COMPARATIVE PERSONALITY PROFILES OF ATHLETES AND NON-ATHLETES IN A SELECTED KANSAS HIGH SCHOOL

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Chapter 1

INTRODUCTION

In certain educational circles, the question of the real value of participation in interscholastic athletics at the high school level, for the participant, has been discussed. This study was undertaken to determine if the high school student is affected by participation in interscholastic athletics, and, if so, to what degree.

THEORETICAL FORMULATION

Throughout the years, scholars have theorized as to the effects of ability in athletics on personality development. Claims and counter-claims have been hurled over the value of participation in athletics, with both sides claiming victory. In the time of the ancient Greeks, such noted philosophers as Plato and Aristotle, both of whom were outstanding athletes as young men, often talked of the advantages of athletics with their publis. Plato, for one, nearly always insisted that his students be as equally proficient in sports as they were in intellect. In fact, the modern word of, "gym" originated directly from the name he gave his school in Athens,

¹H.D.F. Kitto, The Greeks (Chicago: Aldine Publishing Co., 1964), p. 85.

the now-famous, "Gymnasium."

Over the decades, writers have extolled the virtues of the athlete, often labeling him as honest, ethical, disciplined, self-sacrificing, intuitive, reliable, courageous, and happy. They have claimed that the athlete, above the average, non-participating, individual, develops a taste for initiative, and responsibility, and is enabled to regulate his activities and increase his efficiency. 4

Since the 1940's, new interest in the field has spurred more and more research. Unfortunately, those who assumed
that this research would confirm the thoughts of the past,
have, thus far, been somewhat disappointed. Research studies
have produced results ranging from those claiming a high relationship between athletics and personality development to
those who claim practically none at all.

Biddulph, in a well-known study, used five different measurements of personality and social adequacy to compare high school students of high and low athletic ability. 5 In four out of five categories tested, the athlete proved to be

²Ibid., pp. 86.

³J.F. Williams & W.L. Hughes, <u>Athletics in Education</u> (Philadelphia: W.B. Saunders Co., 1936), pp. 87.

⁴Educational Policies Commission of the N.E.A. <u>Proceedings of a Symposium on School Athletics</u>, August, 1954, pp. 5.

⁵Lowell Biddulph, "Athletic Achievement and the Personal and Social Adjustment of High School Boys," Research Quarterly, 21:1, (1954), 7.

significantly superior to the non-athlete.

Other studies, such as Keogh's, have produced dissimilar results. In his study, Keogh administered the California Personality Inventory to college students in four different groups of athletic ability. He observed no significant diferences between the groups.

THE PROBLEM

It was with these thoughts in mind, that this study was undertaken. Obviously, no two individuals are exactly alike. In many ways, they are as distinct as two finger-prints. But are there certain characteristics which are found in groups of individuals? Do athletes and non-athletes differ significantly in their personalities? To what extent do they differ? Would one find the needs of the two groups significantly different? These questions formed the basis of the present study.

Today's educators, more than ever before are looking for ways of improvement. Understanding of their students is of prime importance. If, in fact, the athlete's needs, or his social, psychological, and personal development are significantly different, when compared with his non-participating counterpart, then such knowledge could be of significant aid in the educational process.

Jack Keogh, "Relationships of Motor Ability and Athletic Participation in Certain Stadardized Personality Measures," Research Quarterly, 30:4, (1959), 443.

This study dealt with the personality profiles of fifty, male, high school students at Sabetha High School, Sabetha Kansas, comprising two groups of twenty-five, designated as athletes and non-athletes. All male students in the tenth, eleventh, and twelfth grades in Sabetha High School who met the specification of athlete or non-athlete were included in the original population. These two categories were sequenced into two seperate series in alphabetical order on the basis of surnames. After each series was alphabetically ordered, each series was then consecutively numbered. The subjects to be used in each category were randomly selected from each group by the use of a table of random sampling numbers.

Statement of the Problem

Is there a significant difference between personality profiles of athletes and non-athletes in a selected Kansas High School, as measured by the Minnesota Counseling Inventory?

Statement of the Hypothesis

There is no significant difference between personality profiles of athletes and non-athletes in a selected Kansas High School, as measured by the Minnesota Counseling Inventory.

Assumptions of the Study

This study was based on the assumption that a researcher can make reasonably accurate statements about a population, from a sampling of that population. The sample, due to the random nature of its selection will be representative of the population.

It was assumed that the degree of athletic ability of the individual subjects would not have significant effect on the outcomes of the study. The success or ability of the athlete, in other words, was assumed to be of insignificant importance.

It was also assumed that the Minnesota Counseling
Inventory would provide an accurate personality profile of
the two groups. It was assumed that the subjects would complete the inventory in an open, responsive, and honest manner.

This study did not assume cause and effect. Significant differences were sought, but no attempt was made to determine causality.

Purpose of the Study

The purpose of the study was to seek the effects, for high school boys, of participation in interscholastic athletics. The study was made to determine if participation in interscholastic athletics at the high school age level benefits the individual's personality development, as compared with those individuals who do not participate.

The following eight areas were examined for significant relationships between the groups: (1) Validity, (2)
Family Relationships, (3) Social Relationships, (4) Emotional
Stability, (5) Adjustment to Reality, (6) Conformity, (7) Mood,
and (8) Leadership.

Significance of the Study

The significance of this study lies in its benefits

to the teachers, coaches, counselors, and administrators of small Kansas high schools. Stereotypes of the "dumb jock" or the "sissy" who has declined the opportunity to participate have nearly gone by the wayside. Unfortunately, though, misconceptions still exist, and will continue to plague the educational system until informed opinions are in a predominant position. Hopefully, through the results of this study, educators can better perform their functions, in whatever capacity they serve. They can become more aware of the needs of the athlete or the non-athlete, and aid each in coping with those needs. If one group is significantly different in personality development, that fact should be evidenced in this study. These divergent personality characteristics can then be assessed and dealt with in a manner consistent with the needs of the individual.

This study should also benefit the field of interscholastic athletics, although to what extent is unknown. If the athlete has a significantly different personality profile than the non-athlete, these factors could be identified. Early identification of personality factors concurrent with potential success in athletics could greatly benefit the coach in screening and developing potential talent. Individuals marked for success in athletics by their personality characteristics could begin their training earlier and be developed to their maximum. Those with little hope of anything but mediocrity in athletics could be singled out and directed into a more productive area.

DEFINITION OF TERMS

Five concepts are discussed in this thesis which have particular pertinence to the problem. Definitions of these terms are discussed below. It should be noted that these definitions are in terms of the present study, as they apply to that study, and may not fit the standard definition.

Interscholastic Athletics

Competition in a sports program (games, meets, matches, etc.) between representatives of two or more high schools, as sanctioned by the Kansas State High School Activities Association.

Class 2-A High School

As defined by the Kansas State High School Activities Association, for the school year, 1974-75, those high schools in the state of Kansas with an enrollment of more than 150 but less than 250 students.

Athlete

A male student who participated in at least two of a possible three competitive sports programs in the previous academic year. Those programs included: football, crosscountry, basketball, wrestling, golf, and track.

Non-Athlete

A male student who declined participation in all of the three possible sports programs in the previous academic year.

Personality Profile

That profile received from the results of the eight scales of the Minnesota Counseling Inventory, as evaluated according to the manual of instructions.

LIMITATIONS OF THE STUDY

This study was limited in terms of the sample used. It consisted of only fifty, male, tenth, eleventh, and twelfth graders, in the academic year, 1974-75. Generalizations to any other individuals not in these categories can not be drawn with complete confidence. Sex or age of the subjects, or the time of testing, all could have had a significant effect on the outcomes of the study.

The study was further limited by using only one Class 2-A high school in northeast Kansas. Other high schools, both larger and smaller, could undoubtedly ascertain different data, if tested. Also, any number of other Class 2-A high schools could find dissimilar results. Geographical location of the population might also have played a significant role.

Only one instrument of personality measurement was employed in this study. The Minnesota Counseling Inventory, although assumed to be a true and accurate measure of personality dynamics, may have shown different results than another inventory. To make a better study, research with two or more instruments should be considered.

Only eight traits of personality were measured in the study, meaning that significant differences in other areas

might have gone unnoticed. Also, whereas one group may be significantly different in the personality profile of the Minnesota Counseling Inventory, the exact opposite might be true for any other traits measured, as in another inventory.

Chapter 2

REVIEW OF THE LITERATURE

Interscholastic athletics are becoming increasingly prevelant in American society. If this trend continues, the student-athlete will find himself more and more, a vital "cog" in the "wheel" of the educational system. What psychological and sociological effects this activity has on the maturing young man is certainly a facet worth studying. This chapter deals, first, with some early thoughts on athletics' contributions to the personality development of the individual, and then into several of the more pertinent research studies in the field.

ATHLETICS AND PERSONALITY DEVELOPMENT

The concept of a "sound mind" and a "sound body" working congruently is as old as the ancient civilizations. Aristotle, himself quite an athlete as a young man, always gave the students at his Lyceum, equal proportions of intellectual and physical stimulation.

In our own country, the claim that participation in athletics develops the individual significantly, both socially

¹H.D.F. Kitto, The Greeks (Chicago: Aldine Publishing Co., 1964), p. 87.

and psychologically is certainly not new. Berry, just after World War One, writing in a time he described as full of scoff laws, crime, and greed, saw a definite need for discipline, obedience to the rules, and respect for authority. He stated:

No law is as inexorable as the law of the survival of the fittest. This is the law of athletics. No teacher, no matter how well-thought-of, commands as much complete and cheerful respect as the athletic coach.

Berry also cast aside critics of athletic participation, as he claimed that participation develops emotional control and ethics.

Contemporaries of Berry often thought along the same lines. They gave athletics credit for instilling such common virtues as sacrifice, honor, loyalty, courtesy, cheerfullness, and happiness, in the school boy. They claimed that "all that comprises moral and psychological education is encompased on the athletic field."

In 1949, Voltmer told America that athletics is an area lending itself to character and personality development. Nowhere else can a young man experience the joys of success, or the agonies of defeat in such a small area. Only in athletics could the student find the many opportunities of spirit, give-and-take, cooperation, working together, self-control,

²Elmer Berry, <u>The Philosophy of Athletics</u> (New York: A.S. Barnes, 1927), pp. 43.

J.F. Williams & W.L. Hughes, Athletics in Education (Philadelphia: W.B. Saunders Co., 1936), pp. 87.

⁴Ibid., pp. 99.

and leadership.5

The Education Policies Commission of the National Education Association of the United States studied school athletics over a three-year period, concluding:

Participation in sound athletic programs contributes to the health, happiness, emotional maturity, moral values and betterment of personality of the participant. It is without a doubt that said programs are beneficial to the participant.

Even as little as a decade ago, authors such as Bucher and Nixon were making similar claims. Bucher saw athletics as developing such qualities as, "self-realization, self-sufficiency, self-control, and self-discipline." Nixon, in his work, Physical Education Curriculum, said that athletics gives the young man something he can find nowhere else:

Competitive sports engage the student's whole being, his emotions as well as his body and mind. For these reasons, athletics has possibilities for facilitating self-actualization and developing far better personality patterns.

Unfortunately, most of the early writing in the area of personality and athletics was based on personal experience or bias, rather than experimental data. In the past thirty-five years, however, more and more research, dedicated to

⁵E.F. Voltmer & A.A.Esslinger, Organization and Administration of Athletics (New York: Appleton-Century-Crofts, 1949), pp. 23.

⁶Educational Policies Commission of the N.E.A. Proceedings of a Symposium on School Athletics, 1954, pp. 3.

⁷C.A. Bucher & R.K. Dupee, Athletics in Schools (New York: The Center for Applied Research in Education, 1965), 14.

⁸J.E. Nixon & A.E. Jewett, <u>Physical Education Curriculum</u>, (New York: The Ronald Press, 1964), pp. 136.

finding an answer to the question at hand has been conducted.

PERTINENT RESEARCH

In 1940, Carter and Shannon studied eleventh and twelfth graders from ten small high schools in Indiana. Athletes and non-athletes were compared on the basis of the Symonds Adjustment Questionnaire, and a faculty questionnaire. Teachers, coaches, and principals were asked to rate each subject from one-to-ten, on such categories as cooperation, self-control, leadership, reliability, aggreeability, and sociability. On the basis of the Symonds measurement, no significant differences between the groups were found. On the faculty questionnaire, however, the athletes fared much better than their counterparts in sociability, reliability, and self-control. A similar study by Jones, using statistical, graphical, and case study methods, conclusively found that "competitive athletics are among the chief sources of social maturity in high school boys."

Two studies, both in 1953, produced interesting, albeit incongruent, results. In a study of physical performance and personality, the Minnesota Multiphasic Personality Inventory was administered to 251 athletes and non-athletes from the

⁹G.C. Carter & J.R. Shannon, "Adjustment and Personality Traits of Athletes and Non-Athletes," <u>School Review</u>, (December, 1940), p. 30.

¹⁰H.E. Jones, "Physical Ability as a Factor in Social Adjustment in Adolescence," <u>Journal of Educational Research</u>, 48:4, (December, 1946), p. 300.

high school level. The study concluded that there was mo significant relationship between the variables in any of the Inventory's areas of measurement. McGraw and Tolbert, however, found that the relationship between sociometric status and athletic ability in junior high school boys was very high. The researchers used as their sample, 438 Texas junior high school boys. The researchers asked each of the subjects to list the three boys he liked best, in his class, his grade, and his school. Boys were then ranked as to their respective social status. Each subject was then given several tests of his athletic ability, such as a softball throw, running, pull-ups, etc. Comparisons were made, and as stated above, the study concluded a high degree of correlation between sociometric status and athletic ability.

One year later, Biddulph engineered one of the more well-known, and often-quoted studies in this field. Biddulph and his associates studied one-hundred, randomly selected, tenth, eleventh, and twelfth graders, from Salt Lake City physical education classes. First the sample was tested as to their athletic ability in six different areas: (1) pullups, (2) shot put, (3) broad jump, (4) potato race, (5) 100-yard dash, and (6) basketball throw accuracy. The fifty boys

¹¹ F. Wellman, "A Study of Relationships Between Tests of Physical Performance and Various Traits of Personality" (unpublished PhD dissertation, Purdue University, 1953).

¹²L.W. McGraw & J.W. Tolbert, "Sociometric Status and Athletic Ability of Junior High School Boys," Research Quarterly, 24:1, (1953), 79.

who had scored the highest became the, "High Ability Group," to be compared with the remainder, or the "Low Ability Group." The next step in the study consisted of four parts. First, administer the California Test of Personality to both groups. Secondly, determine the IQs for each subject. Thirdly, calculate the Grade Point Average for each individual. And, lastly, have the subjects' teachers fill out a rating sheet on each. After analyzing all aspects of the study, Biddulph made the following conclusions:

- 1. The High Ability Group did significantly better on the California Test of Personality.
- 2. The two groups were approximately equal on IQ.
- 3. The High Ability Group was significantly higher on the Grade Point Average Rating.
- 4. The High Ability Group did significantly better on the Teacher Rating Scale. 13

Toward the end of the decade, two notable studies, whose results, again, did not coincide, were reported. Booth compared groups of athletes and non-athletes on the Minnesota Multiphasic Personality Inventory, and concluded that there was, "a significant difference in favor of the athletes, in interest, anxiety, social repsonsibility, depression, and psychasthenia." The little institution of Pomona College provided the 167 subjects in a test of the relationships of motor ability and athletic participation with personality.

¹³L.G. Biddulph, "Athletic Achievement and the Personal and Social Adjustment of High School Boys in Contrast," Research Quarterly, 25:1, (1954), 7.

¹⁴E.G. Booth, "Personality Traits of Athletes as Measured by the MMPI," Research Quarterly, 29:1, (1958), 135.

According to their scores on the Larson Test of Motor Ability, college juniors and seniors were placed into, High, Middle, and Low Ability Groups. Each subject then took the California Test of Personality. The researchers concluded, "There is no relationship between the level of athletic participation and the scales of the California Test of Personality." 15

As America moved into the sixties, Merriman was conducting research, which has important implications in this review. At first, he compared two groups of high and low motor ability on the California Personality Inventory, and concluded that the high ability group did significantly better than the low group. However, when he compared athletes and non-athletes of equal motor ability, he found no significant differences. Athletes did better on the dominance sociability, social pressure, and self-actualization scales, while non-athletes did much better on self-control and reliability. Merriman concluded that personality differences may be due to motor ability rather than athletic participation. 16

Significant differences were found between athletes and non-athletes in a study by Schendel. Schendel compared his two groups on the basis of the California Personality Inventory, and concluded that the athletes were, "significantly

¹⁵ Jack Keogh, "Relationships of Motor ability and Athletic Participation in Certain Standardized Personality Measures," Research Quarterly, 30:4, (1959), 443.

¹⁶J.B. Merriman, "Relationships of Personality Traits to Motor Ability," Research Quarterly, 31:2, (1960), 170.

better adjusted in leadership, social initiative, self-concept, status, maturity, dominance, and achievement." When he carried his research one step further, however, to seek the effects of the age or quality of the athlete he found no significance. 18

Through the late sixties, several researchers compared personality and athletics. In 1968, ninety-one athletes and ninety non-athletes in a Wisconsin Junior High School, were given five psychological functions tests and six sports skills tests. The study found significant relationships on all the tests. The study found significant relationships on all the tests. One year later, the Texas Tech football team, and student body provided 141 subjects for a comparative study by Berger and Littlefield. The young men were placed into one of three groups which were labled as, Outstanding Athlete (OA), Non-Outstanding Athlete, (NOA), and Non-Athlete (NA). Each group took the California Personality Inventory and comparisons were made. Non-significant ratios were found, and the researchers concluded that, "Participation . . .may not develop more favorable personality characteristics." In the same year, McClenny, in a comparison of

Jack Schendel, "Psychological Differences Between Athletes and Non-Participation in Athletics," Research Quarterly, 36:1, (1965), 65.

^{18&}lt;sub>Ibid., 67</sub>.

¹⁹L.M. Rindini, "Relationships Between Psychological Functions Tests and Selected Sports Skills in Boys in Junior High School," Research Quarterly, 39:3, (1968), 675.

R. Berger & D. Littlefield, "Comparison Between Football Athletes and Non-Athletes on Personality," Research Quarterly, 40:4, (1969), 664.

athletes and non-athletes at the University of Texas found, "No significant differences in adjustment, self-concept, and self-sufficiency, with little significance in the other categories." 21

Thus far, the decade of the 1970's has produced very little in the way of quality research in the field of personality and athletics. In 1971, Pearson studied athletes and non-athletes at several high schools in Oregon, and found the personality differences to be great. In fact, after administering the California Personality Inventory, the study concluded that in ten of the twelve personality areas which were measured, the difference was, "significant to the .05 level." In a paper presented to the American Alliance for Health, Physical Education and Recreation, Frost reported on his studies. He concluded that there is, "a lack of valid supportive data for development of human values and personality through participation in competitive sports." 23

Over the past three-and-one half decades, much extensive research has been conducted in the field of relating

²¹ Byron McClenney, "A Comparison of Personality Characteristics, Self-Concepts, and Academic Performance of Selected College Men According to Physical Fitness Tests" (unpublished PhD dissertation, University of Texas, 1969).

²²J. Pearson, "Single-Year & Logitudinal Comparisons of Personality, Intelligence, & Academic Achievement Characteristics of High School Athletes and Non-Athletes" (unpublished PhD dissertation, University of Oregon, 1971).

²³Rubin Frost, "Development of Human Values Through Sports," (paper presented to the annual meeting of the American Alliance for Health, Physical Education & Recreation, 1974).

athletic participation and personality development. Unfortunately, these many hours of study and experiment have yet to establish a definitive answer to the question at hand. Some researchers have found a very high correlation, while others have found none whatsoever. Whatever the true answer is, it is evident that only more research, study, and experiment will discover it.

Chapter 3

METHODS AND PROCEDURES

This study was designed to determine if there was any significant differences between the personality profiles of athletes and non-athletes in a selected Kansas high school. This chapter deals with the methods and procedures used in this study, such as the population and sampling, the instrumentation, the design of the study, the collection of data, and the analysis of data.

POPULATION AND SAMPLING

The population of this study was the male, tenth, eleventh, and twelfth grade students at Sabetha High School. Sabetha High is a Class 2-A high school in Nemaha County, Kansas, situated in the northeast corner of the state. Although predominantly rural in nature, the 105 male students at the school represented nearly all of the varied socioeconomic classes and backgrounds one would want in a study of this nature. The sample of twenty-five athletes and twenty-five non-athletes was selected entirely at random, without regard to subjective considerations. Of the fifty subjects, nineteen were tenth graders, fifteen were eleventh graders, and sixteen were twelfth graders. The subjects used in this study ranged from fifteen years, and two months, to eighteen years, three months, in age. The "athletes" had participated

in at least two of the three sports programs available to them from the previous school year, such as football, basket-ball, and track. The "non-athletes" likewise, were categorized by the fact that they had participated in none. No tests as to the degree of ability in the athlete group was made, and no distinctions were noted.

INSTRUMENTATION

The primary source for the study was the Minnesota Counseling Inventory (MCI). Obtained from the Psychological Corporation of New York, the MCI is an excellent test to profile the adolescent personality. This particular inventory was used, as opposed to another for four basic reasons:

(1) Ease of administration; an expertise in test giving is not required, (2) Design; the MCI is designed especially for the high school-age subject, (3) Readability; the language on the MCI is geared at the eighth grade level, thus eliminating misunderstandings by the subjects, and, (4) Construction; traits of personality necessary to the study were measured.

The Minnesota Counseling Inventory, published in 1957, combines two previously developed personality inventories; The Minnesota Personality Scale, and the well-known, Minnesota Multiphasic Personality Inventory. It provides a means by which those working with high school age youth can acquire useful information about such things as personality dynamics, personality structure, and personality problems of an individual. The purposes of the inventory, as established by the

authors, are as follows: 1

- 1. To sensitize teachers and counselors to relevant personality characteristics which differentiate students.
- 2. To identify students in need of therapeutic attention and counseling.
- 3. To assist in understanding students as they attempt to achieve more mature self-understanding and integration between themselves and their environment.
- 4. To provide a means for determining the effects of educational experiences upon relevant personality characteristics.

The MCI consists of a reusable booklet containing 355 statements, such as, "I am more likely to sit by myself at parties," or, "I sometimes find it hard to sleep." The subject is instructed to mark, on a seperate, standardized answer sheet, whether the statement is true or false, as it applies to him. Fight traits are scored from the inventory. They are:

1.	Validity (defensiveness)	(bv)
2.	Family Relationships	(fr)
3.	Social Relationships	(sr)
4.	Emotional Stability	(es)
5.	Adjustment to Reality	(r)
6.	Conformity	(c)
7.	Mood	(m)
8.	Le adership	(1)

The MCI may be administered in about 45 to 50 minutes, depending upon the reading speed of the subject. It can be given, and then machine or hand scored. When the latter is used, eight punch-hole-type scoring keys are utilized. The researcher simply needs to count the number of marks showing and place the number in the corresponding raw score box at

¹R.F. Berdie & W. Layton, "The Minnesota Counseling Inventory Manual," New York: Psychological Corp., 1957, p. 3.

the top of the answer sheet. Interpretation of the scores, a vital part in a study of this nature, was facilitated by a section in the MCI Manual which explained what high and low raw scores for each personality scale may be indicating about an individual.

DESIGN OF THE STUDY

This study was designed to investigate the effects of participation in interscholastic athletics on the personality development and dynamics of high school boys. It was designed to derive an answer to the question of whether or not said participation has a significant effect on their personality profiles, as shown on the Minnesota Counseling Inventory. It was also hoped that it would determine if interscholastic athletic participation is beneficial to the athlete.

The major independent variable in the study was the participation in interscholastic athletics. Only those male students who participated in at least two of a possible three sports programs in the school year, were considered "athletes," and only those who participated in none at all were considered "non-athletes." The purpose of this method of classification was to make the groups more markedly differentiated, and to accent any differences which might have existed between them. If such a selection process were not employed, the participant and non-participant groups would not be as heterogenous as possible, thus creating potential problems. Physical or motor ability in either group, particularly the athletes, was not

measured, only whether or not the subject had participated in the sports programs.

DATA COLLECTION

The Minnesota Counseling Inventory was administered to the fifty subjects of the study on June 21 and 22, 1975. The subjects, randomly selected from the school files of the previous academic year, were contacted by telephone.

Upon arrival at the test site, which was the high school library, the subjects were seated at a table. On the table, were a pencil, and MCI test booklet, and an IBM standardized test answer form. When the subjects were all present they were briefed as to the type of inventory they were each about to take. No explaination as to the purpose of the test was given, to prevent any undue influence on the subjects. The subjects were instructed to answer each question as quickly and honestly as possible. They were also asked to put their age (in years and months) and grade from the previous academic year on their answer sheets. Upon completion of the inventory, the subjects were allowed to leave. The answer sheet was then marked as to the group of the individual, be he athlete or non-athlete.

After all the answer sheets were returned, they were scored using the punch-hole keys provided. It was from this collection method, and the subsequent scoring of the tests, resulting in the raw scores necessary for analysis, that the data (all eight scales) was analyzed.

DATA ANALYSIS

To determine if there was a significant difference between the personality profiles of athletes and non-athletes of a selected Kansas high school, as shown on the Minnesota Counseling Inventory, a statistical <u>t</u>-test was employed. A <u>t</u>-score, the resultant of said <u>t</u>-test is a value which represents the difference between two independent sample means.

The formula for finding a t-score is:

$$\underline{t} = \frac{\left| \overline{x} - \overline{y} \right|}{\sqrt{\frac{1}{N_x} - \frac{1}{N_y}} \left(\frac{\mathcal{L} (x_i - \overline{x})^2 + \mathcal{L} (y_i - \overline{y})^2}{N_x + N_y - 2} \right)}$$

Where the following definitions apply:

 \bar{x} = mean value of the x scores

 \bar{y} = mean value of the y scores

 $N_x = number of x values$

 $N_v = number of y values$

t = T-Statistic

If the resulting <u>t</u>-score was large enough, the null hypothesis would be rejected, as a significant difference existed between the two groups, at a prescribed level of confidence (.05).

Chapter 4

ANALYSIS OF DATA

This study attempted to ascertain if a significant difference existed between the personality profiles of athletes and non-athletes in a selected Kansas high school, as shown on the Minnesota Counseling Inventory. Data was collected and analyzed as described in Chapter three. This Chapter will discuss the results of that analysis on each of the eight personality scales measured by the MCI. The eight scales were: Validity, Family Relationships, Social Relationships, Emotional Stability, Conformity, Adjustment to Reality, Mood, and Leadership.

Validity

The validity scale on the Minnesota Counseling Inventory represents the degree of defensiveness of the subject.

A high score (six or better) by an individual of this study would indicate an attempt at choosing responses thought to be socially acceptable. It would probably represent a naive attempt to "look good" on the Inventory.

The <u>t</u>-test, as explained in Chapter three, was applied to the data gathered on the Validity scale. The resulting <u>t</u>-score was such that no significant difference was found between the two groups.

Table 1

Comparison of Athletes and Non-Athletes on the MCI Validity Scale

A+b1++ 25 1.66		
Athlete 25 1.46	2 .7 8	2 121
Non-Athlete 25 2.62	2.67	0.104

To be significant at the .05 level of confidence, as prescribed in this study, the resulting t-score for this data had to have been equal to or greater than a score of 2.067. As can be easily seen in Table 1, with the Validity scale data that was not the case. Therefore, it was concluded that there was no significant difference between the athletes and the non-athletes on the MCI Validity Scale.

Family Relationships

This scale refers to the relationships between the subject and his family. Subjects scoring low in this area would most likely have friendly and healthy relationships with parents, brothers, and sisters. A high score would suggest conflicts or maladjustments.

Again, the <u>t</u>-test was applied to the data, and, again, no significant difference was found between the two groups. On the Family Relationships scale, the <u>t</u>-score value was greater than in the previous scale, but still short of the necessary significance at the .05 level of confidence.

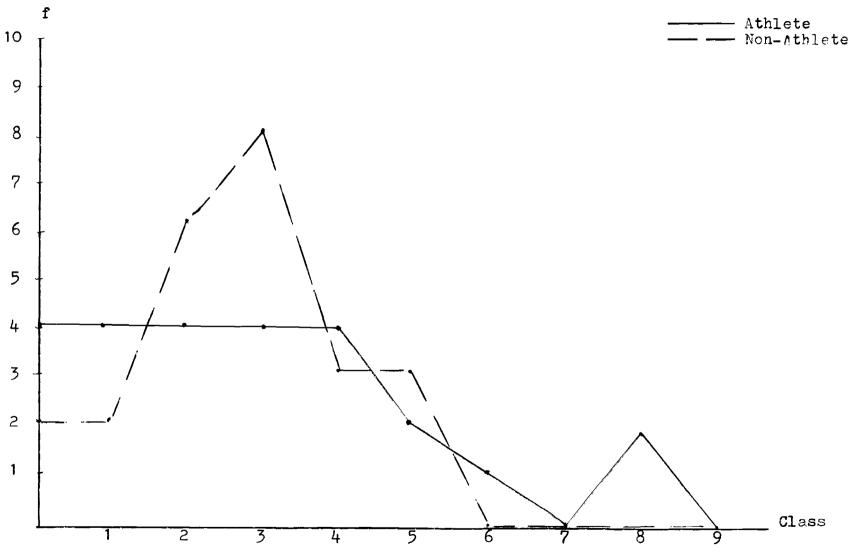


Figure 1. Comparison of Athletes and Non-Athletes on the MCI Validity Scale.

Table 2
Comparison of Athletes and Non-Athletes on the MCI Family Relationships Scale

Group	Number	Standard Deviation	Mean	<u>t</u>
Athlete	25	4.81	10.81	1 4.90
Non-Athlete	25	6.91	13.36	1.480

Again, to be significant at the .05 level of confidence, the t-score for this scale must be equal to or greater than 2.067, and it was not. Thusly, it was concluded that no significant difference existed between the athletes and the non-athletes on the MCI Family Relationships Scale.

Social Relationships

Scores on this scale refer to the nature of the subjects' relationships with other people. A low score could be indicative of gregarious, socially mature individuals. Such a subject would undoubtedly be happy and comfortable when with groups of peers or adults. In groups, these individuals would often be the one to introduce strangers to one another. Conversely, those with high scores would most likely be inept or undersocialized persons, unable to "fit in" with the crowd.

The <u>t</u>-test was applyed to the data collected in this scale, with a resulting <u>t</u>-score of 1.649. This score, although approaching significance led to the conclusion that no significant difference existed between the groups.

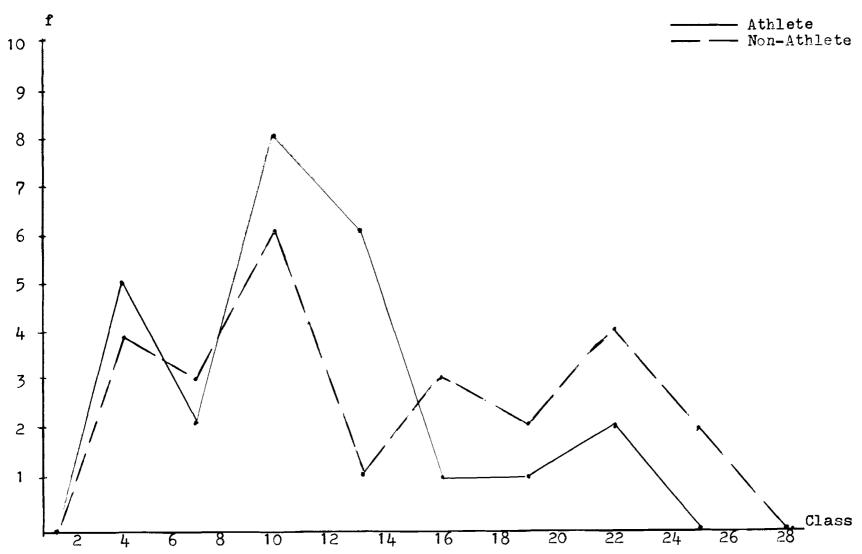


Figure 2. Comparison of Athletes and Non-Athletes on the MCI Family Relations Scale.

Table 3
Comparison of Athletes and Non-Athletes on the MCI Social Relationships Scale

Group	Number	Standard Deviation	Mean	<u>t</u>	
Athlete	25	10.53	26.44	1 (10	
Non-Athlete	25	9.08	31.12	1.649	

In this scale, the resulting t-score was higher than the other scales, but still falls short of the necessary value of 2.067. Therefore, it was concluded that there was no significant difference between the athletes and the non-athletes on the MCI Social Relationships Scale.

Emotional Stability

On the MCI Emotional Stability scale, low scores would characterize emotionally stable individuals. Such subjects would seldom worry; would not likely be self-concious; would tend to be calm and relaxed; and would show confidence in decision-making. High scores would characterize subjects who frequently are unhappy, and in general, appear emotionally unstable. They may lose their tempers easily, and frequently would be moody and irritable. Under stress, they would appear tense or anxious, possibly even cry. In new situations, they could be either fearful and withdrawn, or overly aggressive.

The <u>t</u>-test was applyed to this data, and the resulting <u>t</u>-score showed no significant differences between the groups.

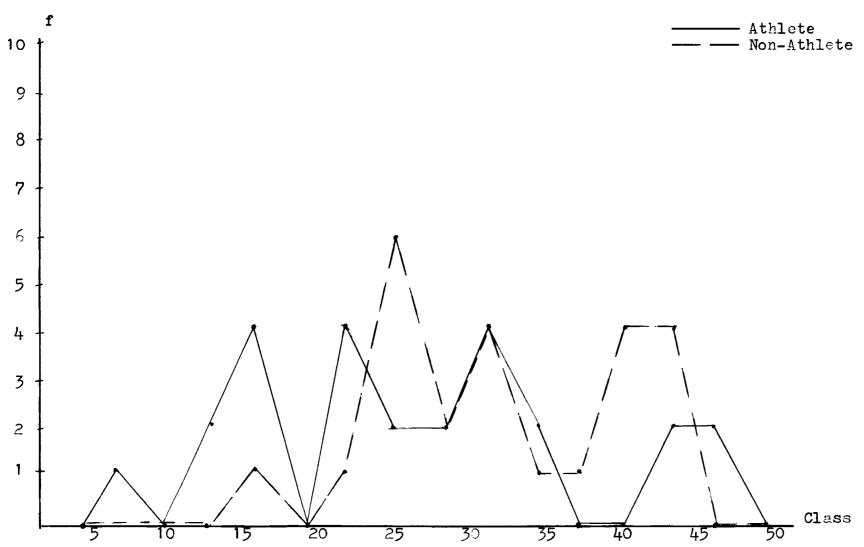


Figure 3. Comparison of Athletes and Non-Athletes on the MCI Social Relationships Scale.

Table 4

Comparison of Athletes and Non-Athletes on the MCI Emotional Stability Scale

Group	Number	Standard Deviation	Mean	ţ	
Athlete	25	5.02	15.40	0.236	
Non-Athlete	25	4.34	15.07		

As can be seen in Table 4, the <u>t</u>-score for this particular scale was extremely low. Since a score which was greater than or equal to 2.067 was necessary for significance at the .05 level, it was concluded that no significant difference existed between the athletes and the non-athletes on the MCT Emotional Stability Scale.

Conformity

The scores on this scale indicated the type of adjustment the subjects made in situations requiring conforming or responsible behavior. Subjects with low scores usually would be reliable and responsible, conforming to rules and behavior codes even when they may not agree with them. Instead of rebelling against them, these individuals would attempt to have them changed through orderly procedures. They ordinarily would show respect to persons in authority. Although not necessarily docile, nor overly submissive, they understand the need for social organization. Those subjects with high scores, usually, would be irresponsible, impulsive, and rebellious. They would appear to learn little from experiences,

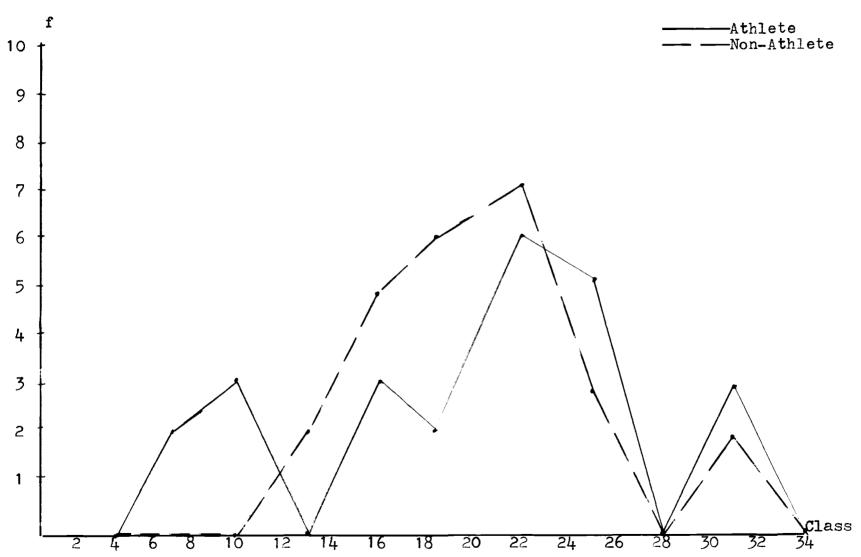


Figure 4. Comparison of Athletes and Non-Athletes on the MCI Emotional Stability Scale.

committing the same offense repeatedly even though verbally acknowledging it to be wrong.

As with the previous data, the statistical <u>t</u>-test was employed on the Conformity Scale data. The results of the <u>t</u>-test showed no significant difference between the groups.

Table 5
Comparison of Athletes and Non-Athletes
on the MCI Conformity Scale

Group	Number	Standard Deviation	Mean	t	
Athlete	25	6.94	16.30	0.212	
Non-Athlete	25	4.58	16.54	0.212	

As before, the resulting t-score must have been equal to or greater than the stated amount to be found significant at the .05 level of confidence. As can be seen in Table 5, that was not the case with this data. There was no significant difference between the athletes and the non-athletes on the MCI Conformity scale.

Adjustment to Reality

This scale referred to a subject's ways of dealing with reality—whether he approached threatening situations in order to master them, or withdrew from them in order to avoid them. Subjects with low scores would usually deal rather effectively with reality. They would be able to make friends and establish stable relations with groups. They would be

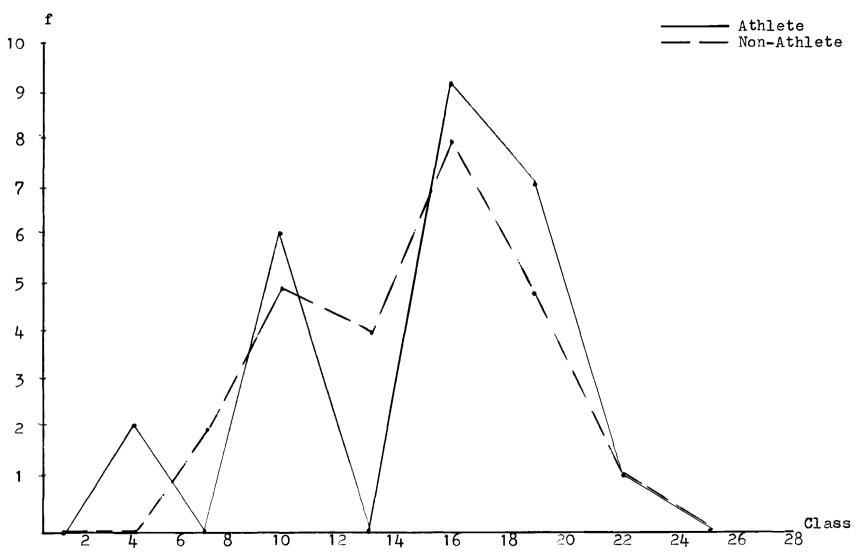


Figure 5. Comparison of Athletes and Non-Athletes on the MCI Conformity Scale.

expected to have little difficulty communicating with others and would share their emotional experiences freely. Those with high scores on this scale would be expected to have a difficult time making friends and establishing relationships with groups. They would often be secretive, withdrawn, shy, sensitive, and easily embarrassed.

A fairly high t-score of 1.722 was recorded when the t-test was applyed to the Adjustment to Reality scale of the MCI. However, no significant differences between the groups was found.

Table 6

Comparison of Athletes and Non-Athletes on the MCI Adjustment to Reality Scale

Group	Number	Standard Deviation	Mean	<u>t</u>	
Athlete	25	8.04	18.04	1 522	
Non-Athlete	25	6.89	21.76	1.722	

Although the <u>t</u>-score for this scale was the one of the greatest value of all eight scores, it still fell short of the necessary 2.067. Therefore, it was concluded that there was no significant difference between the athletes and the non-athletes on the MCI Adjustment to Reality Scale.

Mood

The MCI Mood scale yields scores which indicate a subject's emotional state. Low scores which indicate several things, often characterize students who maintained good or

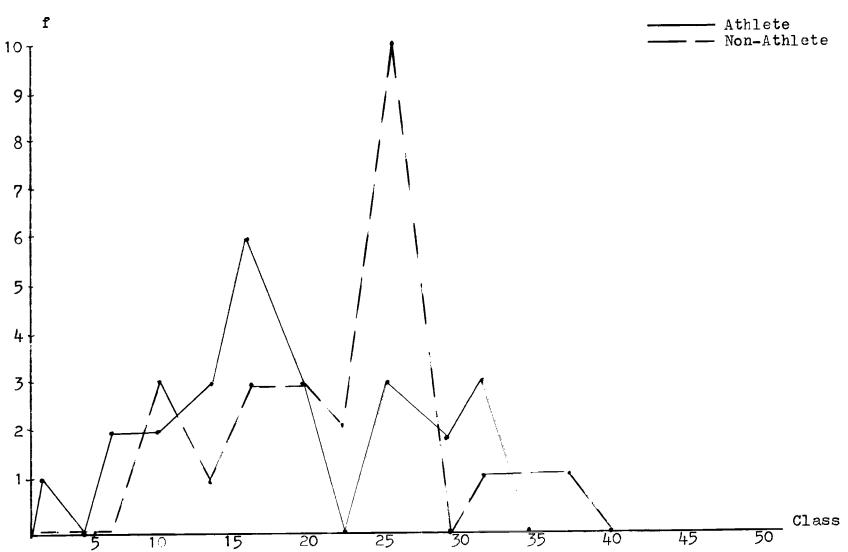


Figure 6. Comparison of Athletes and Non-Athletes on the MCI Adjustment to Reality Scale.

appropriate morale. They would be expected to be cheerful most of the time, and quickly recover from fits of depression or frustration. The subjects scoring low on this scale would be those smiling and laughing and enthusiastic about their activities. Those with higher scores are usually expected to be those with poor morale. Such subjects would seem to be depressed or "blue" most of the time. They would likely be regarded by their peers as "wet blankets."

As with the previous six MCI scales, the statistical t-test was run on the Mood scale. Consistent with previous scales, no significant differences were found between the groups.

Table 7

Comparison of Athletes and Non-Athletes on the MCI Mood Scale

Group	Number	Standard Deviation	Mean	<u>t</u>	
Athlete	25	6 .7 9	14.20	0.450	
Non-Athlete	25	3.14	13.48	0.472	

Since the <u>t</u>-score for this data had to have been equal to or greater than 2.067 to have been significant at the .05 level, it was concluded that there was, again, no significant difference between the athletes and the non-athletes on the MCI Mood scale.

Leadership

This last scale of the MCI yields scores which are

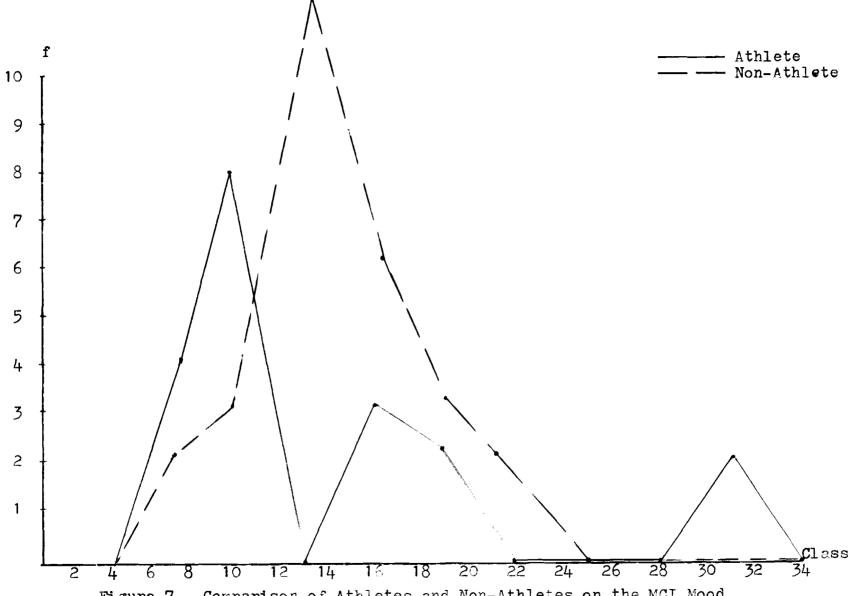


Figure 7. Comparison of Athletes and Non-Athletes on the MCT Mood Scale.

related to those personality characteristics reflected in leadership behavior. Subjects with low scores would often have outstanding leadership skills, and in general, know how to work well with others. These subjects would be expected to be those selected by their peers to positions of leadership, such as school and activity offices. Although low scores are indicative of leadership quality, high scores do not indicate successful "followership" ability. These subjects would undoubtedly be inept in social situations and likely to avoid groups whenever possible.

When the <u>t</u>-test was applyed to this data, no significent difference between the two groups was found.

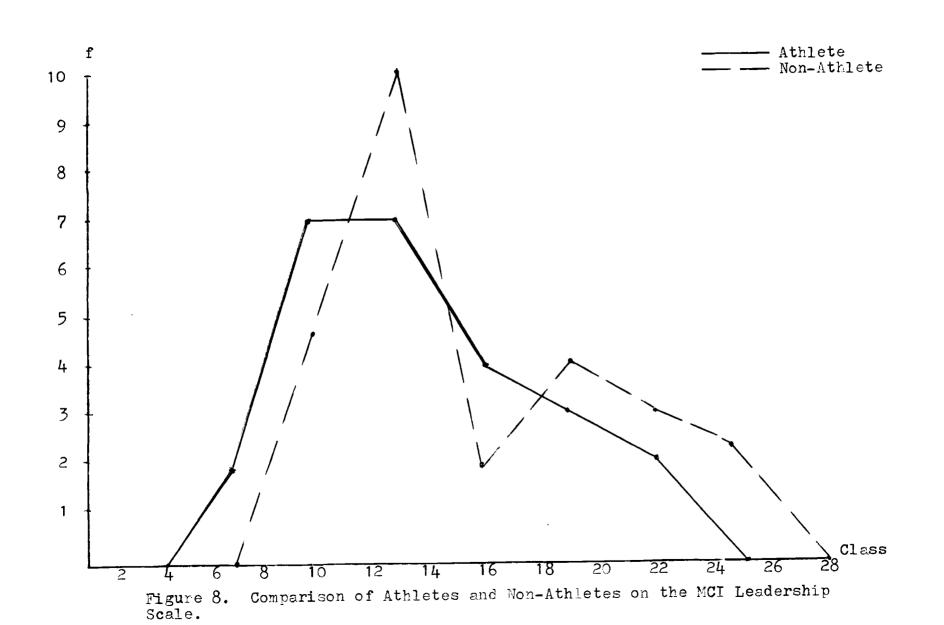
Table 8

Comparison of Athletes and Non-Athletes on the MCI Leadership Scale

Group	Number	Standard Deviation	Mean	ţ
Athlete	25	4.16	13.60	1 (09
Non-Athlete	25	4.64	15.76	1.698

Although the resulting <u>t</u>-score was fairly high, and showed signs of approaching significance, it was not significant at the .05 level of confidence. Therefore, no significant difference between the athletes and the non-athletes on the MCI Leadership scale was the conclusion found.

In summary, all eight scales of the Minnesota Counseling Inventory were analyzed by the use of a statistical tatest



and all eight scales showed a resulting \underline{t} -score which was not significant at the .05 level of confidence.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study attempted to determine if significant differences existed between the personality profiles of athletes and non-athletes in a selected Kansas high school. This chapter will deal with a summary of the methods, procedures, and findings of the study, and make recommendations for any further studies.

SUMMARY

The purpose of this study was to determine personality differences that might exist between high school athletes and non-athletes. It also attempted to determine if said competition has a beneficial effect on the individuals' personality development. The study used, as its sample, fifty, male, tenth, eleventh, and twelfth grade students, from the academic year, 1974-75. The subjects, ranging in age from fifteen years and two months, to eighteen years and three months, all attended Sabetha High School, in Sabetha, Kansas. The sample was divided into two groups. The "athlete" group consisted of males who had participated in two of a roseible three sports programs from the previous year. The "non-athlete" group consisted of those individuals who declined the chance

to participate in any sports programs from the previous school year. The entire sample was administered the Minnesota Counseling Inventory, a 355-statement personality inventory which measured eight different personality areas. The eight areas measured were: (1) Validity (defensiveness), (2) Family Relationships, (3) Social Relationships, (4) Emotional Stability, (5) Conformity, (6) Adjustment to Reality, (7) Mood, and (8) Leadership. The statistical tool employed in the study was a t-test to determine significance between the independent sample means. There was no significant difference found between the athletes and non-athletes on any of the eight scales of the Minnesota Counseling Inventory.

CONCLUSIONS

On the basis of the data collected and analyzed, the null hypothesis of the study, there is no significant difference in the personality profiles of athletes and non-athletes in a selected Kansas high school, as shown by the Minnesota Counseling Inventory, was accepted. Each of the eight personality traits measured by the MCI was analyzed and all failed to show significance at the .05 level of confidence. To be significant at the prescribed level, a t-score of 2.067 was necessary. On four of the eight scales, the t-score of the data fell far short of the required level. On four others, Social Relationships, Family Relationships, Adjustment to Reality, and Leadership, there appeared to be some difference, and the athlete group fared, to a degree, better than the

non-athletes. However, these differences, since they are less than the necessary value of 2.067, could be attributed to some other cause than the problem, possibly even be just a chance happening. It was concluded, therefore, that participation in interscholastic athletics at the high school level had no significant effect on the personality development and dynamics of the subjects studied.

RECOMMENDATIONS

As a result of the data received and analyzed in this study, this section notes four recommendations for further study.

First, it is recommended that a similar study be made with a larger sample. Due to the small size and limited location and background of the sample, this study could have been significantly effected.

It is recommended that a follow-up study be done, using either a different personality inventory than the one used in this study, or using multiple inventories with MCI included. Such a study would provide a more accurate profile.

It is further recommended that a long-range study be done determining differences concurrent with grade levels throughout high school. Each grade level might be significantly different from the next. In such a case, a study of this nature would note these differences. If it was determined that grade levels are different, studies of the nature of this study would be influenced greatly.

Lastly, it is recommended that a study to determine the effects of various levels of athletic or motor ability on personality be carried out. The purpose of such a study would be two-fold, in that it would seek differences between the excellent and mediocre athletes, and whether or not the participation in athletics or the motor ability itself is the determinant of any personality differences.

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APPENDIX A

MINNESOTA COUNSELING INVENTORY

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Published by

THE PSYCHOLOGICAL CORPORATION, NEW YORK, N. Y.

MINNESOTA COUNSELING INVENTORY

The purpose of this booklet is to help you learn more about yourself. As you become better acquainted with yourself as a person, you will be able to plan more wisely and learn more effectively. Your teachers and counselors will be able to provide you with better teaching and wiser counseling as a result of your taking this inventory.

The following pages contain statements that are true for some people but not for others. The way you reply to these statements will help you find out more about yourself. Therefore, it will be to your advantage to answer each question honestly and thoughtfully. There are no right or wrong answers.

Directions:

Read the first statement in the booklet and decide whether you think it is or is not true about you, then mark your answer on the separate answer sheet. If the statement is true or mostly true as applied to you, blacken the space on the answer sheet above the number that agrees with the number of the item. If the statement is false, or not usually true as applied to you, blacken the space on the answer sheet below the number that agrees with the number of the item.

Below is an example of the answer sheet. Item 1 is marked to indicate it is true. Item 2 is marked to indicate it is false.

Section of Answer Sheet

T	1	2	3	4	::::: 5	6	::::: 7	8
F	:::::	_	-:-::	:::::	:::::	:::::	:::::	:::::

If a statement does not apply to you or if you don't know about it, make no mark on the answer sheet. However, answer all the questions you can. Leave as few as possible blank.

Remember, give your own opinion about yourself. Answer the questions quickly and do not spend too much time on any one question.

When you mark your answers on the answer sheet, be sure the number of the statement agrees with the number on the answer sheet. Make a heavy black mark and erase completely answers you wish to change.

TRY TO ANSWER EVERY QUESTION.

BE SURE YOUR NAME IS ON THE ANSWER SHEET.

DO NOT MAKE ANY MARKS IN THIS BOOKLET.

USE THE SPECIAL PENCIL.

Now turn the page and go ahead.

Page Four

- 1. During the past few years I have been well most of the time.
- 2. My home is a very pleasant place.
- 3. I seem to make friends about as quickly as others do.
- 4. I get excited easily.
- 5. I am well poised in social contacts.
- 6. I enjoy the excitement of a crowd.
- 7. I get angry sometimes.
- 8. I find it hard to keep my mind on a task or job.
- 9. I am in just as good physical health as most of my friends.
- 10. I worry over possible misfortunes.
- 11. I suffer discomfort from gas in the stomach or intestines.
- 12. I would rather win than lose in a game.
- 13. My memory seems to be all right.
- 14. I have never been in trouble with the law.
- 15. I easily become impatient with people.
- 16. I have difficulty in getting rid of a cold.
- 17. I have periods in which I feel unusually cheerful without any special reason.
- 18. I find it easy to be the life of the party.
- 19. My parents have often objected to the kind of people I go around with.
- 20. I gossip a little at times.
- 21. I am subject to eye strain.
- 22. I have spells of the "blues."
- 23. I like to know some important people because it makes me feel important.
- 24. If a party is dull, I take the lead in pepping it up.

- 25. I find it easy to express my ideas.
- 26. I am embarrassed when meeting new people.
- 27. I dislike having people about me.
- 28. I enjoy many different kinds of play and recreation.
- 29. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
- I dream frequently about things that are best kept to myself.
- 31. I resent having anyone take me in so cleverly that I have to admit he put one over on me.
- 32. At times I am all full of energy.
- 33. I drink an unusually large amount of water every day.
- 34. I frequently find myself worrying about something.
- 35. I am easily awakened by noise.
- 36. I feel at ease with people.
- 37. I seek to meet the important person present at a reception or tea.
- 38. I have colds,
- 39. I hardly ever notice my heart pounding and I am seldom short of breath.
- 40. I have been depressed because of low marks in school.
- 41. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
- 42. I cross the street to avoid meeting people is know.
- 43. I get angry easily.
- 44. The members of my family are too curious about my personal affairs.
- 45. I cannot keep my mind on one thing.

- 46. At times I feel like swearing.
- 47. I lose self-confidence easily.
- 48. I find it very difficult to speak in public.
- 49. I am sure I get a raw deal from life.
- 50. I have never had a fainting spell.
- 51. I am sorry for the things I do.
- 52. I frequently have to fight against showing that I am bashful.
- 53. I like to flirt.
- 54. I feel just miserable.
- 55. I have been responsible for making plans and directing the actions of other people.
- 56. If I could get into a movie without paying and be sure I was not seen I would probably do it.
- 57. I do not like everyone I know.
- 58. I feel lonesome, even when I am with people.
- 59. I prefer to limit my social life to members of my own family.
- 60. I believe I am no more nervous than most others.
- 61. I feel self-conscious when volunteering to take part in games or other organized activities.
- 62. It is hard for me to keep a pleasant disposition at home.
- 63. I usually feel that life is worthwhile.
- 64. I take cold rather easily from other people.
- 65. I am troubled with the idea that people are watching me on the street.
- 66. I feel very self-conscious if I have to say something to start a conversation among a group of people.
- 67. I am embarrassed because of my lack of experience in social situations.
- 68. My parents treat me more like a child than a grown-up.

Go on to the next column

- 69. I feel that my parents are disappointed in me.
- 70. I seem to be about as capable and smart as most others around me.
- 71. I shrink from facing a crisis or difficulty.
- 72. Even when I am with people I feel lonely much of the time.
- 73. I feel self-conscious because of my personal appearance.
- 74. I think nearly anyone would tell a lie to keep out of trouble.
- 75. I have never been paralyzed or had any unusual weakness of any of my muscles.
- 76. I have often found people jealous of my good ideas, just because they had not thought of them first.
- 77. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
- 78. My eyes are very sensitive to light.
- 79. I get upset easily.
- 80. I often think, "I wish I were a small child again."
- 81. Once in a while I think of things too bad to talk about.
- 82. I feel self-conscious when reciting in class.
- 83. My table manners are not quite as good at home as when I am out in company.
- 84. It has been necessary for me to have medical attention.
- 85. I do not have spells of hay fever or asthma.
- 86. No one seems to understand me.
- 87. Almost every day something happens to frighten me.
- 88. My teeth seem to need dental attention.
- 89. The sight of blood neither frightens me nor makes me sick.
- 90. Whenever possible I avoid being in a crowd.

 Go on to the next page

- 115. I may know the answer to a question, bu when called upon because of fear of spea before the class.
- 116. People say insulting and vulgar things a me.
- 117. I am happy most of the time.
- 118. My parents and family find more fault me than they should.
- 119. At times I hear so well it bothers me.
- 120. If given a chance I could do some t would be of great benefit to the
- 121. I have often met people who were supp to be experts who were no better than
- 122. I work under a great deal of tension.
- 123. I envy the happiness that others see enjoy.
- 124. I am very seldom troubled by constipa
- 125. I cannot understand what I read as we I used to.
- 126. I have had periods of days, weeks, or m when I couldn't take care of things be I couldn't "get going."
- 127. My hardest battles are with myself.
- 128. I become nervous at home.
- 129. I find it hard to do my best when peopl watching.
- 130. Ideas run through my head so that I ca sleep.
- 131. I come to my meals without being 1 hungry.
- 132. I am quite often not in on the gossip and of the group I belong to.
- 133. At times I have fits of laughing and c that I cannot control.
- 134. I feel very tired towards the end of the
- 135. At times I feel like picking a fist fight someone.
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- 91. I feel self-conscious with strangers.
- 92. I have a fairly good time at parties.
- 93. I dislike social affairs.
- 94. My parents too often expect me to obey them, now that I am grown up.
- 95. I do not mind meeting strangers.
- 96. Someone has it in for me.
- 97. I feel that I have often been punished without cause.
- 98. I do not mind being made fun of.
- 99. Peculiar odors come to me at times.

 100. I worry too long over humiliating experiences.
- 101. I feel weak all over much of the time.
- ---- To women ---- -- ---
- 102. I am unusually self-conscious.

 103. At times my mind seems to work more slowly
- 104. My parents would keep faith in me even though I could not find work.
- 105. I feel fatigued when I get up in the morning.
- 106. I cry easily.

than usual.

- 107. I have little or no trouble with my muscles twitching or jumping.
- 108. While in trains, buses, etc., I often talk to strangers.
- 109. I feel like giving up quickly when things go wrong.
- 110. Life is a strain for me much of the time.
- 111. I often feel as if things were not real.
- 112. I have had to keep quiet or leave the house to have peace at home.
- 113. I seldom worry about my health.
- 114. I have never felt better in my life than I do now.

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- 136. I am likely not to speak to people until they speak to me.
- 137. I try to remember good stories to pass them on to other people.
- 138. I get mad easily and then get over it soon.
- 139. I know who is responsible for most of my troubles.
- 140. I am troubled by attacks of nausea and vomiting.
- 141. I have not lived the right kind of life.
- 142. No one seems to understand me.
- 143. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."
- 144. One (or both) of my parents is very nervous.
- 145. Sometimes my voice leaves me even though I have no cold.
- 146. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
- 147. I like to take the first step in making friends.
- 148. I have had a strong desire to run away from home.
- 149. Criticism disturbs me greatly.
- 150. I consider myself a rather nervous person.
- 151. I find it hard to set aside a task that I have undertaken, even for a short time.
- 152. I get discouraged easily.
- 153. Most of the time I wish I were dead.
- 154. I hesitate to volunteer in class recitation.
- 155. At times I have very much wanted to leave home.
- 156. I have difficulty in starting a conversation with a person who has just been introduced.
- 157. I have very few quarrels with members of my family.

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- 158. I like to meet new people.
- 159. I do not read every editorial in the newspaper every day.
- 160. I am worried about sex matters.
- 161. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.
- 162. Most of the time I feel blue.
- 163. Once in a while I put off until tomorrow what I ought to do today.
- 164. I have difficulty in starting to do things.
- 165. When I leave home I do not worry about whether the door is locked and the windows are closed.
- 166. I love to go to dances.
- 167. Many of my dreams are about sex matters.
- 168. In school I sometimes have been sent to the principal for cutting up.
- 169. I was ill much of the time during my child-hood.
- 170. I enjoy social gatherings just to be with people.
- 171. I enjoy speaking before groups of people.
- 172. Criticism or scolding hurts me terribly.
- 173. I have never had a fit or convulsion.
- 174. I am able to recover quickly from social blunders.
- 175. I get all the sympathy I should.
- 176. Some particular useless thought keeps coming into my mind to bother me.
- 177. If given a chance I would make a good leader of people.
- 178. I have been quite independent and free from family rule.
- 179. I brood a great deal,
- 180. I certainly feel useless at times.

- 181. My judgment is better than it ever was.
- 182. My feelings are easily hurt.
- 183. Things go wrong for me from no fault of my own.
- 184. I am indifferent to people.
- 185. My parents fail to recognize that I am a mature person and treat me as if I were still a child.
- 186. I have difficulty in talking to most people.
- 187. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
- 188. In walking, I am very careful to step over sidewalk cracks.
- 189. There is very little love and companionship in my family as compared to other homes.
- 190. I wish I were not so shy.
- 191. Most nights I go to sleep without thoughts or ideas bothering me.
- 192. In a group of people I would not be embarrassed to be called upon to start a discussion or give an opinion about something I know well.
- 193. My daily life is full of things that keep me interested.
- 194. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
- 195. During one period when I was a youngster I stole things.
- 196. People often disappoint me.
- 197. My worries seem to disappear when I get into a crowd of lively friends.
- 198. I have had periods when I felt so full of pep that sleep did not seem necessary for days at a time.
- 199. I have had no difficulty in keeping my balance in walking.
- 200. My family does not like the work I have chosen or the work I intend to choose for my life work.

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- 201. I like to let people know where I stand on things.
- 202. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
- 203. At times I have enjoyed being hurt by someone I loved.
- 204. I have been afraid of things or people that I know could not hurt me.
- 205. My parents expect too much from me.
- 206. I am certainly lacking in self-confidence.
- 207. I daydream.
- 208. My way of doing things is apt to be misunder-stood by others.
- 209. I enjoy trying to persuade people to do things.
- 210. At times I feel like smashing things.
- 211. I get along as well as the average person in social activities.
- 212. I prefer to participate in activities leading to friendships with many people.
- 213. I am against giving money to beggars.
- 214. Sometimes when I am not feeling well I am cross.
- 215. I am troubled with feelings of inferiority.
- 216. I am sure I am being talked about.
- 217. I am easily embarrassed.
- 218. My parents have objected to the kind of companions I go around with.
- 219. At times I have a strong urge to do something harmful or shocking.
- 220. I don't seem to care what happens to me.
- 221. I have much difficulty in thinking of an appropriate remark to make in group conversation.
- 222. I like to study and read about things that I am working at.
- 223. I feel I must have many social contacts to be happy.
- 224. I forget right away what people say to me.
- 225. I am at ease with older people.

- 226. I have been disappointed in love.
- 227. If people had not had it in for me I would have been much more successful.
- 228. I sometimes tease animals.
- 229. I have had attacks in which I could not control my movements or speech but in which I knew what was going on around me.
- 230. I have a good appetite.
- 231. I find less understanding at home than elsewhere.
- 232. I have periods of such great restlessness that I cannot sit long in a chair.
- 233. My father is my ideal of manhood.
- 234. It makes me feel like a failure when I hear of the success of someone I know well.
- 235. My conduct is largely controlled by the customs of those about me.
- 236. I find it difficult to start a conversation with a stranger.
- 237. Neither of my parents gets angry easily.
- 238. I have been absent from school because of illness.
- 239. I have shooting pains in my head.
- 240. At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.
- 241. I meet strangers easily.
- 242. Once in a while I feel hate towards members of my family whom I usually love.
- 243. Often I can't understand why I have been so cross and grouchy.
- 244. I am almost never bothered by pains over the heart or in my chest.
- 245. I have strange and peculiar thoughts.
- 246. My relatives are nearly all in sympathy with me.
- 247. I have no dread of going into a room by myself where other people have already gathered and are talking.

- 248. My hands have not become clumsy or awkward.
- 249. I hear strange things when I am alone.
- 250. Neither of my parents has insisted on obedience regardless of whether or not the request was reasonable.
- 251. My sleep is fitful and disturbed.
- 252. I have disagreed with my parents about my choice of a life work.
- 253. Much of the time I feel as if I have done something wrong or evil.
- 254. I do not worry about catching diseases.
- 255. I find it hard to make talk when I meet new people.
- 256. I am afraid of losing my mind.
- 257. I am easily downed in an argument.
- 258. Sometimes I enjoy hurting persons I love.
- 259. I do not always tell the truth.
- 260. There is something wrong with my mind.
- 261. I have more trouble concentrating than others seem to have.
- 262. I have had periods in which I carried on activities without knowing later what I had been doing.
- 263. I do not blame a person for taking advantage of someone who lays himself open to it.
- 264. I am bothered by the feeling that things are not real.
- 265. Once a week or oftener I feel suddenly hot all over, without apparent cause.
- 266. I am sure I get a raw deal from life.
- 267. I refuse to play some games because I am not good at them.
- 268. It frightens me when I have to see a doctor about some illness.
- 269. I wish I could be as happy as others seem to be.
- 270. My parents seem too old-fashioned in their ideas.

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- Once a week or oftener I become very excited.
- 272. One or both of my parents has certain personal habits which irritate me.
- 273. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
- 274. I am so touchy on some subjects that I can't talk about them.
- 275. I enjoy small children.
- 276. I have difficulty getting to sleep even when there are no noises to disturb me.
- 277. I have ups and downs in mood without apparent cause.
- 278. The actions of one or the other of my parents have aroused great fear in me.
- 279. I have often lost out on things because I couldn't make up my mind soon enough.
- 280. I have several times given up doing a thing because I thought too little of my ability.
- 281. When in a group of people I have trouble thinking of the right things to talk about.
- 282. I have headaches.
- 283. The things that some of my family have done have frightened me.
- 284. I am a good mixer.
- 285. Most any time I would rather sit and day-dream than do anything else.
- 286. I enjoy gambling for small stakes.
- 287. I become self-conscious readily.
- 288. I can trust the people in my family.
- 289. I find it necessary to watch my health carefully.
- 290. I am embarrassed by dirty stories.
- 291. People generally demand more respect for their own rights than they are willing to allow for others.
- 292. My speech is the same as always (not faster or slower, or slurring; no hoarseness).

- 293. In school I find it very hard to talk before the class.
- 294. I believe that my home life is as pleasant as that of most people I know.
- 295. At an important dinner, I would do without something rather than ask to have it passed.
- 296. I am apt to pass up something I want to do when others feel that it isn't worth doing.
- 297. I like parties and socials.
- 298. I have had very peculiar and strange experiences.
- 299. I have the time of my life at social affairs.
- 300. I wish I were not bothered by thoughts of sex.
- 301. My hands and feet are usually warm enough.
- 302. Much of the time my head seems to hurt all over.
- 303. I am nervous and ill at ease with most people.
- 304. I feel most contented at home.
- 305. I seldom or never have dizzy spells.
- 306. I think most people would lie to get ahead.
- 307. Lack of money has tended to make home unhappy for me.
- 308. Neither of my parents finds fault with my conduct.
- 309. I have felt that my friends have had happier home lives than I.
- 310. I find it easy to make friendly contacts with members of the opposite sex.
- 311. I like to mix with people socially.
- 312. I have few or no pains.
- 313. My eyesight is as good as it has been for years.
- 314. I participate easily in ordinary conversation.
- 315. I can be friendly with people who do things which I consider wrong.

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- 316. There has been a lack of real affection and love in my home.
- 317. I find it easy to act naturally at a party.
- 318. I can read a long while without tiring my eyes.
- 319. I am eager to make new friends.
- 320. I enjoy entertaining people.
- 321. I feel I owe my greatest obligation to my family.
- 322. I am rather shy in contacts with people.
- 323. I feel that social affairs are not serious enough for me to enjoy.
- 324. Neither of my parents is easily irritated.
- 325. It is safer to trust nobody.
- 326. My parents and I live in different worlds, so far as ideas are concerned.
- 327. I have had a strong desire to run away from home.
- 328. I avoid people when it is possible.
- 329. I stay in the background at parties or social gatherings.
- 330. I frequently notice my hand shakes when I try to do something.
- 331. I feel that my family obligations are a great handicap.
- 332. I have felt that neither of my parents understands me.
- 333. There seems to be a lump in my throat much of the time.
- 334. I enjoy detective or mystery stories.
- 335. I feel embarrassed when entering a public assembly after everyone else has been seated.
- 336. Often I feel as if there were a tight band about my head.

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- 337. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
- 338. I am indifferent to ordinary social contacts.
- 339. I take an active part in the entertainment at parties.
- 340. I do not tire quickly.
- 341. My parents have been unduly strict with me.
- 342. There have been family quarrels among my near relatives.
- 343. I like to read newspaper articles on crime.
- 344. I am annoyed by social activities.
- 345. I have very few headaches.
- 346. I commonly wonder what hidden reason another person may have for doing something nice for me.
- 347. I feel embarrassed when I must ask permission to leave a group of people.
- 348. I have disagreed with my parents about the way in which work around the house should be done.
- 349. I find it easy to have a good time at a party.
- 350. I hesitate to enter a room by myself when a group of people are sitting around the room talking together.
- 351. Neither of my parents criticizes me unjustly.
- 352. I have difficulty saying the right thing at the right time.
- 353. I get upset when a teacher calls on me unexpectedly.
- 354. I like to participate in many social activities.
- 355. I readily become one hundred per cent sold on a good idea.

END