# A STUDY OF THE SCHOLASTIC QUALITIES AND ATHLETIC EXPERIENCE OF KANSAS ALL-STATE ATHLETES IN FOOTBALL, BASKETBALL AND TRACK FOR THE 1968-1969 SCHOOL YEAR

by 1264

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#### INTRODUCTION

Never before in the history of our nation has the role of sports been as important as it is today. Our society is characterized by automation, increased leisure, space exploration, scientific discovery and tensions at home and abroad. In such a setting school athletics can make a contribution to physical well-being, skilled performance, relaxation and response as well as to the inculcation of sound values. The games and contests furnish opportunities for self-discovery, self-acceptance and self-discipline. In sports, the circumstances of birth, color, race and creed are transcended by performance and by deed.

It is not likely that any other part of the school curriculum has stirred up as much professional and spectator interest as has athletics. "It is a well-known fact that the competitive athletic skills are among the chief sources of social esteem during the period preceding maturity." Therefore a student will often participate in grueling conditioning programs to develop the strength, endurance, and techniques necessary to excel in athletic competition, thereby raising his own peer status.

"It is generally agreed that athletics play a

Charles A. Bucher, Athletics in Schools and Colleges (New York: The Center for Applied Research in Education, Inc., 1965), p. 13.

prominent part in the education program of today's schools."<sup>2</sup> Schools throughout our country have increased in enrollment in the last decade. Most public schools offer a broader curriculum than ever before. With the broadening of the curriculum many people think athletics hinder the student's scholastic achievement. It is hoped that the investigation discussed in this paper may provide some of the answers that arise in discussion of athletics and scholarship.

#### PURPOSE

The purpose of this study was to provide concrete data from seventy-five questionnaires sent to the coaches of all-state and honor roll athletes in the State of Kansas for the school year 1968-1969, which could provide a basis of comparison between all-state athletes, other athletes and classmates in their ability to achieve high scholastic grades.

With the data compiled it is possible this report will shed some light upon the question of whether or not the excellent or outstanding athlete also excelled in scholastic endeavors.

<sup>&</sup>lt;sup>2</sup>James E. Pollom, "A Comparison of Grade-Point Averages and I. Q. Scores of Lettermen, Non-Lettermen, and Non-participants in the Four Year High School at Princeton High School," (unpublished Master's report, Kansas State University, Manhattan, 1963), p. 1.

## REVIEW OF LITERATURE

In the past several years studies have been made concerning the scholastic performance of athletes and non-athletes. These studies have been made on grade school, junior high, senior high and on the college level.

A number of researches support the contention that physical fitness is related to mental achievements. A noted psychologist, L. M. Terman, concluded after twenty-five years of studying intellectually gifted children:

The results of the physical measurements and the medical examinations proved a striking contrast to the popular stereotype of the child prodigy, so commonly predicted as a pathetic creature, ever-serious, undersized, sickly, hollow-chested, nervously tense, and bespectacled. There are gifted children who bear some resemblance to this stereotype, but the truth is that almost every element in the picture, except the last, is less characteristic of the gifted child than of the mentally average.

Warren A. Ketcham in a report "Growth Patterns of Gifted Children," states that intellectually gifted children not only indicated a high degree of group superiority in height, weight, and grip strength for each age six to twelve years inclusive.

The Gifted Child Grows Up (Stanford: Stanford University Press, 1947), p. 24.

Warren A. Ketcham, "Growth Patterns of Gifted Children," Merrill-Palmer Quarterly, 3 No. 3 (Spring 1957), 188.

Clarke and Jarman<sup>5</sup> investigated the academic achievement of boys nine, twelve and fifteen years of age. In each age group, high and low groups were formed separately based on Strength Indices and on Physical Fitness Indices, in each instance, the group was equated by intelligence quotients. Generally, especially for the Physical Fitness Index, the high groups had significantly superior grade-point averages in the class work and significantly higher means on standard achievement tests.

In a study conducted by William Alfred Hargrave, 6 a graduate student at Kansas State University, on the junior high level in the Manhattan Junior High, he concluded that the scholastic attainment of the lettermen's grade averages were superior to those averages of the non-lettermen and the non-participants.

Rogers and Palmer 7 presented a number of case studies of boys and girls at Nathaniel Hawthorne Junior High School,

<sup>&</sup>lt;sup>5</sup>H. Harrison Clarke and Boyd O. Jarman, "Scholastic Achievement of Boys 9, 12, and 15 Years of Age as Related to Various Strength and Growth Measures," <u>Research Quarterly</u>, 32, No. 2 (May 1961), 155.

William A. 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, Kansas State University, Manhattan, 1953).

<sup>&</sup>lt;sup>7</sup>Frederick Rand Rogers and Fred E. Palmer, "A Notable Physical Education Demonstration," Physical Fitness News Letter, University of Oregon (May 20, 1955).

Yonkers, N. Y.; studies of bright kids and low Physical Fitness Indices pupils were conducted. In many instances, improvement in physical fitness was accompanied by improved scholastic success.

A study made by James Elliot Pollom, 8 a graduate student of Kansas State University, compared the grade point averages and intelligent quotient scores of lettermen, non-lettermen and non-participants in the four year high school at Princeton High School in Princeton, Kansas. Mr. Pollom concluded that the scholastic achievements of lettermen and non-lettermen ranked higher than non-participants.

Frederick Rand Rogers in his Master's Thesis, studied two groups of Stanford University men with comparable I. Q. averages, but with differing muscular strength. The scholarship of those higher in muscular strength was definitely superior to that of the lower strength group. Robert Weber obtained a positive correlation between physical fitness test

<sup>&</sup>lt;sup>8</sup>James E. Pollom, "A Comparison of Grade Point Averages and I. Q. Scores of Lettermen, Non-Lettermen, and Non-participants in the Four Year High School at Princeton High School," (unpublished Master's report, Kansas State University, Manhattan, 1963), p. 1.

<sup>&</sup>lt;sup>9</sup>Frederick Rand Rogers, "Rogers' Law of Learning Capacity," <u>Physical Fitness News Letter</u>, University of Oregon, (January 31, 1955).

<sup>10</sup> Robert J. Weber, "A Study of the Relationship of Physical Fitness to Success in School and Personality," (Doctor's Dissertation, State University of Iowa, 1952).

scores and the grade point average of university men.

As a consequence of this type of evidence, it may be contended that a person's general learning potential for a given level of intelligence is increased or decreased in accordance with his degree of physical fitness.

#### METHODS OF STUDY

The material used in this report were compiled from a questionnaire sent to the coaches of the all-state athletes for the school year, 1968-69. Seventy-five questionnaires were sent out, sixty of those seventy-five questionnaires were returned. This gave a response of eighty per cent.

The list of all-state athletes as compiled by the Topeka Daily Capital of Topeka, Kansas was used to determine the outstanding athletes in the State of Kansas. This list was compiled from the results of questionnaires sent to all the high school coaches in the state of Kansas. The coaches of the state listed the players considered to be of the all-state category, which they had encountered during the season. These results were then all compiled into one list of all-state athletes in football, basketball and track.

Each questionnaire included eight questions. Of the eight questions, six were designed so only a check mark was needed for the coach to complete the question. One question required a short answer and one required the answer to be

selected from a list of numbers.

Questionnaires were sent to the coaches of the top twenty-two players in football. These were the players chosen on the first and second all-state teams. The coaches of the five basketball players selected on the team of each high school division or a total of twenty-five basketball coaches were sent questionnaires. In track the top two times or distances in each event were used, except the relays, for a total of twenty-eight athletes. Of the twenty-two questionnaires sent out in football, eighteen responses were received or eighty-two per cent. In basketball, twenty-three of the twenty-five questionnaires were returned by the coaches for ninety-two per cent. However, only nineteen of twenty-eight track questionnaires were returned, or seventy per cent.

Included in the folder sent to each coach was a stamped self-addressed envelope so as to not require any cost for the individual coach or the school for returning the questionnaire.

A letter explaining the purpose and goal of the study and the questionnaire were sent to the coach of each all-state athlete.

A sample copy of the questionnaire and letter sent to the coach of each all-state athlete will be found in the Appendix.

## RESULTS AND DISCUSSIONS

The data with regard to grade level of the all-state athlete are presented in Table I. The table compares the number of all-state athletes in each of the four high school classes, in which an athlete may qualify for this honor. This comparison is prepared for each sport: football, basketball and track separately and then the total for all sports is compared.

TABLE I

COMPARISON OF CLASS LEVEL OF ALL-STATE ATHLETES FOR THE 1968-69 SCHOOL YEAR, IN FOOTBALL, BASKETBALL AND TRACK

Sport	9th	10th	11th	12th
Football	0	0	1	17
Basketball	0	0	0	23
Track	0	1	7	11
Totals	0	1	8	51

Of the sixty responses received from the coaches of the all-state athletes, none of the athletes were on the ninth grade level. Only one athlete on the tenth grade level was able to achieve all-state honors. The athlete achieved the honor in track. Eight, eleventh grade athletes received the all-state honors, one in football and seven in track. Fifty-one of the all-state athletes were on the twelfth grade

grade level. Seventeen of the eighteen football all-state athletes were on the twelfth grade level. All twenty-three of the basketball all-state athletes were on the twelfth grade level. Eleven of the nineteen track all-state athletes were on the twelfth grade level.

Table II shows the relation of all-state athletes to the size of the school of which they were a member. The size of the class was broken down into the following divisions: ten to twenty, twenty to fifty, fifty to one hundred, one hundred to two hundred, and over two hundred.

TABLE II

COMPARISON OF CLASS-SIZE OF INDIVIDUAL ATHLETES WHO
MADE THE ALL-STATE TEAMS IN FOOTBALL, BASKETBALL
AND TRACK IN 1968-1969

Number in high school class	Football	Basketball	Track	Total
10-20	0	2	1	3
20-50	0	3	4	7
50-100	3	6	4	13
100-200	5	0	3	8
Over 200	10	12	7	29
Totals	18	23	19	60

The data in Table II indicated the number of students which were in the individual athletes high school class in 1968-69. The table showed that more of the all-state

athletes were in the large high school classes.

In football, no all-state athlete was in a class that had fewer than fifty students. Three of eighteen football all-staters had fifty to one hundred in their class. The all-state athletes were members of a class of over two hundred students.

Of the twenty-three basketball all-state athletes, two were in classes of ten to twenty students. Three were in a class of twenty to fifty students. Six of the basketball all-staters were in classes of fifty to one hundred students. No all-stater was in a class of one hundred to two hundred students. Twelve of the twenty-three all-state basketball athletes were in a class which had over two hundred students.

Of the sixty all-state athletes in the three sports of football, basketball and track the following breakdown of class size existed. Three were in classes of ten to twenty students. Seven were in classes of twenty to fifty students. Thirteen were in classes of fifty to one hundred students. Eight were in classes of one hundred to two hundred students. Twenty-nine were in classes of over two hundred students.

Table III indicates how the all-state athletes ranked scholastically in their class. The question was asked of how each all-state athlete rated in comparison to his classmates by means of dividing the class in three parts. These

divisions were: the upper one-third, the middle one-third and the lower one-third of their class.

TABLE III

THE RANK OF ALL-STATE ATHLETES, SCHOLASTICALLY WITHIN THEIR INDIVIDUAL CLASS FOR THE YEAR, 1968-1969

Division scholastically of athlete to class	Number in division	Tota1	Per cent
Upper 1/3	31	60	51.66
Middle 1/3	17	60	28.33
Lower 1/3	12	60	20.00

Table III indicated thirty-one of the sixty all-state athletes were in the upper one-third of their high school class scholastically. Thus over fifty-one per cent of the all-state athletes achieved better marks scholastically than two-thirds of their class-mates. Seventeen, or over twenty-eight per cent, of the sixty all-state athletes were in the middle one-third of their class scholastically. By combining the upper one-third and middle one-third totals it was found that eight per cent of the all-state athletes were in the upper two-thirds of their class. Only twelve of the sixty all-state athletes or twenty per cent were in the lower one-third of their class scholastically.

Data comparing the scholastic rating of the high school all-state athlete to the others participating in the same sport is given in Table IV. This information was obtained by asking the coach of the all-state athlete to check whether his all-state athlete fell in the upper one-third, middle one-third or lower one-third scholastically of those participating in the same sport.

TABLE IV

THE RANK OF ALL-STATE ATHLETES WITH OTHERS PARTICIPATING
IN THEIR SPORT SCHOLASTICALLY

Divisions scholastically of participants	Number in division	Total	Per cent
Upper 1/3	32	60	53.33
Middle 1/3	17	60	28.33
Lower 1/3	11	60	18.33

Thirty-two of sixty or over fifty-three per cent of the all-state athletes were in the upper one-third scholas-tically of those participating in his sport for the 1968-1969 school year. Seventeen of sixty or over twenty-eight per cent were in the middle one-third scholastically of those participating. Only eleven of sixty all-state athletes were in the lower one-third of their class scholastically. The remaining eighteen per cent were in the lower one-third of their class.

Table V was compiled from the approximate grade point averages of the sixty all-state athletes. The approximate

grade point averages were asked for on the basis of a four point grading system. A perfect 4.0 average meant that the athlete was a straight A student while 0.0 average designated a straight F student.

TABLE V

APPROXIMATE GRADE POINT AVERAGES OF SIXTY ALL-STATE
ATHLETES IN 1968-1969

Approximate grade point average	Number in division	Tota1	Per cent
3.5-4.00	11	60	18.33
3.0-3.49	15	60	25.00
2.5-2.99	10	60	16.67
2.0-2.49	16	60	26.67
1.5-1.99	7	60	11.67
1.0-1.49	1	60	1.67

Eleven of sixty all-state athletes had a grade point average between 3.5 and 4.00. This meant over eighteen per cent of the all-state athletes had grade point averages near a straight A level. Fifteen of the sixty all-state athletes or twenty-five per cent achieved grade point averages of between 3.0 and 3.49. One sixth or almost seventeen per cent of the all-state athletes had grade point averages between 2.5 and 2.99. The largest group or sixteen of sixty all-state athletes were in the 2.0 to 2.49 range. This

amounted to almost twenty-seven per cent of the sixty athletes from which the responses were compiled.

Seven or almost twelve per cent of the all-state athletes had approximate grade point averages of 1.5 to 1.99. Only one all-state athlete had an approximate grade point average as low as 1.0 to 1.49. Over eighty-six per cent of the all-state athletes achieved approximate grade point averages of 2.0 or higher during the 1968-1969 school year.

Table VI was compiled from the approximate intelligence quotient ratings as indicated by the coaches of the all-state athletes. The following intelligence quotient scale is offered for comparison. 11

140 ar	ıd	ab	ov	re	•	•	•	•	•	Near Genius
120-13	39	•	•	•	•	•	•	•	•	Very Superior
110-11	L9	•	•	•	•	•	•	•	•	Superior
90-109	)	•	•	•	•	•	•	•	•	Normal
80-89	•	•	•	•	•	•	•	•	•	Low Normal
70-79	•	•	•	•	•	•	•	•	•	Borderline
50-69	•	•	•	•	•	•	•	•	•	Moron
25 <b>-</b> 49	•	•	•	•	•	•	•	•	•	Imbecile
0-24										Idiot

<sup>11</sup> Norman L. Munn, <u>Psychology</u> (Boston: Riverside Press Cambridge, 1956), p. 60.

Table VI gives the approximate intelligence quotient ratings. It also gives the number of athletes that were in each division as well as the per cent in each group.

TABLE VI

APPROXIMATE INTELLIGENCE QUOTIENT RATINGS OF SIXTY
ALL-STATE ATHLETES IN 1968-1969

Approximate I. Q. Rating	Number in division	Tota1	Per cent
140	3	60	5.00
120-139	10	60	16.67
110-119	19	60	31.67
90-109	24	60	40.00
80-89	4	60	6.67
Below 80	0	60	0.00

Three of the sixty all-state athletes had an intelligence quotient rating of over 140 or in the near genius group. Ten of the all-state athletes or over sixteen per cent ranked in the 120-139 or very superior group. Nineteen all-state athletes had approximate intelligence quotient ratings in the 110-119 range. This placed those nineteen or almost thirty-two per cent of the athletes in the superior group. Twenty-four or forty per cent of the all-state athletes were in the 90-109 group. This indicated that forty per cent of the athletes were in the normal

intelligence group. Only four athletes or not quite seven per cent of the all-state athletes were in the 80-89 range or low normal group. None of the sixty all-state athletes were lower than the low normal group in their intelligence quotient. It was found that fifty-six of the sixty all-state athletes were in the normal or a higher group on the intelligence quotient scale. Thirty-two or over fifty-three per cent of the all-state athletes were scored in the superior, very superior or near genius groups by their coaches.

In efforts to find the approximate intelligence quotient average of the all-state athletes, two problems of significance were encountered. One problem was that some coaches were unable to identify the intelligence test taken by their all-state athlete. Another problem was the lack of uniformity in the test taken by the all-state athletes. These coaches unable to identify the intelligence test taken by their athlete were asked to place the term "unknown" on the question. Table VII indicates the various intelligence tests taken by the all-state athletes and the number of athletes which had taken each test.

Of the sixty all-state athletes from which questionnaires were returned, twelve of their coaches were unable to identify the intelligence test taken. Fourteen all-state athletes took the Lorge-Thorndike Intelligence Test. This test was given to more or the all-state athletes than any

TABLE VII

NAME OF INTELLIGENCE TEST TAKEN BY 1968-1969 ALL-STATE
ATHLETES AND HOW MANY ATHLETES HAD TAKEN EACH TEST

Test taken	Number taking test
Unknown	12
Lorge-Thorndike Int. Test	14
Otis Quick Scoring Intelligence Test	11
California Test of Mental Maturity	5
Science Research Associates Test of Educational Ability	4
American College Test	4
Iowa Test of Educational Development	3
Otis-Benet' Intelligence Test	2
Kuhlman-Finch Intelligence Test	2
Differential Aptitude Test	2
Henmon-Nelson Intelligence Test	1
Total	60

other single intelligence test. Eleven had taken the Otis
Quick Scoring Intelligence Test. Five athletes took the
California Test of Mental Maturity, and four the Science
Research Associates Test of Educational Ability. Four took
the American College Test. Three took the Iowa Test of
Educational Development. Intelligence Quotients for two
athletes were determined from each of the following three
tests: the Otis-Benet' Intelligence Test, Kuhlman-Finch
Intelligence Test, Differential Aptitude Test. One athlete's
intelligence quotient was determined from the Henmon-Nelson
Intelligence Test.

Question eight of the questionnaire asked each coach to identify the sports that the all-state athlete had lettered in during his high school career and how many years he had lettered in each sport. Table VIII indicates the average number of years each all-state athlete had lettered in his sport of football, basketball or track. Table VIII also indicates the average number of sports each all-state athlete had lettered in during his high school career.

The data indicated that football players lettered on the average 2.77 years. Also the all-state football players averaged lettered in 2.5 sports.

The answers received on the all-state basketball players indicated that on an average each had lettered 3.0 years in basketball, and 2.17 sports.

TABLE VIII

AVERAGE NUMBER OF YEARS LETTERED IN THEIR SPORT BY
ALL-STATE ATHLETES AND AVERAGE NUMBER OF SPORTS
LETTERED IN BY THE ALL-STATE
ATHLETES IN 1968-1969

Sport	Average number of years lettered in by sport	Number of sports each lettered in
Football	2.77	2.50
Basketball	3.00	2.17
Track	2.90	2.11
Overall	2.90	2.25

From the data collected on the all-state track individuals the average number of years lettered in track was 2.9 years and averaged lettered in 2.11 sports.

Overall the all-state athletes averaged lettering 2.9 years in their individual sport and also averaged lettering in 2.25 sports.

#### SUMMARY

In preparing and collecting the data used in this report, it was found several articles and reports were available dealing with the physical fitness and mental capabilities of young men. Several noted psychologists as well as laymen interested in athletics and scholarship have written on subjects dealing with athletics and scholarship. However,

no articles or publications were found dealing with allstate athletes as a group. It was found most coaches of all-state athletes were willing to cooperate enabling the data to be collected. Also, several of the all-state athlete's coaches expressed personal interest in the subject of scholarship and athletics.

Never before in the history of our nation has the role of sports been as important as it is today. School athletics can make a contribution to physical well-being, skilled performance, relaxation and response as well as to the inculcation of sound values. Besides developing these values this study supports the belief that the all-state athlete of 1968-1969 was also capable of maintaining a high academic level.

#### CONCLUSION

The following conclusions were drawn from the data collected from the questionnaires sent to the 1968-1969 all-state athlete's coaches.

- 1. A large percentage of the all-state athletes for the 1968-1969 school year were twelfth grade students.
- 2. Nearly fifty per cent of the 1968-1969 all-state athletes were from schools with a class size of over 200.
- 3. Over fifty per cent of the 1968-1969 all-state athletes ranked in the upper one-third of their class

scholastically.

- 4. Over fifty per cent of the 1968-1969 all-state athletes ranked in the upper one-third scholastically of those participating in the sport.
- 5. Sixty per cent of the 1968-1969 all-state athletes had achieved a grade point average of 2.5 or better on a four point scale.
- 6. None of the 1968-1969 all-state athletes rated lower than low-normal on Munn's Intelligence Scale.
- 7. Eighty per cent of the 1968-1969 all-state athlete had taken some type of Intelligence test.
- 8. The 1968-1969 all-state athletes averaged lettering 2.9 years and averaged 2.25 sports lettered in.

## ACKNOWLEDGEMENTS

Appreciation is expressed to Professor T. M. Evans and Associate Professor Ray Wauthier, Department of Physical Education, Kansas State University; and to coaches of the 1968-1969 Kansas All-State Athletes, for their cooperation and assistance in making this study possible.

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# Dear Coach:

First may I congratulate you on your coaching of an All-State athlete. This is quite an honor for a coach as well as for the athlete.

I am conducting a study of the comparison of the mental ability to the physical ability of the All-State athlete. I realize you have many demands on your time, but I would appreciate it very much if you would fill out the enclosed questionnaire. If I am to be able to correlate the physical ability to the mental ability of the All-State athlete it is necessary that I get a high percentage of responses. Please answer the questions as completely and accurately as you can without undue effort, and return it to me in the enclosed stamped envelope.

Thank you for your cooperation.

Sincerely yours,

Gary Massey Coach North Central High School Morrowville, Kansas

Please	place	a	check	on	the	line	which	applies	to	your
All-Sta										V.

1.	Class
	9th 10th 11th 12th 1
2.	Number in High School Class
	10-20 20-50 50-100 100-200 Over 200
3.	Rating in Class Scholastically
	Upper 1/3 Middle 1/3 Lower 1/3
4.	Rating scholastically in comparison to all others participating in this sport.
	Upper 1/3 Middle 1/3 Lower 1/3
5.	Approximate Grade Point Average (1968-1969 school term) Using following scale:
	A4 points  B3 points  C2 points  D1 point  F0 points.  3.5-4.00  3.0-3.49  2.5-2.99  1.5-1.99  1.0-1.49

6.	Rating on I. Q. Scale "
	Near Genius140 and above Very Superior120-139 Superior110-119 Normal90-109 Low Normal80-89 Borderline70-79 Below70
7.	Type of test taken to determine the mental ability (if known)
8.	Number of years lettered in various high school sports.
	Years in Basketball Years in Football Years in Track Years in Baseball Years in Wrestling

<sup>\*</sup>Scale given by Norman L. Munn, <u>Psychology</u>, p. 60.

# A STUDY OF THE SCHOLASTIC QUALITIES AND ATHLETIC EXPERIENCE OF KANSAS ALL-STATE ATHLETES IN FOOTBALL, BASKETBALL AND TRACK FOR THE 1968-1969 SCHOOL YEAR

by

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AN ABSTRACT OF A MASTER'S REPORT

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KANSAS STATE UNIVERSITY Manhattan, Kansas The purpose of this study was to attempt to provide data from questionnaires sent to the coaches of all-state and honor roll athletes in the state of Kansas for the school year 1968-1969, which could provide a basis of comparison between all-state athletes, other athletes and classmates in their ability to achieve high scholastic grades.

The study began by obtaining the names and high school of the athletes who achieved all-state honors for the 1968-1969 school year from the <u>Topeka Daily Capital</u> of Topeka, Kansas. Questionnaires along with a letter explaining the questionnaire were then sent to the coach of each all-state athlete in football, basketball and track. Seventy-five questionnaires were sent and eighty per cent of the questionnaires were returned.

The study revealed that the 1968-1969 all-state athletes were largely twelfth graders. Fifty-one of the sixty all-state athletes from which questionnaires were returned were twelfth graders, while seven were eleventh graders and one tenth grader.

In compiling the results of the question regarding the number in the athlete's high school class it was indicated a large per cent of the 1968-1969 all-state athletes were from large schools. Only three of the sixty all-state athletes were from the very small high schools.

Scholastically, it was found, over fifty-one per cent of the all-state athletes for the 1968-1969 school year

ranked in the upper one-third of their class. Only twenty per cent were in the lower one-third of their class.

Data comparing the all-state athletes with others participating in the same sport indicated over fifty-three per cent of the all-state athletes were in the upper one-third scholastically of those participating.

By compiling the approximate grade point averages of the sixty all-state athletes in 1968-1969, it was indicated over forty-three per cent had grade point averages of 3.0 or better, with a 4.0 being straight A's. The study also showed that only one of the sixty athletes had a grade point average below 1.49.

By use of Munn's Intelligence Scale the coaches of the all-state athlete indicated that five per cent of the all-state athletes had an I.Q. rating of 140 or above. Over fifty-three per cent rated superior or above on the scale. Forty-eight of the coaches were able to identify the intelligence test taken by the all-state athlete to obtain the intelligence quotient of the athlete. A large variety of tests were taken with the Lorge-Thorndike Intelligence Test being the most common test used.

The study revealed that the all-state athlete averaged lettering 2.9 years in their individual sport and also averaged lettering in 2.25 sports.

It was concluded from data collected that a large per

cent of the athletes receiving all-state honors were older boys with quite a lot of experience in their sport. The majority of the all-state athletes in 1968-1969 were not only superior in their athletic achievements but also in their scholastic achievements. It seems conclusive that the data in this report indicated that the all-state athletes in Kansas for the 1968-1969 school year were dedicated, intelligent athletes of superior physical and mental capabilities.