athletics, today more than ever, are a big business. Where there is big business, the public probes, investigates, and modifies all intricate parts of the business. College athletics is a business venture, ideally a profit producing venture. For athletics to produce profit, it must secure services from high quality athletes. These athletes should not only perform well in the arena of their chosen sport, but they must also meet academic guidelines set by the university of their choice.

Today's college athletics are faced with general problems that currently produce negative ramifications, problems such as illegal drug use, bribery, point shaving, and failure to graduate. Failure to graduate was the concern of this investigation of a group of student athletes. Many variables contribute to the success or failure of a student athlete. This study examined several variables in an attempt to determine the profile of an athlete, and identify criteria which determine his or her chances of success in the university setting such as successful completion of a college program.

Purpose

The purpose of this study was to determine the degree of success of football scholarship student athletes in graduating from Virginia Tech.
Delimitation

The study was limited to Virginia Tech scholarship football players enrolled as freshmen during the years 1981, 1982, and 1983. Due to athletic obligations, these student athletes had similar time frames within which they were required to complete academic responsibilities, responsibilities which differ from those of regular students.

Definition for the Purpose of this Study

Race. A kind of people unified by community, color of skin, interests, habits, or other characteristics. A division of mankind possessing traits that are transmissible by descent and sufficient enough to characterize it as a distinct human type (Webster, 1983).

SAT. A collegiate entrance examination taken by all prospective college students as a criterion for entering college. The National College Athletic Association (NCAA), the governing body of collegiate sports, requires at least a minimum SAT score of 700. Even if a student reaches 700, the university may require higher standards.

Grade Point Average (GPA). A mathematical method which determines the academic success or failure of an individual student. High school and college GPAs are usually based on a four point scale with four being assigned to the highest grade and zero to the lowest. Each letter is assigned a number which represents its value. For example, 4 is equivalent to an "A"; 3 represents a "B"; 2 represents a "C"; 1 equals a "D"; and, 0 represents an "F" or failure of a course.
Graduation Success. Graduation success is determined by whether or not a student graduates within a five year period.

Regular Admission. Regular admission is being formally admitted to college after meeting specific entrance criteria, such as: graduating from an accredited high school or private preparatory school; successful completion of 14 units of core curriculum, including mathematics, English, language studies, natural sciences, and history; with a final GPA of 2.0 in these areas of studies.

Special Action Admission. Special action is an alternate means of acceptance into college without meeting regular admission requirements regarding academics. Research on this topic indicates that admission has been granted to students: with no transcripts, with lower than a C average (2.0), as favors to people of prominence on and off campus, and based on athletic ability (personal communication, Glen Valentine, September 6, 1988). It must be noted that not all special action admissions are related to athletics. Other cases involve students with special talents in the field of performing arts, students with physical handicaps, and students of foreign cultures.

Research Questions

Research Question 1. Was there a correlation between the graduation success rate of football players from 1981 - 1983 and race?
Research Question 2. Was there a correlation between the graduation success rate of scholarship football players from 1981 - 1983 and their SAT scores?

Research Question 3. Was there a correlation between the graduation success rate of scholarship football players from 1981 - 1983 and their high school GPAs?

Research Question 4. Was there a correlation between the graduation success rate of scholarship football players from 1981- 1983 and college GPAs?

Significance of the Study

The goal of this study was to determine an academic profile of the student athlete that the Virginia Tech football association has recruited. The study could give a coach the opportunity to view a prospective student athlete's transcript and estimate the chances that the student would have to succeed academically at Virginia Tech based on this profile. Finally, the study tested the validity of all variables, race, SAT scores, high school GPA, and college GPA as they relate to the student athlete graduate.

Summary

This chapter includes the purpose of the study, which was to examine specific factors that involve the academic portion of an athlete's obligation. These factors include race, SAT entrance examinations, high school grade point average and college grade
point average as they all pertain to successful graduation from college.
Chapter 2
Review of Literature

Researchers have studied graduation success rates of collegiate athletes. To compare students, some studies use variables such as GPA, race, geographical location, and graduation. Although a number of studies deal with such variables, a literature search did not reveal information concerning the criteria important to this investigation. Few studies focus attention on the graduation of athletes or on the affects of race, SATs and GPAs as predictors of academic success.

Two studies were initiated by the United States House of Representatives to establish guidelines for implementing tax deductions for university athletic departments. Mr. James J. Howard, of the House of Representatives, recommended guidelines that included a 75% graduation rate for scholarship athletes before a collegiate program could be deemed eligible. He directed two studies. One was the National Collegiate Athletic Association Survey of Graduation Rates After Five Years for Males First Entering College in Fall 1975, which was finalized by the American College Testing Program (ACT) in April 1981. The other was the Study of Freshman Eligibility Standards Technical Report (ADTECH) prepared by Advanced Technology, Inc. and was finalized in 1982.

ACT Survey

The ACT survey consisted of questionnaires mailed to 200 member institutions of the NCAA, of which 23% responded. Since Mr. Howard
requested a student athlete graduation rate of 75%, and all responses were not indicated as to whether the athletes were on scholarship, this presented a rather one sided picture. Although ACT reported a higher graduation rate for athletes than for non-athletes, the survey was not considered reliable (Chelinsky, 1985).

The data could have contained biases since the "respondents for each institution surveyed were largely directors of athletic departments who, it would be argued, may have been predisposed to report more favorable information for athletes than for non-athletes" (Chelinsky, 1985, p.3). Although no proof exists to support this possibility, ACT did not report any effort to minimize the potential, such as independent verification of reported data. Thus, the differences between athlete and non-athlete graduation rates could, in fact, be less favorable than those reported. Further, the survey instructions did not clarify how the status of an athlete was to be defined (Chelinsky, 1985). The definition was left to the discretion of the respondents, who may have had different criteria for classifying athletes and non-athletes.

**ADTECH Study**

In contrast, ADTECH circulated a similar survey but among different institutions. This survey received a 75% response rate. ADTECH disclosed results for both black and white athletes: the study results indicated there was a substantially higher graduation rate among whites than among blacks. The results also indicated
there was a higher retention rate, with white students being more likely to continue college educations (Chelinsky, 1985).

**Mackenzie Study**

Bonnie L. Mackenzie's survey, Academic performance of Intercollegiate Athletes, examined graduation rates and grade point averages. Of 1042 students identified as male athletes during the period 1970-1979, 13% (136 students) were special action admissions, 63% (667 students) were regular admissions, and 24% (246 students) were unclassified, that is, the admission category was missing from the student's composite undergraduate file. Other results of the study are also of interest to the current examination of student athletes.

Mackenzie reported high graduation rates of intercollegiate male athletes, since 79% graduated. This figure is higher than for male students as a group (68% graduation rate).

In addition, Mackenzie showed that at the end of two years of college work, cumulative GPAs of intercollegiate male athletes admitted from high school compared favorably with those of male students in general: 93% of athletes and 95% of male students had a C average or better. Among special action admission students, which numbered higher in football, basketball, and baseball, athletes had slightly higher grades than men in general: 82% of athletes had a C average or better, compared to only 76% of all men admitted under the special action admit category, at the end of the sophomore year.
Thus, second year cumulative GPA comparisons, involving comparable groups persisting through the time of highest dropout risk, indicate that academic performance is essentially the same for male athletes as for men in general.

Finally, Mackenzie's study showed that in six of the seven sports examined, there was no significant increase during the 1970-1979 period in the proportion of entering students who were special action admits. There was an increase in entering football players who were special action admits, but this was based on very small groups and does not represent a general increase (Mackenzie, 1981).

**Proposition 48**

Academics among college and high school athletes has received much attention from faculty, coaches, civic organizations, and the press. Consequently, the NCAA instituted (Proposition 48, which requires high school seniors wishing to be eligible to play college athletics as a freshman to score 700 on the SAT, 15 on the ACT, and maintain a 2.0 GPA in the high school core curriculum.) This passing of Proposition 48 went into affect in the Fall of 1986, prior to the beginning of the college sports season. Further, the core should include at least 11 academic full year courses, including three in English, two in mathematics, two in social studies, and two in natural or physical science including at least one lab. The core curriculum
is determined by the principal of the school the student attended and the university the student wishes to attend (NCAA, 1986).

(Proposition 48 resulted largely from the recent trend of primarily black athletes' failing to obtain a college degree after using up four or five years of college eligibility) (NCAA, 1986).

While results are still undetermined, Proposition 48 and the recent trend of institutions to motivate student athletes to graduate are positive steps in achieving a higher graduation rate (NCAA, 1986).

C.F.A. Report


Summary

While research perused revealed interesting facts about student athletes, none provides a basis for predicting academic success of a given individual student athlete. Clearly, graduation rates are increasing. However, the effect of Proposition 48 has not yet been tested. Two years does not provide sufficient time for student athletes to be accepted, attend four years of classes, and graduate. Fortunately, studies which have explored different variables related to student athletes' academic performance indicate a growing concern for athletes and the academic pressures they confront.
Chapter 3
Methods

Introduction

This chapter includes a discussion of the subjects used in the current study as well as the source of gathering all pertinent information. The data were pre-existing data, taken solely from previous records at Virginia Tech. Along with the acquisition of the data, in this chapter there is a discussion of how the data were analyzed and evaluated to answer the research questions.

Description of Subjects.

The subjects were scholarship football players who entered the freshman year of college during the years 1981 - 1983. There were 91 male student-athlete participants, all of whom had similar study schedules, and all of whom had access to tutors and free educational materials. The subjects were 52 black and 39 non-black male students. Subjects are classified as black or non-black for purposes of this study. All statistical data collected were gathered through the student profile section of Virginia Tech's mainframe computer. This information consists of: SAT scores, high school and college GPA's, and race.

Data Analysis

The data were analyzed by pairing scores to determine whether or not a relationships existed between pairs. This type of measurement is called correlation. For the purpose of this study,
Pearson Product Moment correlation coefficient (Pearson r) was applied.

When interpreting Pearson's Product Moment correlation coefficient the number used to decide whether or not a correlation exists between the two variables must fall between -1 and 1. An arbitrary scale has been devised to determine the effect that one variable possesses on another. The scale is as follows: 0 to .2 is called a 'zero order' correlation, meaning that one particular variable has little or no effect on the other. Two to three is referred to as a mild correlation; .4 to .5 is a moderate correlation; .6 to .7 illustrates a strong correlation and .8 or higher indicates a very strong correlation. The scale using negative numbers has the same interpretation, but the relationship between variables is inverse.

Summary

The subjects for this study include the 1981-1983 scholarship football athletes. The data used included the SAT scores, high school and college GPAs. The analysis method to be used in the analysis of these variables is the Pearson Product Moment correlation coefficient. In the interest of clarity of presentation, relationships between race and academic performance was examined through tabular analysis.
Chapter 4
Results

Introduction

After collecting the data a Pearson's r was calculated between variables paired scores (Appendices A, B, C). It must be explained that of the 91 students in the study, 63 cases had data for all variables, thus qualifying them for inclusion in the analysis. This explains why there were different numbers of cases in the analysis of SATs, high school GPAs and college GPAs.

Graduation Success

During the period of the three years from 1981-1983 black students showed a lower graduation rate (20%) in comparison to non-blacks (52%) (Table 1). Even though statistics in the table show a slight increase yearly (13% - 18% - 28%) for black student athletes, they still lag behind at a rate of over 30% collectively, over non-black athletes. (Table 1). Therefore, it would appear that there is a relationship between race and graduation success. These findings agree with the results of the ADTECH study where there was a substantially higher graduation rate among non-blacks than among blacks. Also, this study had below 75% of the athletes graduating as was found in ADTECH. The overall graduation rate of the athletes in this study for 1982 and 1983 was above that of the C.F.A. study.
<table>
<thead>
<tr>
<th></th>
<th>81</th>
<th>82</th>
<th>83</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black grads</td>
<td>13%</td>
<td>18%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>Non-black grads</td>
<td>66%</td>
<td>30%</td>
<td>64%</td>
<td>52%</td>
</tr>
</tbody>
</table>
SAT

SAT scores are very influential in a students admission requirement. In the case of black athletes, SAT’s have little correlation (Appendices A, B, C) with graduation success. (10 of the 36 black students admitted during the 1981 - 1983 period with recorded SAT scores, graduated) (Table II). However, SAT scores for black graduates and non-graduates are very close (665 to 644), (Table II). Non-black athletes on the other hand had higher SAT averages (810 non-graduates - 890 graduates) with a larger difference between mean scores of those that graduated and those that failed to graduate. Therefore, the answer to research question two is that there is a correlation between SAT scores and graduation success. These results for the blacks are below the standards set by Proposition 48 but the non-blacks exceed the minimum score set by Proposition 48.

High School GPA

High school GPAs correlate moderately to strongly with graduation success. (Table III), (Appendices A, B, C). Within both groups, the higher the high school GPA, the higher the graduation rate. Therefore, the answer to research question three is that there is a correlation between graduation success and high school GPA’s.

College GPA

College GPA’s relate directly to graduation, but there are a few athletes with sufficient college GPA’s who did not graduate due
Table II  Graduation and S.A.T. of Blacks and Non-blacks

<table>
<thead>
<tr>
<th></th>
<th>Mean S.A.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blacks</strong></td>
<td></td>
</tr>
<tr>
<td>Graduates</td>
<td>10</td>
</tr>
<tr>
<td>Non-graduates</td>
<td>26</td>
</tr>
<tr>
<td>Total blacks</td>
<td>36</td>
</tr>
<tr>
<td><strong>Non-blacks</strong></td>
<td></td>
</tr>
<tr>
<td>Graduates</td>
<td>21</td>
</tr>
<tr>
<td>Non-graduates</td>
<td>14</td>
</tr>
<tr>
<td>Total Non-blacks</td>
<td>35</td>
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</tbody>
</table>
### Table III  Graduation and H.S.G.P.A. of Blacks and Non-blacks

<table>
<thead>
<tr>
<th></th>
<th>Mean H.S.G.P.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blacks</strong></td>
<td></td>
</tr>
<tr>
<td>Graduates</td>
<td>10</td>
</tr>
<tr>
<td>Non-graduates</td>
<td>31</td>
</tr>
<tr>
<td>Total blacks</td>
<td>41</td>
</tr>
<tr>
<td><strong>Non-blacks</strong></td>
<td></td>
</tr>
<tr>
<td>Graduates</td>
<td>22</td>
</tr>
<tr>
<td>Non-graduates</td>
<td>13</td>
</tr>
<tr>
<td>Total Non-blacks</td>
<td>35</td>
</tr>
</tbody>
</table>
to personal or disciplinary reasons. Therefore, the answer to research question four is there is a correlation between college GPAs and those who graduate (Appendices A, B, C).

Summary

According to Pearson's $r$ using both categories of subjects, black and non-blacks, SATs and high school GPAs indicate an overall positive relationship to graduation success. Whether or not these variables have a direct affect on graduation success is unknown. The University has a standard 2.0 GPA requirement for graduation, therefore this variable of college GPA for a student who graduates is of little value in this study.
Chapter 5
Summary, Conclusions, and Recommendations

Summary

Graduation success of college athletes is a priority issue for many people. Some of the reason for the success or failure of a college athlete to graduate with a degree provided the impetus for this study. There were certain variables used and correlated using Pearson's product moment correlation coefficient. There have been other studies, but none have employed the same variables and format that were used in this study. Interestingly, a positive relationship between the variables chosen for this research does exist.

Comparing black student athletes to non-blacks using Pearson's r, the results are as follows. An appreciably smaller number of blacks graduated compared to non-blacks. The non-black students had higher SAT scores and high school GPAs and more of these students successfully graduated. The black students had a 30% lower graduation rate as well as substantially lower percentage scores in other categories investigated.

Conclusion

The results of this study indicate a discrepancy between black and non-black student athletes in the realm of academics. This study has indicated that black student athletes were academically deficient upon admission in direct comparison with their non-black counterparts.
The results indicate that the variables are important for successful graduation, but to no known measurable degree. Blacks have made significant progress toward graduation during the years tested, beginning with 13% in 1981 and ending with 28% in 1983. It could be concluded that as time passes, the academic distance between blacks and non-blacks will lessen due to the implementation of Proposition 48.

Recommendations

As a result of this study, the following are recommended:

1. This study should be replicated to compare results once Proposition 48 has been in effect for five years;
2. A study should be conducted using different variables, such as geographic locations and socioeconomic status of the athletes;
3. Coaches at Virginia Tech desiring to recruit student athletes who could expect to graduate should be guided by the results of this study;
4. A follow-up study should be conducted of those athletes who were academically eligible but did not complete their degree requirements within a five-year period; and,
5. Student athletes should be evaluated to determine their needs for special tutorial emphasis.
References


Appendix A


<table>
<thead>
<tr>
<th></th>
<th>College G.P.A</th>
<th>H.S.G.P.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.A.T.</td>
<td>.012</td>
<td>.488</td>
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<tr>
<td>College G.P.A.</td>
<td></td>
<td>.254</td>
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</table>
Appendix B


<table>
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<th>College G.P.A</th>
<th>H.S.G.P.A.</th>
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</thead>
<tbody>
<tr>
<td>S.A.T.</td>
<td>.332</td>
<td>.777</td>
</tr>
<tr>
<td>College G.P.A.</td>
<td></td>
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</table>
Appendix C


<table>
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<th>College G.P.A</th>
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<tbody>
<tr>
<td>S.A.T.</td>
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<td>.753</td>
</tr>
<tr>
<td>College G.P.A.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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VITA

Abraham Billy Hardee, Jr. was born in Lakeland, Florida on August 12, 1954. He graduated from Mulberry High School in Mulberry, Florida in June, 1972. He then pursued a Bachelor of Science degree in marketing education at Virginia Polytechnic Institute and State University. Upon completion of his undergraduate degree, he played eight years of professional football and taught two years of high school. During the past two years, he worked as a salesman and as a policeman. In March, 1987, he accepted a position with the Virginia Tech football program as a graduate assistant.

Abraham Billy Hardee, Jr.