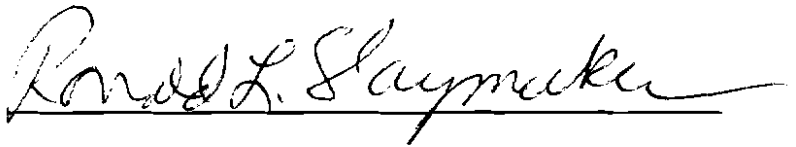


AN ABSTRACT OF THE THESIS OF

LINDSAY RANDALL TJADEN for the Master of Science Degree
in Physical Education presented on January 9, 1981.

Title: A COMPARISON OF THE PERSONALITY TRAITS OF COLLEGE
COACHES

Abstract approved:

A handwritten signature in cursive script, reading "Ronald L. Slaymaker", is written over a horizontal line.

The purpose of this study was to examine and compare similarities and differences in the personality traits of college coaches, regardless of their sex or the type of sport they coach.

The assumption that particular sports attract different personality types or that men and women coaches differ in personality traits simply because of gender has not been adequately supported by research. It needs to be determined if an analysis of personality traits can lead to a profile of a coaching personality. In general, it can be assumed that there is a characteristic coaching personality if there are consistent similarities in personality traits of college coaches, regardless of their sex or the type of sport they coach.

Forty-five coaches completed the Edwards Personal Preference Schedule. A comparison of the scores from the EPPS

was statistically analyzed in three categories: male coaches vs. female coaches; individual sports coaches vs. team sports coaches; and contact sports coaches vs. noncontact sports coaches. The statistical tool was the analysis of variance at the .05 level of significance.

The comparison of the coaches of contact sports vs. the coaches of noncontact sports showed that there were no significant differences in personality traits. However, the comparisons of male coaches vs. female coaches and the coaches of individual sports vs. the coaches of team sports showed significant differences in three of the fifteen personality traits tested in both categories. The results are as follows:

1. Male vs. female coaches were different at the
 - a. Dominance variable ($F_{1,43}=7.9666$)
 - b. Change variable ($F_{1,43}=9.1993$)
 - c. Aggression variable ($F_{1,43}=6.5605$)
2. Individual vs. team sports coaches were different at the
 - a. Intraception variable ($F_{1,43}=5.3133$)
 - b. Nurturance variable ($F_{1,43}=4.1768$)
 - c. Endurance variable ($F_{1,43}=5.7538$)


A COMPARISON OF THE PERSONALITY
TRAITS OF COLLEGE COACHES

A Thesis
Presented to
the Department of Physical Education
EMPORIA STATE UNIVERSITY

In Partial Fulfillment
of the Requirements for the Degree
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TABLE OF CONTENTS

	Page
LIST OF TABLES	v
Chapter	
1. INTRODUCTION	1
Purpose of the Study	2
Significance of the Study	3
Statement of the Problem	3
Statement of the Hypotheses	4
DEFINITION OF TERMS	4
Coach	4
Contact Sport	4
Edwards Personal Preference Schedule	5
Individual Sport	5
Noncontact Sport	5
Personality	5
Personality Trait	6
Psychology	6
Sport Psychology	6
Sports	6
Team Sports	6
LIMITATIONS	6
Delimitations	7
2. REVIEW OF LITERATURE	8
SUMMARY	18

Chapter	Page
3. METHODS AND PROCEDURES	19
POPULATION AND SAMPLING	19
MATERIAL AND INSTRUMENTATIONS	21
DESIGN	22
DATA ANALYSIS	24
4. ANALYSIS OF DATA	26
Response Analysis	26
Statistical Analysis	27
COMPARISON OF PERSONALITY TRAITS BETWEEN MALE AND FEMALE COLLEGE COACHES	27
COMPARISON OF PERSONALITY TRAITS BETWEEN INDIVIDUAL AND TEAM SPORT COLLEGE COACHES	30
COMPARISON OF PERSONALITY TRAITS BETWEEN CONTACT AND NONCONTACT SPORTS COLLEGE COACHES	34
SUMMARY	34
5. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	64
SUMMARY	64
FINDINGS	65
CONCLUSIONS	66
RECOMMENDATIONS	67
BIBLIOGRAPHY	69
APPENDIX	72

LIST OF TABLES

Table	Page
1. Analysis of Variance Criterion Variable Dominance: Male vs. Female College Coaches	28
2. Analysis of Variance Criterion Variable Change: Male vs. Female College Coaches	29
3. Analysis of Variance Criterion Variable Aggression: Male vs. Female College Coaches	30
4. Analysis of Variance Criterion Variable Intracception: Individual vs. Team Sports College Coaches	31
5. Analysis of Variance Criterion Variable Nurturance: Individual vs. Team Sports College Coaches	32
6. Analysis of Variance Criterion Variable Endurance: Individual vs. Team Sports College Coaches	33
7. Mean Scores: Male vs. Female College Coaches	36
8. Mean Scores: Individual vs. Team Sports College Coaches	37
9. Mean Scores: Contact vs. Noncontact Sports College Coaches	38
10. Analysis of Variance For All Selected Areas Tested	39
11. Analysis of Variance: Male vs. Female College Coaches	40
12. Analysis of Variance: Individual vs. Team Sports College Coaches	48
13. Analysis of Variance: Contact vs. Noncontact Sports College Coaches	56

Chapter 1

INTRODUCTION

Coaches seeking to improve their personal effectiveness can be greatly helped by findings of sport psychologists' personality studies (4:52). One of the recent benefits of work in the field of sport psychology is the use of personality profiles of athletes to assist a coach in determining the athlete's type of personality. By knowing the athlete's personality traits, a coach will be better equipped to approach communications with the athlete and be aware of the best method of working with him as an individual. A personality profile will also aid a coach in identifying an athlete who possesses those traits that generally lead to athletic success (28:1).

Understanding the athlete, valuable as it may be, does not guarantee the coach an easy job. He must also be aware of his own personality and how it affects his interaction with the athletes he coaches. A profile of personality traits can show the coach his weak and strong points in areas important to his coaching responsibilities, as well as categorizing the type of coach he is. Alonzo Stagg in 1927 was aware of the importance of a coach's personality:

How to be a good coach is just as much
a mystery as how to be a good general...Like
all other jobs above common labor and office

routine, it requires a native gift, a feeling for the task, for success (27:301).

In spite of the fact that coaches have traditionally been stereotyped as having certain personality traits, research into the personality traits of coaches has been virtually ignored (25:74). Emphasis has been placed on athletes, probably because they provide a broader base for both testing and application of findings. Most research done on coaching personalities has dealt with determining types of coaches (i.e. Authoritarian, Nice Guy, Intense, Easy-going, Business-Like), or traits of successful coaches (29:15, 14:303, 26:126). These studies do not give a true picture of a coach's personality profile. A comparison of coaches in general is needed to establish a basic profile of the personality traits of coaches.

Tutko (24:1) said it is a difficult area to research. More questions are raised than are answered. Since the area is primarily of interest to physical educators, few psychologists can be expected to delve heavily into the study of personality traits of coaches; therefore, it is up to the physical educators to provide new literature giving a generalized treatment of personality in relation to their field (3:54). One of the first questions to be answered is whether there is a "coaching personality" common among all coaches.

Purpose of the Study

The purpose of this study was to examine and compare

the similarities and differences in personality traits between coaches of various types of sports, as well as between male and female coaches. The results of the Edwards Personal Preference Scale were used to determine personality traits.

Significance of the Study

While much research has been done concerning the personality of athletes, limited information is available about the personality of coaches. Any scholarly investigation into the personality of coaches can offer at least a foundation for further study. Tutko, a leader in the field of sport psychology, wrote concerning personality research of coaches: "Perhaps slowly but surely if we all do some research we can get a clearer picture of the area" (24:1).

The results of this study provide insight into the personality traits of coaches for purposes of comparison. This study also contributes information about the personality traits of coaches compared in several categories, and could serve as a basis for extending research into other areas, such as the effects of personality on coaching methods, traits of successful versus unsuccessful coaches, and other such studies.

Statement of the Problem

The assumption that particular sports attract different personality types or that men and women coaches differ in

personality traits simply because of gender has not been adequately supported by research. It needs to be determined if an analysis of personality traits can lead to a profile of a coaching personality. In general, it can be assumed that there is a characteristic coaching personality if there are consistent similarities in personality traits of college coaches, regardless of their sex or the type of sport they coach.

Statement of the Hypothesis

There are no significant differences in personality traits between individual and team sport college coaches. There are no significant differences in personality traits between male and female college coaches. There are no significant differences in personality traits between contact and noncontact sport college coaches.

DEFINITION OF TERMS

The following definitions apply to terms used in this study.

Coach (12:271): An instructor or trainer of athletes; the person who is in overall charge of a team and the strategy in games.

Contact Sport (32:88): A sport or game where the contestants come, to an appreciable extent, in bodily contact with one another. For the purpose of this study, football

was the only contact sport represented.

Edwards Personal Preference Schedule (7:60): A forced-choice personality inventory in which items are paired and the individual is asked to choose that member of each pair that he believes is more descriptive of himself. There are 210 different pairs of statements in the EPPS and scores are provided on fifteen scales, which are: Achievement (ach), Deference (def), Order (ord), Exhibition (exh), Autonomy (aut), Affiliation (aff), Intraception (int), Succorance (suc), Dominance (dom), Abasement (aba), Nurturance (nur), Change (chg), Endurance (end), Heterosexuality (het), and Aggression (agg).

Individual Sport (32:319): A sport commonly contested between individuals as contrasted to a team game where team-play is a major factor. For the purpose of this study, individual sports represented were golf, gymnastics, swimming, tennis, and track.

Noncontact Sport (32:283): A sport or game in which the contestants do not come in bodily contact with one another as an integral part of the sport or game. Noncontact sports represented in this study were baseball, basketball, golf, gymnastics, softball, swimming, tennis, track and volleyball.

Personality (1:558): An individual's characteristic pattern of behavior and thought, including an accordant self-concept and a set of traits consistent over time.

Personality Trait (13:259): A distinctive and relatively permanent characteristic aspect of the behavior of an individual (e.g. persistence, cheerfulness, etc.).

Psychology (12:1147): The science dealing with the mind and with mental and emotional processes; the science of human and animal behavior.

Sport Psychology (16:831): Psychology and its entire world of research, experiments and practical work being placed at the service of that personal and social phenomenon that we know as sport. From this point of view, it is a matter of studying man with the aim of insuring that his sporting activities become more productive.

Sports (18:9-10): An athletic activity requiring physical prowess or skill and usually of a competitive nature (baseball, football, field sports, etc.).

Team Sport (32:444): A sport in which teamwork is an integral feature. For the purpose of this study, team sports are represented by baseball, basketball, football, softball, and volleyball.

LIMITATIONS

The study was limited by the attitudes of the coaches taking the Edwards Personal Preference Schedule. If they experienced anxiety over a testing procedure, their responses could have been influenced by their emotional state at the time of testing. The honesty of the coaches in their answers

could also affect the outcome. The test was given at four schools, and the number of coaches on the staffs limited the number of subjects used in the survey. Also, the availability and cooperation of the coaches determined whether all of them took the Edwards Personal Preference Schedule.

Delimitations

The use of only one evaluation, the Edwards Personal Preference Schedule, which is based on a measure of fifteen personality traits does not give complete information on the whole spectrum of personality. The EPPS was given to the coaching staffs at four small universities, which provided only a small sampling of forty-five subjects. Data collected from a larger sample would have given a more general picture of the personality traits of coaches. The method of analysis provided only statistical results, with no consideration given to other factors (i.e., the subject's mood at the time of testing, if the coach's sport is in season and he is more involved with coaching, the affect of a personality trait on coaching, etc.).

Chapter 2

REVIEW OF LITERATURE

If a survey poll were conducted today to determine what type of an individual would become an athletic coach, most people would give a variety of descriptions, since there seems to be no common concept of what sort of personality becomes a coach. Coaches, hiding behind windbreakers, clipboards, and unbeaten seasons, have always seemed to escape human definition (22:38). No one really knows very much about the personality traits of coaches, nor are there any desired guidelines or controls along this line for the selection of a coach. This is unfortunate, since the coach is an important reference person who transmits values and expectations to the athletes he is coaching (26:126). In other words, the personality traits of a coach may be passed on to the players that he has under his guidance; whether they are desirable or undesirable traits. Reflection of this influence and the resultant traits being passed on is evident at the public school level, but even greater evidence of this influence is evident at the collegiate level. Few college faculty members exert the degree of constructive leadership manifested by the college coach (18:255). To young people involved in athletics, the college years are critical because athletics represent a testing ground in

their lives, whereby they develop a self-image and personality. This final period of development can determine how a person will act and react the rest of his life.

A great deal of research has gone into determining the type of personality an athlete possesses, but virtually no research has been conducted on the people who control and guide these young athletes. Much of what is known about athletic coaches are ideas, assumptions, experiences, and myths that have been handed down through the years. The research that has been conducted, along with observations, has yielded five personality types among coaches.

The five types of coaches are: the hard nose or authoritarian coach; the nice guy coach; the intense or driven coach; the easy-going coach; and the business-like coach (29:16, 20:133-4). Although these five views of coach types are descriptive, they are also deceiving. They only show the exterior of the coach's personality; they do not really show what is actually happening inside the person.

Coaches are usually very defensive about their lives and thoughts; they tend to avoid serious questions presented to them by researchers and they volunteer nothing (10:16). However, this type of research may become more important as time goes by, since the personality of a coach could determine the success or failure of an athletic team, or even an entire athletic program.

In most highly competitive athletic situations, the

coach is faced with the extreme pressure of fielding a successful team or being dismissed from his job. The teacher-coach in the public schools usually perceives that his main, and occasionally his only, responsibilities are related to coaching and producing a winning team. The collegiate coach is often forced to use tactics he would find abhorrent if he was not faced with the pressure of winning to keep his job (16:48). With almost every institution seeking to field a winning team, they are all seeking the ideal coach to create a winning program. With this desire to find the perfect coach for their school, principals and athletic directors develop hiring practices which force conformity to models. But this does not guarantee that the coach will meet the requirements, since personality traits, which seldom surface during job interviews, may not conform to what the athletic director is seeking when the coach may meet every other requirement.

There are many concepts of what the ideal coach should be like. People have been trying to find a definition since 1929, when Howard Savage defined a coach as "...a man or woman whose work it is to instruct participant members of an athletic organization or candidates for such membership in techniques and methods of one or more branches of athletics" (8:132). Even then the role of the coach was seen as very complex.

Most of the current research is aimed at finding the

right coach to create and perpetuate a winning athletic program. Hendry's findings showed that coaches were dominant, aggressive, driving, realistic, self-sufficient, radical in outlook, suspicious, and insecure (15:69, 6:324). Percival concluded that the best coaches were either modest or realized that they had much to learn and were trying hard to do just that (20:138). Other studies concluded that coaches are aggressive people, self-assertive. They tend to be highly organized and ordered people. They listen to others, but pay little attention to what others have to say. They have fierce psychological endurance. They dislike change and experimentation. They are extremely conservative, politically, socially, and attitudinally (16:73-77; 8:131-2).

In several studies a description of an ideal coach was used. These studies were conducted among coaches as well as athletes. The results were similar to what the researcher described as an ideal coach. These studies showed the coaches being high in nurturance, dominating, highly intelligent, realistic, high in affiliation, confident, outgoing, innovative, and self-sufficient (16:76, 14:304, 15:69). One of the most critical items brought out in the studies was the need for decisiveness. In athletics, decisions often must be made rapidly. They must be practical, rational, and expedient. One of the major responsibilities of coaching is to make decisions and this decisiveness in a leader is a most desirable trait (8:132, 4:46, 17:142).

Another common trait found among the subjects tested by several researchers was flexibility. The coaches that were more flexible and able to adjust to various situations tended to be much more successful and stay in the field of athletics longer. The flexibility of the coach also created a much healthier educational atmosphere for the participants. The coaches who were unable to meet the standard of flexibility were eventually forced out of the business because of not being able to cope with various situations (29:16, 5:119, 31:144, 21:63).

Even through criticism we can get an impression of a coach's personality. Some critics view coaches as being dehumanizing, autocratic, and insensitive to the needs of the individual athletes that they coach. They are seen as simplistic, conservative, and dictatorial. Outstanding coaches tend to have these characteristics to a marked degree (17:141, 18:255).

Overall, the coach as a leader must have the right combination of humility and flexibility, while also possessing the strength of character to stand alone when an important principle is at stake or a difficult decision must be made. He also needs to fulfill the functions of the traditional father: be strong, tough, virile, deserve and expect respect, receive obedience, and dispense punishment when it is needed (23:39, 2:200). A coach must be willing to take responsibility for the team, but in exchange he demands and usually gets

complete authority. Having this much control of an individual and possessing the means to alter a person's character can create problems. Whatever type of character the coach portrays will most likely reflect on the players under his control. In fact, many athletes entering the coaching field bring certain personality traits with them which are characteristic of the coaches they played under (17:140-2).

With this much influence and authority at stake and available to a coach, we need a sound person in control. We need someone we know about and can trust not to abuse his power. Grieve believes that the individual who is emotionally mature about his day to day experiences will normally reflect a similar maturity when he is coaching (11:54). Hopefully, administrators will delve a little deeper than the mere appearance of a person when considering him for such an important position.

Tutko has been deeply involved in the research concerning sport psychology and in particular the area dealing with the personalities of athletes and coaches. In research conducted by Tutko and Ogilvie, results indicated that a coaching personality did indeed exist. Testing revealed that the coach's personalities were similar to the personality of an athlete or competitor, but the personality traits of the coaches tended to be greatly intensified (21:63, 30:206). The coaches tested gave support to Tutko and Ogilvie's generalization that the personality traits which determine a coach

getting ahead and succeeding, but do not necessitate personal involvement, show high scores. But in those personality traits which contribute most to being sensitive and also supportive in close relationships, they score low (16:75-76).

In separate studies, Ogilvie found many of the dominant characteristics in his results coincided with those found in the research conducted with Tutko. Through this accumulation of data, he developed a list of twelve traits that he found to be common among the tested subjects (10:16). Those traits included:

1. A need for high achievement
2. A need to exert leadership and an ability to get others to follow directions
3. A fair amount of inflexibility
4. Aggressiveness
5. A solid sense of right and wrong
6. Emotional stability
7. Tough-mindedness and an ability to face facts
8. Great determination
9. Organization
10. A lack of anxiety
11. A willingness to accept blame and pay the physical and/or emotional price for success
12. A willingness to listen to authorities and acknowledged leaders in the field

By setting down these guidelines or traits, other researchers can use them as a basis for future studies. Also, some of the scattered research which has already been conducted will be re-evaluated and perhaps re-studied. Hopefully, through all of this a consistency of research will evolve. Many of the questions raised by early studies can be investigated more thoroughly.

Many of the questions that have been raised about existing studies point out the lack of research in consistent and specific areas. The results that are now available indicate that the sex of the subjects used were not differentiated between men and women coaches. This would appear to be a very obvious but important area that should be investigated. The need for research dealing with the differences and similarities between men and women coaches would seem even more important today with the dramatic rise in the number of women's sports and female athletes due to the implementation of Title IX and the subsequent increase in women coaches. In one of the few existing studies now available that deals with this area, Loy found that women tend to display similar intellectual and emotional behavior to the men coaches. In another study, Neal came to the conclusion that the attributes needed to handle people well, be emotionally stable, and possess a wide grasp of a particular sport are just as strong in women as they are in men (20:127, 5:117). Kane's study concurred with Neal that the sex of an individual

should make no difference in the performance of an individual (16:140).

Even with the results of the available studies, many educators and scientists are skeptical of the evidence. Challenges are raised against this type of research. The value of knowing the personality traits of athletic coaches is questioned, along with the methods being used in the research. There are even questions as to whether one can truly define the personality traits of an individual.

Allport considers personality as the individual's unique characteristic behavior and thought, and how a person adjusts to his environment. Therefore, some similar characteristics may appear in the individual's behavior, but no specific personality is consistent with the type of environment one is in. English and English take a different stand. They feel that the actual meaning of personality can be and is influenced by the way it is studied. Consequently, if one is looking for a personality in an athletic coaching setting, one will find it because one has altered the setting through unintended bias to meet the requirements of the study (3:55).

There have been an enormous number of studies conducted by psychologists and other behavioral scientists dealing with the area of personality. They have dealt with many aspects of human life and its environment, but it is remarkable how little attention they have given to the area of physical

activity; specifically play, games, and sports. There is little reason to believe that these researchers, except for a few, will ever study personality as revealed in the context of physical activity (3:61).

Review of the available studies reveal some strengths and weaknesses. Extensive personal interviews with subjects indicated that test results were highly consistent with the subjects' own self-perception for most traits measured. They proved most reliable in identifying the traits of dominance, psychological endurance, and athletic drive. However, it was found that for certain traits there was a consistent lack of self-perception. The subjects were unable to recognize such traits as emotional control, self-confidence, trust, conscience, self-abasement, or tenderness (21:63, 16:73).

There is also a difference of opinion concerning the relationship of personality and coaching. Some opponents of this line of study point out that some research has been unable to determine the extent to which character contributes, if at all, to coaching and coaching success, or if it is even a contributing factor (20:131, 21:63, 19:20).

With all of the challenges being brought against this type of research, questions are raised about the value of continuing or even entering this line of study. But a great deal of valuable data dealing with the domain of leadership and personality in coaching has already been accumulated and many scholars are stressing the need for more studies in this

area. Cratty has called for more information about the interaction between the coach's personality and coaching behavior. He feels that this information can result in new and more effective practices (methods of coaching and coaching behavior) in athletics (6:323).

SUMMARY

Psychological insight can offer increased effectiveness in coaching and coaches have shown a positive response to efforts to bring the tools of psychology into their careers. The research and consulting experience concluded at this time have greatly reinforced early findings that one of the most significant contributions to coaching was personal awareness of one's strengths and weaknesses in terms of the psychological traits that make up one's personality.

Some controversy revolves around the best method of research to employ as reliable and valid measurements of personality. In personality research that deals with physical activity and coaching, there is a pressing need for imaginative theories to counter the traditional approach of borrowing and indiscriminantly applying psychological theories to research problems.

Chapter 3

METHODS AND PROCEDURES

The intent of this research was to examine and compare similarities and differences in the personality traits of college coaches, regardless of their sex or the type of sport they coach.

The purpose of this chapter is to illustrate the methods and procedures of selecting the test sample from the population, the collection of the data, and the manner in which it was analyzed. A description of the instrument used to establish the data needed to test the null hypothesis can also be found in this chapter. These methods and procedures are the basis of the validity of the study.

POPULATION AND SAMPLING

The sample selected and tested was individuals currently active in coaching during the 1976-1977 school year at the small university level. The institutions were randomly selected from schools located within one day's travel time from Emporia .

The universities chosen for testing included two state institutions, one municipal and one private institution. Emporia State University and Pittsburg State University are small state supported schools; Washburn University is a

municipal school supported by the City of Topeka, and Friends University is supported by the Friends (Quakers) religious organization. Enrollments range from 850 students at Friends University to 5,600 students at Emporia State University.

Permission to test the coaching staff at each school was obtained by verbal communication over the telephone from the Athletic Director at each university, followed by a letter confirming that permission (see Appendix A). Mr. Jack Kater at Friends University, Dr. Bill Dickey at Pittsburg State University, and Mr. Edward Head at Washburn University were contacted in this manner. Dr. Bill Tidwell at Emporia State University was contacted in person. The sample represents a selection from the normal distribution of the individuals who coached during the 1976-1977 seasons in small colleges and universities.

A note asking for the coaches' assistance and participation in the study was prepared and placed in each coach's mail box or was personally given to him which explained the purpose of the study (see Appendix B).

The sample consisted of sixty coaches who could be tested from the four institutions, distributed as follows: twenty at Emporia State University, twelve at Friends University, seventeen at Pittsburg State University, and eleven at Washburn University. Out of the possible sixty, forty-five coaches, twenty-eight men and seventeen women, participated in the study. Coaches of the following sports were

represented: baseball, basketball, football, golf, gymnastics, softball, swimming, tennis, track and volleyball. Fifteen coaches either declined to take the EPPS for personal reasons or were unable to take it at the time it was administered due to other commitments.

MATERIAL AND INSTRUMENTATIONS

To obtain the desired information, the EPPS was administered. The EPPS was developed by Allen L. Edwards in such a way as to minimize the influence of social desirability on the answers in the personality inventory (9:15). Edwards used a two statement per question format rather than a yes or no answer to a single question. The EPPS is a forced-choice inventory, since the subjects are required to answer every question, regardless of a particular question's relevance to the individual.

The EPPS reports scores on fifteen key need variables showing their relative importance to the individual. The variables are: achievement, affiliation, nurturance, deference, intraception, change, order, succorance, endurance, exhibition, dominance, heterosexuality, autonomy, abasement, and aggression. Norms for the test were established from the results of 1,509 college men and women and 8,963 adult men and women being tested and scores tabulated.

The test took an average of between forty and fifty minutes to complete. Each subject was given an information

sheet, answer sheet, test booklet, and two pencils. Hand scored or machine scored answer sheets are available. In this study, machine scored answer sheets were used.

The EPPS has withstood tests of reliability of the variables as well as the correlation with other scales. The Guilford-Martin and Taylor Manifest Anxiety Scale were correlated with the EPPS and there existed a significant correlation between the variables of the EPPS, the Guilford-Martin, and the Taylor Manifest Anxiety Scale at the .05 level of significance. The results of the reliability, validity, and correlation with other scales of the EPPS can be found in the test manual (9:21-24).

DESIGN

The EPPS was given to forty-five individuals from the population sample, after approval was obtained from the Athletic Director at each school. The coaches were contacted and asked for their assistance and participation. Testing dates were arranged with the Athletic Directors for a day in which the majority of coaches would be available. Two dates were given to Pittsburg State University, Washburn University, and Friends University for testing. Since Emporia State University had the largest staff, four days were set aside for testing. Several coaches at Emporia State University were willing to test, but were unable to do so on a specified date. They were tested at their convenience.

The subjects were tested in a classroom or other room away from disturbances and interruptions. The subjects were given an information sheet, answer sheet, test booklet, and two pencils, and were informed that all information was strictly confidential and would be used only as a statistical tool to test the hypothesis.

Coaches taking the test were asked to fill out an information sheet (see Appendix C). This was to determine what primary sport they coached, since most of the subjects coached two sports. After completing the information sheet, they filled out the personal data portion of the answer sheet. When these forms were completed, the subjects were given verbal instructions, then were asked to read the instructions printed on the front of the test booklet. The instructions given were to read each pair of statements in each question and select the statement that best described the individual in that situation. It was explained that every question must be answered, even if the choice was difficult. The subjects were to choose the statement that best described what they believed their actions would be in the case of the situation used in the example. The answer sheet was a machine scoring type, so the subjects were instructed to darken either slot A or slot B with their pencils. They were to answer the questions as rapidly as possible, even though they had no time limit. They were asked not to talk or to make any physical or verbal expressions or

reactions during testing. When the coaches were finished, they were free to go, but were asked not to converse with any other coach about the test. After reading the instructions, the subjects were given an opportunity to ask questions. This procedure was repeated at every testing.

After the completion of all testing, the answer sheets were scored by machine at the Bureau of Educational Measurements at Emporia State University. All answer sheets were scanned for any stray marks and any omitted items. If any answer sheet was not completely filled out, it would be necessary to identify and remove it from the sample. All questions were answered on every sheet in this study. Machine scoring information can be found in the test manual that accompanies the EPPS (9:7-8). The data were collected to test the null hypothesis of the study.

A letter of thanks was sent to the Athletic Director and coaches at each institution (see Appendix D).

DATA ANALYSIS

The results of the EPPS were collected for data to assess similarities and differences between the personality traits of coaches. Comparisons were made in the following categories: male vs. female coaches; individual vs. team sports; and contact vs. noncontact sports. To test the hypothesis of equal means, the analysis of variance was computed to determine if there were any significant

differences at the .05 level of significance between the selected areas. The F-ratio was calculated as follows:

$$F = \frac{MS_b}{MS_w}; \text{ with } df=k-1, N-k$$

Chapter 4

ANALYSIS OF DATA

The purpose of this study was to examine and compare the similarities and differences in personality traits between college coaches of various types of sports, as well as between male and female coaches.

Response Analysis

The study started with a population of sixty subjects, of which forty-five completed the study. The subjects were members of the coaching staffs at Emporia State University, Friends University, Pittsburg State University, and Washburn University during the 1976-1977 academic year. Three comparisons were made from the collected data and all subjects were included in each comparison. In each comparison the total body was placed in either category one or two. The placement depended upon the criterion selected for the comparison. The first personality traits comparison was made between male and female college coaches. There were twenty-eight men and seventeen women in the distribution for this category. The second comparison was made between the coaches of individual and team sports. There were fourteen individual and thirty-one team sports coaches in the two groups. The third comparison was between the coaches of contact and noncontact sports. There were twelve coaches of contact

sports and thirty-three coaches of noncontact sports in the respective groups.

Statistical Analysis

The analysis of variance was used to test the null hypothesis: There are marked similarities in the personality traits of college coaches, regardless of their sex or the type of sport they coach.

COMPARISON OF PERSONALITY TRAITS BETWEEN MALE AND FEMALE COLLEGE COACHES

The hypothesis was: There are no significant differences in the personality traits of college coaches, regardless of their sex or the type of sport they coach. Classification by sex, i.e. male coaches and female coaches, was one comparison used to test the hypothesis. The mean scores for the male vs. female coaches category can be found in Table 7. From these scores, the analysis of the variance was calculated to obtain F-scores (Table 10) to determine the significant difference between the male and female coaches. The male and female coaches showed a significant difference on three traits. The first was the dominance variable (Table 1). The sum of squares ($SS_b=164.1250$; $SS_w=885.8750$), the mean squares ($MS_b=164.1250$; $MS_w=20.6017$), and degrees of freedom (1,43) were used to obtain the F-score of 7.9666. To be significant at the .05 level of significance, the $F_{1,40}=4.08$ must be obtained. The $F_{1,43}=7.9666$ was significant at the

.05 level of significance, therefore the null hypothesis is rejected because of the significant difference between the personality trait of dominance in male and female college coaches.

Table 1

Analysis of Variance Criterion Variable Dominance
Male vs. Female College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	164.1250	1	164.1250	7.9666*
Within	885.8750	43	20.6017	
Total	1050.0000	44		

*Significant: $p < .05$

The mean of male coaches for the variable dominance (17.82) was significantly larger than that of the female coaches (13.88). The F-ratio of 7.9666 was significant beyond the .05 level. It was significant beyond even the .01 level of significance.

The second variable to show a significant difference was the variable change (Table 2). The sum of squares ($SS_b=320.9570$; $SS_w=1500.2461$), the mean squares ($MS_b=320.9570$; $MS_w=34.8894$), and the degrees of freedom (1, 43) were used to obtain the $F_{1,43}=0.1993$. This is significant as it falls in the critical area of $F_{1,40}=4.08$ at the .05 level of

significance. Therefore, the null hypothesis is rejected as there is a significant difference between the personality trait of change in male and female college coaches.

Table 2

Analysis of Variance Criterion Variable Change
Male vs. Female College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	320.9570	1	320.9570	9.1993*
Within	1500.2461	43	34.8894	
Total	1821.2031	44		

*Significant: $p < .05$

The mean of the female coaches for the variable change (18.29) was significantly larger than that of the male coaches (12.79). The F-ratio of 9.1993 was significantly beyond the .05 level. It was also significant beyond even the .01 level of significance.

The third variable to show a significant difference in the male vs. female college coaches category was the variable aggression (Table 3). The sum of squares ($SS_b = 94.1328$; $SS_w = 616.9805$), the mean squares ($MS_b = 94.1328$; $MS_w = 14.3484$) and the degrees of freedom (1, 43) were used to obtain the $F_{1,43} = 6.5605$. This is significant as it too is in the critical area of $F_{1,40} = 4.08$ at the .05 level of

significance. Therefore, the null hypothesis is rejected as there is a significant difference between the personality traits of male and female college coaches.

Table 3

Analysis of Variance Criterion Variable Aggression
Male vs. Female College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	94.1328	1	94.1328	6.5605*
Within	616.9805	43	14.3484	
Total	711.1133	44		

*Significant: $p < .05$

The mean of the male coaches for the variable change (13.57) was significantly larger than that of the female coaches (10.59).

COMPARISON OF PERSONALITY TRAITS BETWEEN
INDIVIDUAL AND TEAM SPORT COLLEGE COACHES

Classification by the type of sport coached, in this case team sports or individual sports, was the second category used for comparison to test the null hypothesis that there are marked similarities in the personality traits of college coaches, regardless of their sex or the type of sport they coach. The mean scores for the individual and team

sport coaches can be found in Table 8. From these scores the analysis of variance was calculated. The F-scores can be found in Table 10. There was a significant difference of three variables at the .05 level of significance in this category.

The first of these was the intraception variable (Table 4). The sum of squares ($SS_b=128.1484$; $SS_w=1037.0977$), the mean squares ($MS_b=128.1484$; $MX_w=24.1185$), and the degree of freedom (1, 43) were used to obtain the $F_{1,43}=5.3131$. To be significant at the .05 level of significance, the $F_{1,40}=4.08$ must be obtained. The $F_{1,43}=5.3133$ was significant at the .05 level of significance, therefore the null hypothesis would be rejected because there is a significant difference between the personality trait of intraception in individual and team sports coaches.

Table 4

Analysis of Variance Criterion Variable Intraception
Individual vs. Team Sports College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	128.1484	1	128.1484	5.3133*
Within	1037.0977	43	24.1185	
Total	1165.2461	44		

*Significant: $p < .05$

The mean of individual coaches for criterion variable intraception (17.00) was significantly larger than that of the team coaches (13.35). The F-ratio of 5.31 was significant beyond the .05 level.

The second variable to show a significant difference was the variable nurturance (Table 5). The sum of squares ($SS_b=93.3164$; $SS_w=960.6836$), the mean squares ($MS_b=93.3163$; $MS_w=22.3415$), and the degree of freedom (1, 43) were used to obtain the $F_{1,43}=4.1768$. This was significant as it fell in the critical area of $F_{1,40}=4.08$ at the .05 level of significance. Therefore, the null hypothesis was rejected as there was a significant difference between the personality trait of nurturance in individual and team sports college coaches.

Table 5

Analysis of Variance Criterion Variable Nurturance
Individual vs. Team Sports College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	93.3164	1	93.3164	4.1768*
Within	960.6836	43	22.3415	
Total	1054.0000	44		

*Significant: $p < .05$

The mean of the team sports coaches for criterion variable nurturance (15.97) was significantly larger than that of the individual sports coaches (12.86). The F-ratio of 4.1768 was significant beyond the .05 level.

The third variable to show a significant difference was the variable endurance (Table 6). The sum of squares ($SS_b=111.5508$; $SS_w=833.6523$), the mean squares ($MS_b=111.5508$; $MS_w=19.3873$), and the degree of freedom (1, 43) were used to obtain the $F_{1,43}=5.7538$. This was significant, as it fell in the critical area of $F_{1,40}=4.08$ at the .05 level of significance. Therefore, the null hypothesis was rejected, as there was a significant difference between the personality trait of endurance in individual and team sports college coaches.

Table 6

Analysis of Variance Criterion Variable Endurance
Individual vs. Team Sports College Coaches

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	111.5508	1	111.5508	5.7538*
Within	833.6523	43	19.3873	
Total	945.2031	44		

*Significant: $p < .05$

The mean of the team sports coaches for criterion variable endurance (16.27) was significantly larger than that of the individual sports coaches (12.86). The F-ratio of 5.7538 was significant beyond the .05 level.

COMPARISON OF PERSONALITY TRAITS BETWEEN CONTACT AND NONCONTACT SPORTS COLLEGE COACHES

The mean scores of the fifteen variables on the EPPS for the coaches in this category are shown in Table 9. From these mean scores, the F-ratio was used to determine the significant differences between the groups at the .05 level of significance. An F-ratio of 4.08 was considered significant ($F_{1,40}=4.08$). In all cases of the comparison of the groups, a significant F-ratio was not obtained. The F-scores, sum of squares, mean squares, and degrees of freedom for this category are shown on Table 13. Since there were no significant differences found between the groups, the null hypothesis is retained for the purpose of this specific comparison; that is, there are marked similarities in the personality traits of college coaches, regardless of their sex or the type of sport they coach.

SUMMARY

The analysis of variance was used to determine the outcome of the hypothesis being tested: There are marked similarities in the personality traits of college coaches, regardless of their sex or the type of sport they coach.

The F-scores (Table 10) obtained in the test hypothesis were significant at the .05 levels of significance in the comparison of male vs. female coaches and individual vs. team sports coaches. Therefore, in these two categories, the null hypothesis is rejected. In the third category, contact vs. non-contact sports coaches, the F-scores obtained were not significantly different at the .05 level of significance and the null hypothesis is retained.

Table 7
 Mean EPPS Scores:
 Male vs. Female College Coaches

Trait	Males	Females
Achievement	15.46	16.76
Deference	12.64	10.94
Order	12.32	9.94
Exhibition	13.93	14.18
Autonomy	13.46	14.00
Affiliation	14.32	15.76
Intracception	13.79	15.65
Succorance	9.61	12.29
Dominance	17.82	13.88
Abasement	13.86	13.41
Nurturance	14.89	15.18
Change	12.79	18.29
Endurance	15.68	14.41
Heterosexuality	15.82	14.71
Aggression	13.57	10.59

Table 8

Mean EPPS Scores:
Individual vs. Team Sports College Coaches

Trait	Individual Sports	Team Sports
Achievement	16.29	15.81
Deference	11.57	12.19
Order	10.07	12.03
Exhibition	13.57	14.23
Autonomy	15.29	12.94
Affiliation	14.21	15.16
Intraception	17.00	13.35
Succorance	11.29	10.32
Dominance	16.21	16.39
Abasement	13.43	13.81
Nurturance	12.86	15.97
Change	15.57	14.55
Endurance	12.86	16.26
Heterosexuality	16.43	14.94
Aggression	13.36	12.03

Table 9

Mean EPPS Scores:
Contact vs. Noncontact Sports College Coaches

Trait	Contact Sports	Noncontact Sports
Achievement	14.17	16.61
Deference	12.33	11.88
Order	11.83	11.27
Exhibition	14.42	13.88
Autonomy	12.67	14.03
Affiliation	13.17	15.48
Intraception	13.67	14.79
Succorance	11.00	10.48
Dominance	17.08	16.06
Abasement	14.33	13.45
Nurturance	16.17	14.58
Change	14.33	15.06
Endurance	16.50	14.73
Heterosexuality	16.08	15.15
Aggression	12.25	12.52

Table 10
 Analysis of Variance
 For All Selected Areas Tested

Trait	F-SCORES		
	Male vs. Female	Individual vs. Team	Contact vs. Noncontact
Achievement	1.1019	0.1334	3.3936
Deference	3.9271	0.5538	0.2145
Order	3.0351	1.8388	0.1312
Exhibition	0.0427	0.2736	0.1684
Autonomy	0.1396	2.5890	0.7633
Affiliation	1.3550	0.5219	3.0173
Intraception	1.3963	5.3133	0.4121
Succorance	3.4778	0.3892	0.0985
Dominance	7.9666	0.0117	0.3802
Abasement	0.0986	0.0647	0.3214
Nurturance	0.0346	4.1768	0.9281
Change	9.1993	0.2396	0.1102
Endurance	0.7863	5.7538	1.2961
Heterosexuality	0.3524	0.5788	0.2038
Aggression	6.5605	1.0487	0.0374

Table 11

Analysis of Variance of EPPS Scores:
Male vs. Female College Coaches

Achievement

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	17.8867	1	17.8867	1.1019
Within	698.0273	43	16.2332	
Total	715.9141	44		

Group	Male	Female
Mean	15.46	16.76
SD	4.05	3.99
N	28	17

Deference

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	30.6289	1	30.6289	3.9271
Within	335.3711	43	7.7993	
Total	366.0000	44		

Group	Male	Female
Mean	12.64	10.94
SD	2.71	2.93
N	28	17

Table 11 (continued)

Order				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	59.9297	1	59.9297	3.0351
Within	849.0508	43	19.7454	
Total	908.9805	44		

Group	Male	Female		
Mean	12.32	9.94		
SD	4.63	4.12		
N	28	17		
Exhibition				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	0.6484	1	0.6484	0.0427
Within	652.3320	43	15.1705	
Total	652.9805	44		

Group	Male	Female		
Mean	13.93	14.18		
SD	4.05	3.61		
N	28	17		

Table 11 (continued)

Autonomy				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	3.0352	1	3.0352	0.1396
Within	934.9648	43	21.7434	
Total	938.0000	44		

Group	Male	Female		
Mean	13.46	14.00		
SD	4.17	5.40		
N	28	17		
Affiliation				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	22.0313	1	22.0313	1.3550
Within	699.1719	43	16.2598	
Total	721.2031	44		

Group	Male	Female		
Mean	14.32	15.76		
SD	3.93	4.21		
N	28	17		

Table 11 (continued)

Intrasection				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	36.6484	1	36.6484	1.3963
Within	1128.5977	43	26.2464	
Total	1165.2461	44		

Group	Male	Female		
Mean	13.79	15.65		
SD	5.57	4.26		
N	28	17		
Succorance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	76.3672	1	76.3672	3.4778
Within	944.2109	43	21.9584	
Total	1020.5781	44		

Group	Male	Female		
Mean	9.61	12.29		
SD	4.66	4.73		
N	28	17		

Table 11 (continued)

=====				
Dominance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	164.1250	1	164.1250	7.9666
Within	885.8750	43	20.6017	
Total	1050.0000	44		

Group	Male	Female		
Mean	17.82	13.88		
SD	4.15	5.13		
N	28	17		
=====				
Abasement				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	2.0938	1	2.0938	0.0986
Within	913.5508	43	21.2454	
Total	915.6445	44		

Group	Male	Female		
Mean	13.86	13.41		
SD	5.01	3.84		
N	28	17		
=====				

Table 11 (continued)

Nurturance

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	0.8477	1	0.8477	0.0346
Within	1053.1523	43	24.4919	
Total	1054.0000	44		

Group	Male	Female		
Mean	14.89	15.18		
SD	4.51	5.62		
N	28	17		

Change

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	320.9570	1	320.9570	9.1993
Within	1500.2461	43	34.8894	
Total	1821.2031	44		

Group	Male	Female		
Mean	12.79	18.29		
SD	6.41	4.93		
N	28	17		

Table 11 (continued)

Endurance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	16.9727	1	16.9727	0.7863
Within	928.2305	43	21.5867	
Total	945.2031	44		

Group	Male	Female		
Mean	15.68	14.41		
SD	3.97	5.60		
N	28	17		
Heterosexuality				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	13.1602	1	13.1602	0.3524
Within	1605.6406	43	37.3405	
Total	1618.8008	44		

Group	Male	Female		
Mean	15.82	14.71		
SD	5.32	7.25		
N	28	17		

Table 11 (continued)

Aggression				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	94.1328	1	94.1328	6.5605
Within	616.9805	43	14.3484	
Total	711.1133	44		

Group	Male	Female		
Mean	13.57	10.59		
SD	3.84	3.69		
N	28	17		

Table 12

Analysis of Variance of EPPS Scores:
Individual vs. Team Sports College Coaches

Achievement				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	2.2148	1	2.2148	0.1334
Within	713.6992	43	16.5977	
Total	715.9141	44		

Groups	Individual	Team		
Mean	16.29	15.81		
SD	4.12	4.05		
N	14	31		
Deference				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	3.7305	1	3.7305	0.4428
Within	362.2695	43	8.4249	
Total	366.0000	44		

Group	Individual	Team		
Mean	11.57	12.19		
SD	3.32	2.70		
N	14	31		

Table 12 (continued)

Order				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	37.0820	1	37.0820	1.8288
Within	871.8984	43	20.2767	
Total	908.9805	44		

Group	Individual	Team		
Mean	10.07	12.03		
SD	5.55	3.96		
N	14	31		
Exhibition				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	4.1289	1	4.1289	0.2736
Within	648.8516	43	15.0896	
Total	652.9805	44		

Group	Individual	Team		
Mean	13.57	14.23		
SD	3.67	3.97		
N	14	31		

Table 12 (continued)

Autonomy				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	53.2695	1	53.2695	2.5890
Within	884.7305	43	20.5751	
Total	938.0000	44		

Group	Individual	Team		
Mean	15.29	12.94		
SD	4.18	4.68		
N	14	31		
Affiliation				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	8.6484	1	8.6484	0.5219
Within	712.5547	43	16.5710	
Total	721.2031	44		

Group	Individual	Team		
Mean	14.21	15.16		
SD	4.23	4.00		
N	14	31		

Table 12 (continued)

Intrasection				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	128.1484	1	128.1484	5.3133
Within	1037.0977	43	24.1185	
Total	1165.2461	44		

Group	Individual	Team		
Mean	17.00	13.35		
SD	4.15	5.21		
N	14	31		
Successance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	8.9453	1	8.9453	0.3802
Within	1011.6328	43	23.5263	
Total	1020.5781	44		

Group	Individual	Team		
Mean	11.29	10.32		
SD	4.66	4.93		
N	14	31		

Table 12 (continued)

Dominance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	0.2852	1	0.2852	0.0117
Within	1049.7148	43	24.4120	
Total	1050.0000	44		

Group	Individual	Team		
Mean	16.21	16.39		
SD	5.31	4.77		
N	14	31		
Abasement				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	1.3750	1	1.3750	0.0647
Within	914.2695	43	21.2621	
Total	915.6445	44		

Group	Individual	Team		
Mean	13.43	13.81		
SD	4.13	4.81		
N	14	31		

Table 12 (continued)

Nurturance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	93.3164	1	93.3164	4.1768
Within	960.6836	43	22.3415	
Total	1054.0000	44		

Group	Individual	Team		
Mean	12.86	15.97		
SD	5.99	4.06		
N	14	31		
Change				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	10.0938	1	10.0938	0.2396
Within	1811.1094	43	42.1188	
Total	1821.2031	44		

Group	Individual	Team		
Mean	15.57	14.55		
SD	8.38	5.47		
N	14	31		

Table 12 (continued)

Endurance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	111.5508	1	111.5508	5.7538
Within	833.6523	43	19.3873	
Total	945.2031	44		

Group	Individual	Team		
Mean	12.86	16.26		
SD	4.94	4.15		
N	14	31		
Heterosexuality				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	21.5000	1	21.5000	0.5788
Within	1597.3008	43	37.1465	
Total	1618.8008	44		

Group	Individual	Team		
Mean	16.43	14.94		
SD	6.60	5.86		
N	14	31		

Table 12 (continued)

=====				
Aggression				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	16.9297	1	16.9297	1.0487
Within	694.1836	43	16.1438	
Total	711.1133	44		

Group	Individual	Team		
Mean	13.36	12.03		
SD	3.59	4.19		
N	14	31		
=====				

Table 13

Analysis of Variance of EPPS Scores:
Contact vs. Noncontact Sports College Coaches

Achievement				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	52.3672	1	52.3672	3.3936
Within	663.5469	43	15.4313	
Total	715.9141	44		

Group	Contact	Noncontact		
Mean	14.17	16.61		
SD	4.26	3.81		
N	12	33		
Deference				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	1.8164	1	1.8164	0.2145
Within	364.1836	43	8.4694	
Total	366.0000	44		

Group	Contact	Noncontact		
Mean	12.33	11.88		
SD	2.39	3.07		
N	12	33		

Table 13 (continued)

Order				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	2.7656	1	2.7656	0.1312
Within	906.2148	43	21.0748	
Total	908.9805	44		

Group	Contact	Noncontact		
Mean	11.83	11.27		
SD	4.26	4.70		
N	12	33		
Exhibition				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	2.5469	1	2.5469	0.1684
Within	650.4336	43	15.1264	
Total	652.9805	44		

Group	Contact	Noncontact		
Mean	14.42	13.88		
SD	3.94	3.87		
N	12	33		

Table 13 (continued)

Autonomy				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	16.3594	1	16.3594	0.7633
Within	921.6406	43	21.4335	
Total	938.0000	44		

Group	Contact	Noncontact		
Mean	12.67	14.03		
SD	5.37	4.35		
N	12	33		
Affiliation				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	47.2891	1	47.2891	3.0173
Within	673.9141	43	15.6724	
Total	721.2031	44		

Group	Contact	Noncontact		
Mean	13.17	15.48		
SD	3.35	4.15		
N	12	33		

Table 13 (continued)

 Intraception

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	11.0625	1	11.0625	0.4121
Within	1154.1836	43	26.8415	
Total	1165.2461	44		

Group	Contact	Noncontact
Mean	13.67	14.79
SD	5.47	5.08
N	12	33

 Succorance

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	2.3320	1	2.3320	0.0985
Within	1018.2461	43	23.6801	
Total	1020.5781	44		

Group	Contact	Noncontact
Mean	11.00	10.48
SD	5.46	4.64
N	12	33

Table 13 (continued)

Dominance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	9.2031	1	9.2031	0.3802
Within	1040.7969	43	24.2046	
Total	1050.0000	44		

Group	Contact	Noncontact		
Mean	17.08	16.06		
SD	4.50	5.06		
N	12	33		
Abasement				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	6.7930	1	6.7930	0.3214
Within	908.8516	43	21.1361	
Total	915.6445	44		

Group	Contact	Noncontact		
Mean	14.33	13.45		
SD	5.35	4.31		
N	12	33		

Table 13 (continued)

Nurturance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	22.2695	1	22.2695	0.9281
Within	1031.7305	43	23.9937	
Total	1054.0000	44		

Group	Contact	Noncontact		
Mean	16.17	14.58		
SD	4.55	5.01		
N	12	33		
Change				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	4.6563	1	4.6563	0.1102
Within	1816.5469	43	42.2453	
Total	1821.2031	44		

Group	Contact	Noncontact		
Mean	14.33	15.06		
SD	5.85	6.71		
N	12	33		

Table 13 (continued)

Endurance				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	27.6563	1	27.6563	1.2961
Within	917.5469	43	21.3383	
Total	945.2031	44		

Group	Contact	Noncontact		
Mean	16.50	14.73		
SD	4.36	4.71		
N	12	33		
Heterosexuality				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	7.6367	1	7.6367	0.2038
Within	1611.1641	43	37.4689	
Total	1618.8008	44		

Group	Contact	Noncontact		
Mean	16.08	15.15		
SD	5.26	6.39		
N	12	33		

Table 13 (continued)

=====				
Aggression				
Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F
Between	0.6172	1	0.6172	0.0374
Within	710.4961	43	16.5232	
Total	711.1133	44		

Group	Contact	Noncontact		
Mean	12.25	12.52		
SD	4.29	3.99		
N	12	33		
=====				

Chapter 5

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The summary, findings, conclusions, and recommendations of this study are found in this chapter. They are based upon the outcomes of the statistical analysis. The recommendations for future study in the area of personality and athletic coaching are in this chapter.

SUMMARY

The intent of this study was to examine and compare the similarities and differences in personality traits between athletic coaches of various types of sports, as well as between male and female coaches.

There were sixty subjects who were members of the coaching staffs at Emporia State University, Friends University, Pittsburgh State University, and Washburn University during the 1976-77 athletic and academic year. The test data were collected by the completion of the Edwards Personal Preference Schedule. The tests were administered in April and May at each of the participating schools. Forty-five subjects completed the testing.

The analysis of variance was calculated to determine the outcome of the hypothesis. The F-scores obtained comparing the personality traits of female coaches to male coaches,

and individual sport coaches to team sport coaches showed that significant differences were in existence at the .05 level of significance. The F-scores obtained in the third category comparing contact sport coaches to noncontact sport coaches failed to show any significance at the .05 level of significance. The null hypothesis was rejected in the first two categories and was retained in the third. The results can be found in Chapter 4.

FINDINGS

The findings of this study showed that significant differences occurred in two of the three categories of comparison made at the .05 level of significance ($F_{1,40}=4.08$).

In the comparison dealing with male coaches versus female coaches, three variables showed significant difference. The dominance variable calculated at $F_{1,43}=7.9666$, the change variable at $F_{1,43}=9.1993$, and the aggression variable at $F_{1,43}=6.5605$ showed a significant difference at the .05 level of significance. The variables dominance and change were significant at the .01 level of significance ($F_{1,40}=7.31$).

In the comparison dealing with individual sport coaches versus team sport coaches, three variables showed significant difference. The intraception variable calculated at $F_{1,43}=5.3133$, the nurturance variable at $F_{1,43}=4.1768$, and the endurance variable at $F_{1,43}=5.7548$ showed a significant difference at the .05 level of significance.

In the third category of comparison, contact sport coaches versus noncontact sport coaches, the study revealed no significant differences occurred at the .05 level of significance ($F_{1,40}=4.08$) as all of the calculated F-ratios were not in the critical region.

CONCLUSIONS

The findings of this study indicate differences between male and female coaches. The male coaches were found to have a greater need for dominance and aggression than the female coaches, while the female coaches were found to be much more willing to change than were their male counterparts.

Although society is changing today, women have, in the past, been socially conditioned to be less dominant and aggressive than men, which could explain the trait differences between the male and female coaches. Because women are still relative newcomers to the coaching field, they have not had the role models to form their coaching behavior. As a result, female coaches are still developing their coaching style, and it seems reasonable to assume that they would be open to new methods and behaviors.

Individual sport coaches were found to score higher in the need for intraception than were team sport coaches. Of course, the very nature of individual sports emphasizes intraception. The emphasis is on the individual performance, and with fewer athletes involved, the coach has the opportunity

to work closely with each individual.

Team sport coaches scored higher in needs for nurturance and endurance. Because of the need for a group of athletes to work together, it is important that the coach be able to bring a group of individuals together as a team. It seems reasonable that a nurturing person would be better capable of developing a team spirit. It would also require strong traits of endurance to work through the problems of dealing with a group to obtain team performance.

No significant differences between coaches of contact sports and coaches of noncontact sports were found. Since many sports which are noncontact by definition are actually played with a certain amount of physical contact, it is difficult to discern a real difference between contact and noncontact sports. Therefore, there is perhaps an inadequate basis for comparison.

RECOMMENDATIONS

The results of this study failed to indicate any differences between personality traits of contact and noncontact sport coaches. Results did indicate differences between male and female coaches, and between individual and team sport coaches. The research reviewed indicated only limited study has been conducted in the area dealing with the personality traits of athletic coaches. Thus recommendations for further study in the area of personality traits and coaches would be:

1. The selection of a larger cross-section of coaches from a larger group of institutions that would represent a broad range of sports and where coaches are much more specialized in a particular sport.
2. An overall increase in the study of the relationship between personality and coaching.
3. The study of more distinct subgroups according to the specific sport coached.
4. Increased study in all areas dealing with personality and coaching.

Recommendations for future study derived from this research would be:

1. The selection of institutions with larger coaching staffs to enhance the number of subjects willing to complete the test.
2. The comparison of the personality traits of head coaches in relationship to those of assistant coaches.
3. The comparison of the personality traits of men and women by the specific sports they coach (i.e. men's track to women's track, etc.).

These recommendations could improve the research completed in this study and the results could be different by carrying out these recommendations.

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APPENDIX A

Dear _____:

This is to confirm our telephone conversation of April 21, 1977, in which you gave me permission to conduct a short study at your school. As part of my Master's Thesis at Emporia State University, I need to have all members of the coaching staff take the Edwards Personal Preference Schedule. This will include all head coaches, assistant coaches, and any graduate assistant coaches. The information taken from the EPPS will be analyzed and used to make a comparison of the personality traits of a variety of college coaches. Other schools that will be participating in the study are (Emporia State University, Pittsburg State University, Washburn University in Topeka, and Friends University in Wichita).

I can utilize two separate days to come to the university for testing. I can administer the test individually or to small groups, whichever is more convenient for your staff's working hours. The questionnaire itself takes about fifty minutes to complete. The dates of testing at the university can be finalized between us by telephone.

Your cooperation and assistance, and that of your staff, is greatly appreciated.

Very truly yours,

Randy Tjaden

APPENDIX B

Coaches:

I need your help! As part of my Master's Thesis at ESU, I need to have all members of the coaching staff to take the Edwards Personal Preference Schedule. Information taken from the EPPS will be analyzed and used to make a comparison of the personality traits of a variety of college coaches. Schools participating in the study are Emporia State University, Pittsburg State University, Washburn University, and Friends University in Wichita.

I can administer the test individually or to small groups, whichever is more convenient. The questionnaire itself takes about fifty minutes to complete. Testing dates for Emporia will be Thursday, April 28, Friday, April 29, Monday, May 2, and Wednesday, May 3. If you are unable to test on the designated dates, arrangements will be made for testing you at another time.

Your cooperation and assistance is greatly appreciated.

Randy Tjaden

APPENDIX C

Information Sheet

DATE: _____

SCHOOL: _____

Name: _____

Age: _____ Sex: _____

Primary Sport Coached: _____

Other Sports Coached: _____

Participation in College Sports: _____

Thank you for your cooperation. If you are interested in the results of this study, please check here and I will send you an abstract of my thesis. _____



APPENDIX D

Dear _____:

I would just like to say thank you to you and your staff for all your assistance and cooperation in conducting my study. Without your help I would not have been able to complete it on time. Again, thanks for all your help.

Sincerely,

Randy Tjaden