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A Comparison of College Academic Success Between High School Athletes and Non-Athletes

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A Comparison Of College Academic Success

Between High School Athletes And Non-Athletes

(TITLE)

BY

JEROLD T. VAN BELLEHEM

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Science in Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1968

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED

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DATE

ADVISER

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DEPARTMENT HEAD

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CONTENTS

	page
ACKNOWLEDGMENTS.	i
LIST OF TABLES	iii
I. INTRODUCTION	1
<i>Purpose of Study</i>	1
Method of Research	2
Definition of Terms	4
Limitations of Study	5
II. RELATED RESEARCH	6
III. FINDINGS OF THE STUDY	9
IV. CONCLUSIONS	19
BIBLIOGRAPHY.	21

TABLES

Table Number	Title	Page
1	Average High School Class Standings	10
2	Numbers and Percentages of Students Covered by Study	11
3	Grade Point Summary of Athlete Group by Sport	11
4	ACT College Entrance Test Percentages	12
5	Students Dropped For Low Scholarship - Average Quarter Hours In School Average College Grade Point Average Average High School Grade Point Average	14
6	Students Still Attending Eastern - Average Quarter Hours In School Average College Grade Point Average Average High School Grade Point Average	14
7	Miscellaneous Grouping - Average Quarter Hours In School Average College Grade Point Average Average High School Grade Point Average	15
8	Students That Have Graduated From Eastern - Average Quarter Hours In School Average College Grade Point Average Average High School Grade Point Average	16
9	Average College and High School Grade Point Averages	17

CHAPTER I

INTRODUCTION

For several years the writer of this study has thought that through involvement with athletics the athlete learned things that should be helpful to him after high school outside of the realm of athletics. Because of the many hours spent on the practice fields and going to and from games, the athlete should learn to budget his time. Also, because of the time spent, he should be willing to spend time to reach certain immediate goals. The manner in which he is taught certain skills should leave his mind open for constructive criticism and ideas from others. He should also have a healthy attitude toward discipline and be able to withstand pressures put on him from the rigors of competition in the classroom.

At first it was thought that the best means of proving the success or failure of the athletic program would be to measure the success of the student after high school graduation. To prove success of the athlete, a comparison would have to be made between athletes and non-athletes. Also, some basis for success would have to be decided on. Because of the wide range of career and job possibilities, success would be almost impossible to assess. After careful consideration it was decided to use college academic success as the basis for finding any relative differences between the two groups - athletes and non-athletes.

Although it would have been desirable to use the records of athletes attending colleges throughout the country, because of the availability of records, this study included only graduates of Charleston High School who subsequently attended Eastern Illinois University.

How the Data Were Collected

In order to alleviate the task of going through the individual records of all Charleston High School graduates who attended Eastern Illinois University during the years 1958-1966, the annual reports by the principal containing lists of colleges and locations of jobs to which students transcripts were sent, was examined. A random sample of male students whose transcripts were sent to Eastern from the years 1958 through 1966 was then selected. One hundred athletes and 100 non-athletes were selected. All of the male students included in the years 1962 and 1963 who were in the category above were selected for two reasons. The reasons were that (1) in 1962 Charleston High School started using the A. C. T. college entrance exams extensively, and (2) these students have also had a chance to graduate from college. About one-third of the students were from the 1962-63 year group; the other two-thirds were selected randomly from 1958-1961 and 1964-1966.

Two hundred names were presented to the Dean of Records at Eastern Illinois University, who secured the transcript of each individual on the list.

From Eastern Illinois University the following information was obtained:

1. Year entered
2. Grade point average (overall)
3. Number quarter hours credit earned
4. Major-minor(s) (if available)
5. Quarters in school
6. Sports and letters (if any)
7. Reason left school

Because of various reasons, such as applicants not entering college or withdrawing before any credit was earned, the number included in the study was reduced to seventy-five high school athletes and seventy-five non-athletes. No student was considered who did not complete at least one quarter in college.

After the one hundred and fifty students to be studied were selected, the following information was obtained from the high school records:

1. Year graduated
2. Class standing
3. Overall grade point average
4. College entrance test scores (A. C. T.)

Information concerning the sports and letters won by individuals was obtained from the varsity club records at the high school.

Definition of Terms

The following four terms are defined in relation to this study.

Athlete - Any male student who has received one or more varsity letters in one or more sports at Charleston High School. A varsity letter is awarded to any candidate who has played in one-half the quarters in football and basketball or innings in baseball or scored 16 varsity points in track and finished the respective season in good standing with the team.

Non-athlete - Any male student who does not meet the qualifications outlined for the athlete.

Academic Success - Is decided on in this study using Grade Point Average in high school, Grade Point Average in college, and the number of quarters in attendance.

Grade Point Average - Is based on a 5 point basis at Charleston High School with the following grade weights, F = 1, D = 2, C = 3, B = 4, and A = 5. At Eastern Illinois University, a 4 point basis is used with the grades having the following weights, F = 0, D = 1, C = 2, B = 3, and A = 4.

In this study the grades are left at their respective weights from the two schools.

Limitations of Study

The first limitation of the study is that it is restricted to male graduates from Charleston High School.

The second limitation of the study is that the male graduates were further restricted to only those that entered Eastern Illinois University upon graduation from high school.

The third limitation is that which is inherent in a small random sampling. It is possible to miss some important deviations that would change the findings a small amount one way or another.

CHAPTER II

RELATED LITERATURE

Edward Cope, Chancellor of the University of Pittsburgh, wrote in an article for Sports Illustrated in 1962:

"I believe athletes were, as a breed, not incongenial to a scholarly atmosphere. I felt reasonably confident that most athletes regard college as more than a place to sojourn in lieu of going directly from high school to work."¹

Cope wrote the above article in defense of athletics in general. He conducted a study of over 1900 graduates from Pittsburgh from 1900 through 1960 to see if athletes applied any of their knowledge learned through competition. He sums up his study in these two statements:

"The competitive drive which is encouraged and the institutional loyalty which is engendered, provides the rationale for intercollegiate contests. . . . There emerges from our study a titillating relationship between the violent spirit and the probing, often creative mind."²

In an article in 1954 in Scholastic Coach, Tom Conner wrote in defense of the criticism leveled at athletes for poor scholarship. Seven hundred seventy four students were studied in the Alexandria, Minnesota High School. Seventy-four of these students were athletes.

¹ Dr. Edward Cope, "Saturday's Hero Is Doing Fine." Sports Illustrated, October 8, 1962, p. 66-70.

² Ibid.

Through his research Conner came to these conclusions:

"I. In Alexandria High School the athletes had greater native ability and greater achievement than the non-athlete."

"II. Despite long hours engaged in athletics, the athlete achieved as well in relation to ability as did the non-athlete."

"III. Participation has no effect on scholastic success."³

Most of the other related literature was dated 1929-1935 when there was evidently much pressure and interest on this subject. It is felt most of the material covered in these older studies no longer applies to the situations with which we are now familiar. One of these studies compared athletic ability and scholarship.

Cooper and Davis wrote on the subject of the academic success of athletes in 1934 in the American Physical Education Association Research Quarterly and found that although there are a few discrepancies, for the most part, there is no difference between the grades of better or lesser athletes. This study covered over 30 years of information.⁴

Roland A. Jones wrote "Comparison of the Intelligence of High School Athletics and Non-Athletics" for School and Society.

³ Tom Conner, "Varsity Athletes Make Superior Scholars" Scholastic Coach XXIV, November 1954, p. 56-57.

⁴ J. A. Cooper and E. C. Davis, "Athletic Ability and Scholarship", American Physical Education Association Research Quarterly V, December 1934, p. 68-78.

Jones found generally that athletes tended to put their ability and time to more effective use than non-athletes. The respective I Q's of these groups did not differ enough to be significant.⁵

Gerald W. Ferguson wrote an unpublished Master's paper at Eastern Illinois University in 1955 titled, "A Comparison of Athletes Grade Point Averages With Those of Non-Athletes With Similar I Q's". This study was conducted to find out if athletes were actually "given" grades simply because they were athletes. Ferguson compared grade-point averages of athletes and non-athletes of comparable I Q's taken from three high schools of three different sizes. Ferguson summed up:

"In the comparison of grade point averages between athletes and non-athletes, it appeared that the differences found were negligible and apparently insignificant. Thus it would appear there was little difference between the athlete's grade point average and that of the non-athlete when the factor of academic ability was similar."⁶

Most of the related literature has been written in defense of the athlete and apparently has shown that the athlete does as well or better than does the non-athlete.

⁵ Roland A. Jones, "Comparison of the Intelligence of High School Athletes With Non-Athletes", School and Society XLIII, September 21, 1935.

⁶ Gerald W. Ferguson, "A Comparison of Athlete's Grade Point Averages With Those of Non-Athletes With Similar Intelligence Quotients", Eastern Illinois University, 1955, Dept. of PE-Men.

CHAPTER III
FINDINGS OF THE STUDY

The two groups in this study are the high school athlete or letterman and the non-athlete or non-letterman. To further study these groups, they were broken down into the following categories:

1. Graduated - All those students who have completed the requirements for graduation at Eastern Illinois University.
2. Still Attending - All those students who are still attending Eastern and have yet to fulfill the requirements for graduation. This study did not find enough students who have been readmitted to school to be of any significance.
3. Dropped For Low Scholarship - This group includes all those students who have been dropped for either excessive grade deficit points or low grade point average. None of those in this group have been readmitted to Eastern.
4. Miscellaneous - This group includes several different groups, none of which are believed large enough to have an effect on the study. The different groups include those transferred, drafted, and those quitting to get married.

For each of the categories listed on the previous page, the average quarter hours in college, the average college grade point average, and the average High School grade point average will be considered and compared. In addition, the ACT test scores for the athletes and non-athletes were compared.

TABLE 1

High School Class Standings of the Athlete and Non-Athlete

	<u>4th. Qtr.</u>	<u>3rd. Qtr.</u>	<u>2nd. Qtr.</u>	<u>1st. Qtr.</u>	<u>Number of Students</u>
Athletes	24	21	23	7	75
Non-Athletes	24	26	21	4	75

Table one indicates the similarities of the two groups in the study in high school class standings. Sixty percent of the athletes are in the upper fifty percent of the class standings and sixty-seven percent of the non-athletes are in the same group.

The table indicates that the differences as to number of students in each quartile were slight.

Table two indicates the numbers in each group included in the study. Further discussion of the performance of these groups will be presented later in the study.

TABLE 2

Numbers and Categories of Students Included in the Study

	<u>Non-Athletes</u>		<u>Athletes</u>	
Dropped - Low Scholarship	27	37%	23	30%
Graduated	20	26%	19	25%
Still Attending	19	25%	24	31.2%
Miscellaneous	9	13%	9	13.5%

TABLE 3

Grade Point Summary of Athlete Group by Sport

	<u>High School</u>	<u>College</u>
Football	3.618	2.108
Basketball	3.535	2.185
Baseball	3.634	2.140
Track	3.790	2.244

Many of the athletes participated in more than one sport. Some athletes are considered two or three times depending on the number of sports in which the student participated. It was noted that track athletes had both the highest college and high school grade point average, and that although football and baseball athletes had slightly higher grade point averages in high school, the baseball group had slightly better College Grade Point Averages. No reason for these differences can be assigned.

TABLE 4

ACT Test Capacities

English:

Deciles	1	2	3	4	5	6	7	8	9	10	Total
No. of Athletes	11	2	3	2	7	4	4	2	4	7	46
No. of Non-Athletes	3	4	3	4	4	4	6	4	4	3	39

Math:

Deciles	1	2	3	4	5	6	7	8	9	10	Total
No. of Athletes	7	3	1	10	4	3	6	4	2	8	46
No. of Non-Athletes	2	2	4	1	1	5	3	4	9	8	39

Social Science:

Deciles	1	2	3	4	5	6	7	8	9	10	Total
No. of Athletes	8	3	5	3	2	3	3	7	6	6	46
No. of Non-Athletes	2	2	3	1	1	4	6	9	9	2	39

Natural Science:

Deciles	1	2	3	4	5	6	7	8	9	10	Total
No. of Athletes	12	2	4	4	1	2	5	5	6	5	46
No. of Non-Athletes	1	1	5	1	5	3	8	7	7	1	39

Comprehensive:

Deciles	1	2	3	4	5	6	7	8	9	10	
No. of Athletes	10	3	1	3	1	5	3	6	6	8	46
No. of Non-Athletes	3	4	2	4	3	6	2	6	8	3	39

Table four, ACT Test Capacities was included in order to give some indication as to the relative test standings of the groups being studied. Since the ACT as a requirement for entrance to college did not include all the students being studied the figures in this table are only for those students for whom such scores were available. In explaining the comparative standings, it was noted that the athletes showed a bi-modal distribution in all categories in that they consistently ranked in the highest and lowest deciles. The non-athletes, on the other hand, consistently ranked in the middle deciles, with only a few in the highest and lowest. The effect of this ranking on grades in college can only be guessed at.

TABLE 5

Average Quarter Hours in College, College Grade Point Average, and High School Grade Point Average for Students Dropped from Eastern for Low Scholarship

	<u>Number of Students</u>	<u>Aver. Qtr. Hrs. in College</u>	<u>Aver. College GPA</u>	<u>Aver. High School GPA</u>
Athletes	23	38.3	1.429	3.171
Non-Athletes	27	56.6	1.325	3.328

Table five indicates that the non-athletes stayed in school longer before dropping out with the average quarter hours in school being 38.3 for the athlete versus 56.6 for the non-athlete. The non-athlete had a lower overall grade point average in college at the time of dropping out, 1.325 compared to 1.429 for the athlete. The non-letterman had a higher grade point average in high school, 3.328, than did the athlete, 3.171.

TABLE 6

Average Quarter Hours in College, College Grade Point Average, and High School Grade Point Average for Students Still Attending Eastern

	<u>Number of Students</u>	<u>Aver. Qtr. Hrs. in College</u>	<u>Aver. College GPA</u>	<u>Aver. High School GPA</u>
Athletes	24	130.9	2.599	3.713
Non-Athletes	19	125.9	2.624	3.593

Table six indicates that the athlete still in college, but not graduated had done slightly better in high school work than the non-athlete with a

Grade Point Average of 3.713 compared to the non-athletes Grade Point Average of 3.593, although they are slightly behind the non-athletes in school work in college, 2.599 for the athlete and 2.624 for the non-athlete. It was found in the research that although the five students who competed in college athletics majored in Physical Education, no specific pattern could be established for major and minor work in school. Because of this, majors and minors were not considered in the study.

TABLE 7

Average Quarter Hours in College, Average Grade Point Average in College and Average Grade Point Average in High School for the Miscellaneous Grouping

	<u>Number of Students</u>	<u>Aver. Qtr. Hrs. in College</u>	<u>Aver. College GPA</u>	<u>Aver. High School GPA</u>
Athletes	9	62.0	2.508	3.984
Non-Athletes	9	62.5	2.329	3.927

In Table seven, the writer has included the following groups:

Transfers - those students who started at Eastern but transferred to another school; Servicemen - those students who either were drafted or quit and joined some branch of the service; two students who quit to get married, and those who quit to go into business.

It should be noted that the majority of both groups quit during the sophomore year, and that the Grade Point Average for the athlete group,

as well as the group of non-athletes were well above the 2.0 Grade Point Average required for staying in school. They all did have somewhat better college records, however. The athletes in this group had slightly better grades in high school than did the non-athletes, although the difference was slight. It is also interesting to note that this group had a high school Grade Point Average which is about the same, and college Grade Point Average which is slightly lower than the college graduates shown in Table eight.

TABLE 8

Average Quarter Hours, Average College Grade Point Average, and Average High School Grade Point Average for Students Who Have Graduated From Eastern

	<u>Number of Students</u>	<u>Aver Qtr. Hrs. in College</u>	<u>Aver College GPA</u>	<u>Aver High School GPA</u>
Athletes	19	199.3	2.586	3.988
Non-Athletes	20	205.9	2.542	3.943

In Table eight the most important fact appears to be that the athletes have maintained the slight advantage in Grade Point Average they held in high school all the way thru college. Both groups began with nearly a "B" average (3.9+), and completed college with a good "C+" average (2.5+).

The trend in all of the tables has been to show a fairly close re-

relationship between the two groups being studied. Table nine tends to show what has been developing throughout the study. Although the non-athlete did slightly better in his high school subjects overall than the athlete, he did less well in college than his athlete classmate.

TABLE 9

Average College and High School Grade Point Averages For All Groups

	<u>Number of Students</u>	<u>Aver. GPA in College</u>	<u>Aver. GPA in High School</u>
Athletes	75	2.340	3.621
Non-Athletes	75	2.238	3.625

In summarizing this section, the following points should be noted.

In the dropped for low scholarship category, the athlete dropped in a much shorter period of time, usually during the first year, but had a higher Grade Point Average at the time of drop than did the non-athlete. Also, in this category the non-athlete had done much better in high school compared to the athlete of this group, although the grades of both groups were significantly lower in high school than those of any of the other groups.

The still attending Eastern group tended to show the closest relationship to each other in both high school and college grade points and in quarter hours in attendance.

The graduated group showed the athlete took on the average, six

quarter hours fewer to graduate than the non-athlete but kept about the same relationship in Grade Point Average.

Considering the four sports offered at Charleston High School, the track athletes tended to be the better students. They had a Grade Point Average of 3.790 in high school and 2.244 in college compared to the next highest in high school which was the baseball athlete with a Grade Point Average of 3.634, and in college the next highest was basketball with a 2.185 Grade Point Average.

CHAPTER IV

SUMMARY AND CONCLUSIONS

To the extent that the data collected is correct and the analysis correct, the following conclusions seem justified.

The class standing and Grade Point Averages indicate that athletes in general do less well at Charleston High School in similar school work than do the non-athletes. However, they do as well or better on the ACT college entrance exams. Reasons for these two facts can be broken down readily. The average student will be in a classroom for academic subjects three hours and forty minutes. This is not counting subjects such as band and chorus. The average varsity football player will take the field before 3:30 p. m. in the afternoon and be back in the field house by 7:00 p. m. This is almost the equivalent of taking four more subjects time-wise during the day. This is not considering the time it takes to go to and from ball games or the length of time spent going home after practice. Considering this, the closeness of the high school class standings and grade point averages seem remarkable.

A higher percentage of non-athletes than athletes dropped out of college for low scholarship. There is no clear-cut reason for this other than the fact that the athlete may tend to exhibit a little more determination to stick with something that he starts.

Although the athlete tends to have a lower level of achievement in high school, he seems to do better in college. This is where the long hours of hard work and energy spent on the high school field or court may pay off for the student. Because the athlete has had to spend extra time getting his homework in high school he may be more willing to spend the time in college to prepare for classes. Because the athlete has spent long hours striving toward a goal, he knows that there will be many obstacles in his path to overcome. The successful athlete has apparently learned to try harder in college and consequently does better. It might be noted that the study shows that of the groups studied, approximately the same proportion of each group was dropped for low scholarship, dropped for miscellaneous reasons, and was finally graduated.

The conclusion overall, that the high school athlete does slightly better in college than does the non-athlete, appears to be justified.

BIBLIOGRAPHY

- ¹ E. Cope, "Saturday's Hero Is Doing Fine", Sports Illustrated, Oct. 8, 1962, pg. 66-70.
- ² Tom Conner, "Varsity Athletes Make Superior Scholars", Scholastic Coach XXIV, November 1954, pg. 56-57.
- ³ J. A. Cooper and E. C. Davis, "Athletic Ability and Scholarship", American Physical Education Association Research Quarterly V, December 1934, pg. 68-78.
- ⁴ Roland A. Jones, "Comparison of the Intelligence of High School Athletes With Non-Athletes", School and Society XLIII, September 21, 1935.
- ⁵ Gerald W. Ferguson, "A Comparison of Athlete's Grade Point Averages With Those of Non-Athletes With Similar Intelligence Quotients", Eastern Illinois University, 1955, Dept. of PE - Men.