

A COMPARISON OF ACADEMIC ACHIEVEMENTS OF LETTERMEN,
NON-LETTERMEN, AND NON-ATHLETES AT MSGR. LUCKEY
HIGH SCHOOL, 1957-1962

by

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A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

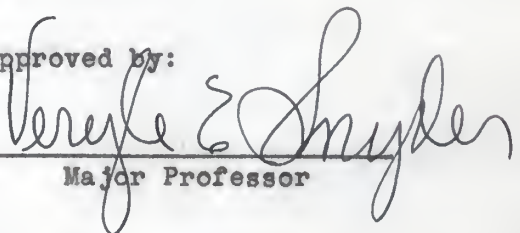
MASTER OF SCIENCE

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INTRODUCTION

The value of athletics in the educational program of a high school has been the center of controversy since the introduction of sports into the extra class life of the student.

In reviewing the literature, one discovers that many opinions and discussions for and against the inclusion of athletics in the high school program have been presented throughout the years. The term athletics, has often been regarded by some individuals as a field chosen primarily by young men who specialize in the use of "brawn," and lack the aptitude or "brain power" necessary to cope with the everyday problem of attaining high scholastic achievement. Some of these same individuals believe that time consumed in athletic programs is often a hindrance to participating students who do have the ability to comprehend and attain scholastic achievement.

The schools of today require that students attain a certain scholastic achievement before they are to participate in sports, and it is necessary that they maintain these standards throughout the students' institutional athletic career.

PURPOSE

The purpose of this study was to investigate the scholastic status of the athletes of Luckey High School extending through the five-year period from 1957 to 1962.

A comparison will also be made of the scholastic achievement of the letterman, non-letterman, and the non-participant to

determine whether or not participation in athletics has interfered with scholastic achievement of boys in Luckey High School.

REVIEW OF LITERATURE

An extensive review of the reference indexes in the Farrell Library and the Physical Education Departmental library was made to determine what previous literature had been written on my chosen subject.

Although no previous literature has been written concerning this particular report at Luckey High School, there have been other studies made in other educational institutions on all different levels. Some of the studies available could not be used because of different educational and athletic standards which have been set up by the different institutions.

William Alfred Hargrave, a graduate of Kansas State University, made a comparative study of the freshmen in Manhattan Junior High School in 1958. He found that the scholastic attainment of the athletes of Manhattan Junior High School were not affected by their participation in athletics. It was concluded in this study that the athletes had higher I.Q. averages than the non-participants. The non-participants had the lower average. The lettermen's grade point average was superior in comparison to the averages of non-lettermen and non-participants.¹

¹ William Alfred Hargrave, "A Comparison of Grade Point Averages and I.Q. Scores of Lettermen, Non-lettermen, and Non-participants at the High School Freshman Level," Unpublished Master's Report 1953, p. 18.

In a Master's study made by Virgil Rodney Enos in 1958, a graduate of Kansas State University, on the senior high level of sophomores, juniors, and seniors, he concluded that lettermen at Turner High School made better grades than all other boys in the school. The boys participating in athletics usually had higher I.Q. averages than the non-participants.

The scholastic attainment of the athletes at Turner High School was not affected by participation in athletics. Athletes had above average I.Q. scores in comparison with other boys.²

MATERIALS AND METHODS

The data used in compiling this report included the grade point averages and intelligence quotients of 359 freshman, sophomore, junior, and senior male students. The grades used for determining the grade point averages were taken from permanent records from the office of the principal at Luckey High School. The intelligence test scores were obtained from the principal's office also.

The following procedure was used to determine grade point averages of the letter grades achieved by the students.

A equaled four (4) points

B equaled three (3) points

C equaled two (2) points

² Virgil Rodney Enos, "A Comparison of Grade Point Averages and I.Q. Scores of Lettermen, Non-lettermen, and Non-participants at The Senior High School Level," Unpublished Master's Report, 1958, p. 21-22.

D equaled one (1) point

F equaled zero (0) point

The Kardex file in the principal's office was used to determine the I.Q. averages. Before a student enrolled in the school, he completed a test from which an I.Q. could be obtained for the school records. The mean was the average used in this study.

The names of all the athletes were obtained from the annual report of athletes and also from the yearly report of the Kansas State High School Activities Association kept on file in the athletic director's office.

In this report a "letterman" refers to a boy earning a letter in a specific varsity sport. A "non-letterman" is any boy who has participated in a sport, but did not qualify for an award. A "non-athlete" refers to a boy who did not take part in any of the varsity sports.

RESULTS AND DISCUSSION

The data in Table 1 show the grade point averages and I.Q. scores of 18 football lettermen, 11 basketball lettermen, 11 track lettermen, 8 non-lettermen, and 27 non-athletes at Msgr. Luckey High School. This included every freshman, sophomore, junior, and senior boy who took the Otis I.Q. test and successfully completed the school year.

The data indicated that in terms of grade point averages, basketball (2.68), football (2.65), and track lettermen (2.60)

Table 1. The comparison of grade point and I.Q. averages of football, basketball, and track lettermen with non-lettermen and non-athletes for the 1957-1958 school year.

Classification	: Number	: Grade point : : average	: I.Q. : average
Football lettermen	18	2.65	108
Basketball lettermen	11	2.68	107
Track lettermen	11	2.60	108
Non-lettermen	8	2.40	104
Non-athletes	27	2.52	103

ranked one, two, and three for the 1957-1958 school year. Non-lettermen had the lowest grade point average (2.40) and non-athletes (2.52) were slightly above the non-lettermen.

Football and track lettermen shared the highest I.Q. average (108); non-athletes had the lowest (103) for the school year. Data from Table 1 disclose that basketball lettermen had an I.Q. average of 107, with non-athletes having 103 compared to the 104 average of non-lettermen.

Table 2 includes the grade point and I.Q. averages of 15 football lettermen, 11 basketball lettermen, 10 track lettermen, 12 non-lettermen, and 30 non-athletes for the school year 1958-1959.

The table showed that all lettermen had a higher grade point average than non-athletes or non-lettermen. The basketball lettermen had the highest grade point average (2.60), non-athletes the lowest (2.18). The non-lettermen were slightly above the

Table 2. Comparison of the grade point and I.Q. averages of football, basketball, and track lettermen with non-lettermen and non-athletes for the 1958-1959 school year.

Classification	: : Number	: Grade point : : average	: I.Q. : average
Football lettermen	15	2.55	106
Basketball lettermen	11	2.60	99
Track lettermen	10	2.49	98
Non-lettermen	12	2.44	112
Non-athletes	30	2.18	104

non-athletes in grade point average (2.44). Football lettermen were second to basketball lettermen in grade point average (2.55). Track lettermen were .05 of a point lower, with a grade point average of 2.49.

Non-lettermen had the highest I.Q. average (112) while track lettermen had the lowest (98). Football lettermen were second to non-lettermen in I.Q. average (106), with non-athletes (104), and basketball lettermen (99) following in that order.

The information included in Table 3 shows the grade point average and I.Q. average of 16 football lettermen, 7 basketball lettermen, 11 track lettermen, 12 non-lettermen, and 32 non-athletes.

Of the five groups in this table, basketball lettermen emerged with the highest grade point average (2.75). In grade point average, football lettermen (2.70), track lettermen (2.68), non-lettermen (2.46), and non-athletes (2.24) followed basketball

lettermen (2.75).

Table 3. Comparison of the grade point and I.Q. averages of football, basketball, and track lettermen with non-lettermen and non-athletes for the 1959-1960 school year.

Classification	Number	Grade point average	I.Q. average
Football lettermen	16	2.70	108
Basketball lettermen	7	2.75	103
Track lettermen	11	2.68	103
Non-lettermen	12	2.46	107
Non-athletes	32	2.24	104

Football lettermen were slightly higher than all other groups in I.Q. average (108). The non-lettermen were second in this category (107) with non-athletes (104), basketball lettermen (103), and track lettermen (103).

According to Table 4, football lettermen had the highest grade point average (2.45) for the 1960-1961 school year, followed by basketball lettermen (2.36). Track lettermen and non-lettermen (2.35) were slightly higher than non-athletes (2.34) for the school year.

The football lettermen for the 1960-1961 school year had an I.Q. average of 109. The basketball lettermen and non-athletes had the same I.Q. average (106) for this year. Non-lettermen (108) I.Q. averages were one point higher than track lettermen (107).

Table 4. Comparison of the grade point and I.Q. averages of football, basketball, and track lettermen with non-lettermen and non-athletes for the 1960-1961 school year.

Classification	Number	Grade point average	I.Q. average
Football lettermen	15	2.45	109
Basketball lettermen	9	2.36	106
Track lettermen	13	2.35	107
Non-lettermen	17	2.35	108
Non-athletes	25	2.34	106

Table 5 shows that football lettermen had the highest grade point average (2.46) for the second consecutive year. Non-athletes had the lowest grade point average (2.34) for the 1961-1962 school year, keeping them in the same position for two consecutive years. Basketball lettermen's grade point average had a slight increase over the previous school year (.02). The non-lettermen grade point average had a slight increase (.01) for this school year while the track lettermen grade point average remained constant for the same period.

The football lettermen for the 1961-1962 school year also had the highest I.Q. (110) for the past two years. Non-athletes were lowest in I.Q. average (105) for the school year. I.Q. averages of non-lettermen (109), basketball lettermen (108), and track lettermen (107) ranked second, third, and fourth, respectively.

Table 5. Comparison of the grade point averages and I.Q. averages of football, basketball, and track lettermen with non-lettermen and non-athletes for the 1961-1962 school year.

Classification	Number	Grade point average	I.Q. average
Football lettermen	22	2.40	110
Basketball lettermen	9	2.38	108
Track lettermen	11	2.35	107
Non-lettermen	18	2.36	109
Non-athletes	19	2.34	105

From Table 1 through Table 5 the following comparisons can be made.

Football lettermen were highest for three years in I.Q. averages. The 1959-1960 basketball lettermen had the highest grade point average (2.75), and the 1958-1959 non-athletes had the lowest grade point average (2.18).

Non-lettermen had the highest I.Q. average (112) in the 1958-1959 school year. The track lettermen had the lowest I.Q. average (98) during the 1958-1959 school year.

Basketball lettermen had the highest grade point average for three of the five years. The fourth and fifth year football lettermen gained the highest grade point average, when basketball lettermen dropped to their lowest average (2.36) for any single year.

Non-athletes were lowest in grade point average four of the five years. The other low was registered by non-lettermen in the

1957-1958 school year.

The lowest I.Q. average in the report was recorded by track lettermen (98) for the 1958-1959 school year. Basketball and track lettermen shared the low (103) in the 1959-1960 school year.

The data in Table 6, for the five-year period 1957-1961, showed that the grade point and I.Q. averages of the 86 football lettermen ranked higher than all other groups for this study. The 57 basketball and the 56 track lettermen ranked second and third in grade point average. The 133 non-athletes received the lowest grade point average (2.32), with the non-lettermen ranking fourth (2.40).

Table 6. Comparison of grade point and I.Q. averages of the total number of football, basketball, and track lettermen with the total number of non-lettermen and non-athletes over the five-year period 1957-1962.

Classification	: Total : number	: Grade point : : average	: I.Q. : average
Football lettermen	86	2.56	108
Basketball lettermen	57	2.55	104
Track lettermen	56	2.49	104
Non-lettermen	67	2.40	108
Non-athletes	133	2.32	105

The study showed football lettermen and non-lettermen ranking first in I.Q. averages with 108. The non-athletes were second in I.Q. average with a score of 105. The basketball and

track lettermen received the lowest I.Q. average, both having the identical score of 104.

The information in Table 7, for the 1957-1958 school year, showed that 40 lettermen had the highest grade point (2.64) and I.Q. average (107). There were 27 non-athletes with the lowest I.Q. average (103) and the middle grade point average (2.52). The eight non-lettermen had the lowest grade point average (2.40) with the middle I.Q. average (104).

Table 7. Comparison of the grade point and I.Q. averages of lettermen, non-lettermen, and non-athletes for the 1957-1958 school year.

Classification	Number	Grade point average	I.Q. average
Lettermen	40	2.64	107
Non-lettermen	8	2.40	104
Non-athletes	27	2.52	103

Table 8 shows the total number of lettermen, non-lettermen, and non-athletes with their grade point averages and I.Q. averages for the school year 1958-1959. In football, basketball, and track combined, there was a total of 36 boys that lettered. There were 12 non-lettermen and 30 non-athletes.

The lettermen had the highest grade point average (2.54). The non-lettermen were second in grade point averages (2.44). Non-athletes were the lowest in grade point average (2.18).

Table 8. Comparison of the grade point average and I.Q. average of lettermen, non-lettermen, and non-athletes for the 1958-1959 school year.

Classification	Number	Grade point average	I.Q. average
Lettermen	36	2.54	101
Non-lettermen	12	2.44	112
Non-athletes	30	2.18	104

Non-lettermen during this year had the highest I.Q. average (112) for any group included in this study. Following them in order were non-athletes (104) and lettermen (101).

Table 9 includes the grade point and I.Q. averages of 44 lettermen, 8 non-lettermen, and 32 non-athletes for the 1959-1960 school year.

Table 9. Comparison of the grade point and I.Q. averages of lettermen, non-lettermen, and non-athletes for the 1959-1960 school year.

Classification	Number	Grade point average	I.Q. average
Lettermen	44	2.71	105
Non-lettermen	12	2.46	107
Non-athletes	32	2.24	104

Lettermen were high in grade point average with 2.71. The non-lettermen received the highest I.Q. average (107).

The non-athletes had the lowest I.Q. average (104) as well as the lowest grade point average (2.24). Lettermen gained the

middle I.Q. average (105) while the non-lettermen had the middle grade point average (2.46).

The information in Table 10 shows the grade point and I.Q. averages of 37 lettermen, 17 non-lettermen, and 25 non-athletes for the academic school year 1960-1961.

Table 10. Comparison of the grade point and I.Q. averages of lettermen, non-lettermen, and non-athletes for the 1960-1961 school year.

Classification	Number	Grade point average	I.Q. average
Lettermen	37	2.38	107
Non-lettermen	17	2.35	108
Non-athletes	25	2.34	106

Lettermen were slightly higher in both grade point average (2.38) and I.Q. average (107) than non-athletes. The non-athletes compiled grade point and I.Q. averages of 2.34 and 106, respectively.

The difference in grade point averages between non-lettermen and non-athletes was .01 for the year. The non-lettermen received the highest I.Q. average for the 1960-1961 school year (108).

Table 11 shows the grade point and I.Q. averages of 42 lettermen, 18 non-lettermen, and 19 non-athletes for the 1961-1962 school year.

For the fourth consecutive year this study showed that the non-lettermen maintained the highest I.Q. average. The lettermen

Table 11. Comparison of the grade point and I.Q. averages of lettermen, non-lettermen, and non-athletes for the 1961-1962 school year.

Classification	: Number	: Grade point : average	: I.Q. : average
Lettermen	42	2.39	108
Non-lettermen	18	2.36	109
Non-athletes	19	2.34	105

maintained the highest grade point average for five straight years.

A 109 I.Q. average by the non-lettermen indicated that this was highest in this category, followed by the lettermen (108), with the non-athletes ranking third (105).

Non-lettermen gained the middle grade point average (2.36). The lettermen ranked first in grade point average and the non-athletes were in the last position.

Table 12 shows that lettermen had the highest grade point average for each year. Non-athletes were lowest in 1958, 1959, 1960, and 1961. The non-lettermen had the lowest mark in 1957.

For four consecutive years the non-lettermen posted the highest I.Q. average, with the lettermen gaining top position in 1957. The highest I.Q. average achieved was 112 by non-lettermen in 1958. In comparison, the lowest I.Q. average was made by lettermen in the same year.

Lettermen had the highest grade point average (2.53) and the middle I.Q. rating. Non-lettermen had the highest I.Q. score

Table 12. Composite averages over the five-year period (1957-1962) of grade point and I.Q. averages of lettermen, non-lettermen, and non-athletes.

Year	Lettermen			Non-lettermen			Non-athletes		
	: Grade:	: Grade:	: Grade:	: Grade:	: Grade:	: Grade:	: Grade:	: Grade:	
	: point: I.Q.	: point: I.Q.	: point: I.Q.	: point: I.Q.	: point: I.Q.	: point: I.Q.	: point: I.Q.	: point: I.Q.	
No.:	Ave.:	Ave.:	No.:	Ave.:	Ave.:	No.:	Ave.:	Ave.:	
1957-58	40	2.64	107	8	2.40	104	27	2.52	103
1958-59	36	2.54	101	12	2.44	112	30	2.18	104
1959-60	44	2.71	105	12	2.46	107	32	2.24	104
1960-61	37	2.38	107	17	2.35	108	25	2.34	106
1961-62	42	2.39	108	18	2.36	109	19	2.32	105
Totals and average	199	2.53	105	67	2.40	108	133	2.32	104

(108) with a 2.40 grade point average. Non-athletes had the lowest grade point (2.32) and I.Q. average for the five years studied.

The information in Table 13 shows grade point and I.Q. averages of 45 one-sport lettermen, 38 two-sport lettermen, 16 three-sport lettermen, and 133 non-athletes. These figures show the total number of participants for each group for the five-year period.

Two-sport lettermen had the highest grade point average (2.85) of any group in this table. This also was true for all other tables in this report. Data showed this group highest in I.Q. scores (111). Three-sport lettermen were second in grade point (2.65) and last in I.Q. scores (101). One-sport lettermen

Table 13. Comparison of grade point averages and I.Q. averages of one-sport, two-sport, and three-sport lettermen with non-athletes for the five-year period 1957-1962.

Classification	Number	Grade point average	I.Q. average
One-sport lettermen	45	2.39	105
Two-sport lettermen	38	2.85	111
Three-sport lettermen	16	2.65	101
Non-athletes	133	2.32	104

rated third in grade point (2.39) and second in I.Q. average (105). Non-athletes were lowest in grade point averages (2.32) and third in I.Q. averages (104).

Table 14 shows the grade point and I.Q. averages of 133 non-athletes, 67 non-lettermen, 45 one-sport lettermen, 38 two-sport lettermen, 16 three-sport lettermen, 86 football lettermen, 57 basketball lettermen, and 56 track lettermen.

In the grade point average the two-sport lettermen had the highest mark with 2.85. Following the two-sport lettermen in order were: Three-sport lettermen (2.65), football lettermen (2.56), basketball lettermen (2.55), track lettermen (2.49), non-lettermen (2.40), one-sport lettermen (2.39), and non-athletes (2.32).

The two-sport lettermen had the highest I.Q. average (111). Non-lettermen and football lettermen were second with 108. The order of the remaining groups was as follows: one-sport lettermen (105), non-athletes (104), basketball lettermen (104),

Table 14. Comparison of grade point and I.Q. averages of non-athletes, non-lettermen, one-sport lettermen, two-sport lettermen, three-sport lettermen, football lettermen, basketball lettermen, and track lettermen for the five-year period 1957-1962.

Classification	Number	Grade point average	I.Q. average
Non-athletes	133	2.32	104
Non-lettermen	67	2.40	108
One-sport lettermen	45	2.39	105
Two-sport lettermen	38	2.85	111
Three-sport lettermen	16	2.65	101
Football lettermen	86	2.56	108
Basketball lettermen	57	2.55	104
Track lettermen	56	2.49	104

track lettermen (104), and three-sport lettermen (101) over the five years.

CONCLUSIONS

The academic achievements of lettermen of Luckey High School surpassed those of non-athletes for every year from 1957 through 1961.

Basketball, track, football, and non-lettermen exceeded non-athletes in grade point averages.

Non-athletes' I.Q. averages were surpassed by one-sport and two-sport lettermen.

One-sport, two-sport, and three-sport lettermen's grade point averages were higher than those of non-athletes.

The non-athletes' grade point averages were lower than those of lettermen and non-lettermen.

Non-athletes surpassed only the three-sport lettermen and track lettermen in I.Q. average.

Participating in one or more sports did not show any marked effects according to I.Q. averages and grade point averages.

The boys participating in athletics usually had higher I.Q. averages than non-participants.

A comparison of non-athletes with athletes of equal I.Q. showed that the athletes achieved higher academic standards in the classroom.

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A COMPARISON OF ACADEMIC ACHIEVEMENTS OF LETTERMEN,
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1963

The purpose of this report was to compare the academic achievement of athletes with that of non-athletes of the freshman, sophomore, junior, and senior boys of 1957 through 1961 at Luckey High School, Manhattan, Kansas, by presenting objective data from the permanent records of the school.

This study included 359 boys at Luckey High School who had taken the Otis Quick test upon entering their freshman year of high school.

The groups under study were football, basketball, and track men: one-, two-, and three-sport lettermen with non-lettermen and non-athletes. The grades of each student were given a numerical value, and the grade point averages were compiled. The scores from the Otis Quick test were used to find the I.Q. averages. With the grade point and I.Q. averages, comparisons of the groups within the report were made. The mean was the average used in this study.

This report showed that over the five-year period 1957 through 1961, football, basketball, and track lettermen with non-lettermen had a higher grade point average than non-athletes. Football lettermen and non-lettermen had slightly higher I.Q. averages than non-athletes. The I.Q. averages for track lettermen, basketball lettermen, and non-athletes were the same. Basketball lettermen had the highest grade point average, and track lettermen the lowest I.Q. average for lettermen of a single sport over the five years.

Boys who lettered in one sport, two sports, or three sports surpassed non-athletes in grade point average. In comparison with non-athletes, two-sport lettermen were 0.53 of a point higher, one-sport lettermen 0.07 higher, and three-sport lettermen 0.33 of a point higher.

It was concluded that all lettermen had a higher grade point average than non-athletes. The I.Q. averages of football lettermen surpassed non-athletes every year of the study. Boys who participated in athletics, whether it be one, two, or three sports received grades higher than those of non-athletes.