

AN ABSTRACT OF THE THESIS OF

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Title: PERSONALITY CHARACTERISTICS OF SELECTED MEN AND WOMEN ATHLETIC
COACHES IN OREGON AND CALIFORNIA.

Abstract Approved: *Redacted for Privacy*
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The purposes of the study were twofold: (1) to compare selected personality traits of male and female interscholastic and intercollegiate athletic coaches with standardized norms for personality traits established for all men and women, and (2) to compare personality traits of interscholastic male and female athletic coaches with the personality traits of male and female intercollegiate athletic coaches. Subjects in the study were 239 male and female athletic coaches from Oregon and California with two years or more athletic coaching experience. The athletic coaches were placed in four groups: (1) male interscholastic athletic coaches, (2) male intercollegiate athletic coaches, (3) female interscholastic athletic coaches and (4) female intercollegiate athletic coaches. Areas of influence concerning the experience of each of the four groups was considered: (1) 2-10 years and (2) 11 years or more. Each subject completed two instruments: (1) a personal inventory, and (2) the Jackson Personality Research Form. A multiple group discriminant analysis procedure was employed by using a set of linear classification functions computed by choosing the independent variables in a stepwise manner and

by applying a t-ratio of significant differences from the general norms of the Jackson Personality Research Form.

Of the eight proposed null hypotheses, all but one were rejected by the results obtained. The results indicated that athletic coaches display personality traits different from the general norms of the population. The results indicate that additional research is needed on athletic coaches' personality traits in the following areas:

(1) traits which affect the athletic coach as an influencing personality on the behavior of the athlete.

(2) traits which identify potential interscholastic and inter-collegiate athletic coaches.

(3) traits which are common to both male and female athletic coaches.

(4) traits, if any, which are unique to athletic coaches in specific types of athletics such as individual or team events.

(5) traits, if any, that are culturally oriented which have influenced the personality of female athletic coaches.

(6) traits, if any, which are affected by the experience of athletic coaches.

PERSONALITY CHARACTERISTICS OF SELECTED MEN AND WOMEN
ATHLETIC COACHES IN OREGON AND CALIFORNIA

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TABLE OF CONTENTS

Chapter	Page
I	1
INTRODUCTION	3
Purposes of the Study	4
Hypotheses	5
Limitations	8
Definition of Terms	8
II	8
REVIEW OF RELATED LITERATURE	8
Identification of Personality Traits of Athletic Coaches	8
Assessment of Personality Traits of Athletic Coaches	12
III	16
PROCEDURE FOR CONDUCTING THE STUDY	16
Selection of Sample Population	18
Collection of Data	23
Tabulation of Data	23
Analysis of Data	23
IV	28
ANALYSIS OF DATA	32
Analysis of Athletic Coaching Groups	50
Summary	50
V	56
CONCLUSIONS AND RECOMMENDATIONS	57
Conclusions	60
Summary	63
Recommendations	63
BIBLIOGRAPHY	65
APPENDICES	
Appendix A - Letter of Inquiry	69
Appendix B - Self-Addressed Postcard	71
Appendix C - Letter of Information	73
Appendix D - Jackson Personality Research Form	75
Appendix E - Personal Inventory	84
Appendix F - Personality Research Form Scales	89
Appendix G - Conceptual Groupings	92
Appendix H - PRF Answer Sheet	94
Appendix I - PRF Profiles for Men and Women	96
Appendix J - Biomedical Program	99

LIST OF TABLES

Table	Page
1. Identification of Personality Traits of Athletic Coaches.	9
2. Analytical Analysis of Groups and Score Distribution.	25
3. Male and Female Athletic Coaching Subjects.	29
4. Years of Coaching Experience of Male and Female Subjects.	29
5. Discriminant Analysis of Eight Coaching Groups.	31
6. Probability of Personality Trait Variable Alignment.	32
7. Athletic Coaching Groups Compared to PRF Norms.	35
8. Interscholastic Male Athletic Coaches Compared to PRF Norms.	38
9. Intercollegiate Male Athletic Coaches Compared to PRF Norms.	39
10. Interscholastic Female Athletic Coaches Compared to PRF Norms.	40
11. Intercollegiate Female Athletic Coaches Compared to PRF Norms.	42
12. Athletic Coaching Groups Personality Assessment (Significant Differences from the Norms).	51

LIST OF FIGURE

Figure	Page
1. 8 Group centroid for one discriminant function between coaching groups.	27

PERSONALITY CHARACTERISTICS OF SELECTED MEN AND WOMEN
ATHLETIC COACHES IN OREGON AND CALIFORNIA

CHAPTER I

INTRODUCTION

Athletics in the United States began in Colonial America. The complexity and organization of present day athletics were initiated during the industrial revolution of the mid-nineteenth century. (15) Urbanization changed recreational activities from family related ones to agency structured programs such as athletics.

A number of factors occurred which culminated in critical changes for athletics. Spectator interest spurred the growth and development of modern athletic programs. Injuries among players and unrestrained recruiting practices indicated the need for governing bodies for interscholastic, intercollegiate, intramural, recreational and international competition. As athletics developed in colleges and universities, the roles of the coaches and athletic directors changed also. Qualified leaders cognizant of training procedures, practices and game skills were needed. As the number of intercollegiate and interscholastic athletic programs developed and increased so did the need for qualified coaches. The athletic coach could no longer be an individual chosen because of willingness to serve or previous athletic experience.

Athletics for women evolved slowly. In the late 1960's interscholastic and intercollegiate athletic programs for women emerged

and in the early 1970's women's athletic programs gained national recognition. As women's athletic programs expanded, the need increased for qualified athletic coaches who possessed the skills and personal attributes necessary for conducting the programs and meeting participant needs. The need to develop professional preparation programs for athletic coaches was noted by the American Alliance of Health, Physical Education and Recreation. (1) The Alliance noted the need to examine and to identify the personality of the coach.

The responsibilities of the athletic coach have been described in a variety of ways. Some believe that the athletic coach's prime concern is winning. Some picture the athletic coach as the traditional model of authority by being strong but fair and by earning and receiving player respect. (3) (13) (21) One writer depicted the athletic coach as an individual who personally enjoys the physical skills, emotions and goals of the athlete with whom he works. (21) Other writers saw the athletic coach's position as one of influence. (12) (23) (27) Hendry indicated that the behavior patterns of athletic coaches influenced the behavior of athletes. (28) Richmond noted that personality factors were important to the effectiveness of a coach working with the team and that the influence of the athletic coach upon the undergraduate student was greater than that of any other individual on the college campus. (38) Ogilvie and Tutko report that the success or failure of an athlete or of the total athletic program may be dependent on the

stability and self-actualization of the coach involved. (32) The development of an athletic team may depend on the coach's awareness of his or her own personality and attitudes. (20) (45)

The competencies needed for the athletic coaching role are vital to the development of undergraduate and graduate preparatory programs. In addition to specific coaching abilities, educators must define the personality traits which are desirable for athletic coaches and then devise a means by which these traits can be assessed. Although some research has been completed on the technical competencies which an athletic coach must possess, limited research has been completed which assesses personality traits vital to the coach. Since personality factors seem to influence athletic competitors as well as athletic programs, personality traits of athletic coaches need to be assessed.

Purposes of the Study

The purposes of this study were as follows:

1. to compare selected personality traits of male and female interscholastic and intercollegiate athletic coaches with standardized and intercollegiate athletic coaches with standardized personality norms established for all men and women.
2. to compare selected personality traits of interscholastic male and female athletic coaches with the selected personality traits of male and female intercollegiate athletic coaches.

3. to compare the personality traits of athletic coaches who possess limited coaching experience with the personality traits of athletic coaches who possess extended coaching experience.

4. to examine the differences between personality traits of female and male athletic coaches.

Hypotheses

The following null hypotheses were constructed for the study:

1. No significant difference exists between the personality traits of male athletic coaches when compared to the personality norms established for all men.

2. No significant difference exists between the personality traits of female athletic coaches when compared to the personality norms established for all women.

3. No significant difference exists between male inter-scholastic athletic coaches personality traits and the personality norms established for all men.

4. No significant difference exists between male inter-collegiate athletic coaches personality traits and the personality norms established for all men.

5. No significant difference exists between female inter-scholastic athletic coaches personality traits and the personality norms established for all women.

6. No significant difference exists between female inter-collegiate athletic coaches personality traits and the personality norms established for all women.

7. No significant difference exists between the personality traits of interscholastic male athletic coaches when compared to the personality traits of intercollegiate male athletic coaches and the personality traits established for all men.

8. No significant difference exists between the personality traits of interscholastic female athletic coaches when compared to the personality traits of intercollegiate female athletic coaches and the personality norms established for all women.

Limitations

The following limitations are recognized in this study:

1. the study is limited to selected interscholastic and intercollegiate men and women coaches.
2. the study is limited to athletic coaches located in Oregon and California.
3. the study is limited to those athletic coaches who indicate an interest to participate and who have coached for a minimum of two years.
4. the study is limited to athletic coaches currently involved in athletic coaching.
5. the study is limited to athletic coaches indicating an interest in and responding to the researcher.

Definition of Terms

The definitions of terms used in this study are as follows:

Athletics are those physical movement activities structured and organized with formal and explicit rules of conduct. The specific athletic activities have recorded histories and traditions. The participants often represent formally organized groups with an identifiable purpose of achieving rewards through gaining victory by defeating opposing groups or individuals.

Athletic coach is an individual assigned responsibility for athletic coaching duties in any college, university or high school.

Mahalanobis D^2 is a statistical method for testing of differences between mean values of two populations.

Personality represents typical behavior patterns of individuals and indicates what a person will do when placed in a particular situation. (6) (39)

Personality Traits are those identifiable characteristics which describe an individual's developmental attitude representative of that individual's life style (role in life). (39) The personality traits derived from the Jackson Personality Research Form and included in this study are: abasement, achievement, affiliation, aggression, autonomy, change, cognitive structure, defence, dominance, endurance, exhibition, harmavoidance, impulsivity, nurturance, order, play, sentience, social recognition, succorance,

understanding, desirability, and infrequency. For definition of each of the traits as well as a description of a high scorer see Appendix F.

CHAPTER II

REVIEW OF RELATED LITERATURE

While few studies report on the personality traits of athletic coaches, desirable personality traits for athletic coaches have been suggested by many writers concerned with the professional preparation of the athletic coach. The findings from the literature are presented in two areas: (1) identification of personality traits of athletic coaches and (2) assessment of personality traits of athletic coaches.

Identification of Personality Traits of Athletic Coaches

Various writers have suggested that athletic coaches have a particular life style comprised of specific personality traits. To understand the athletic coach as a particular personality 15 researchers identified the personality traits possessed by athletic coaches. (Table 1) These writers indicated that there were certain personality traits which were important to the coaches' effectiveness. The personality traits noted in Table 1 are the traits most often mentioned by these writers. Emotional stability was the one trait noted by a majority of researchers. This trait was reported to be extremely vital to the success of athletic coaches. Creativity which may be associated with strategy planning and effective use of playing personnel was the second most noted trait. This trait also indicates the ability to utilize playing personnel effectively.

TABLE 1. IDENTIFICATION OF PERSONALITY TRAITS OF ATHLETIC COACHES.

	Bucher (4)	Cratty (9)	Edwards (12)	Frost (13)	Henry (17)	Kane (20)	Lanther (21)	Moore (24)	Neal (27)	Ogilvie (32)	Rice (37)	Richards (45)	Sabock (40)	Thorpe (43)	Tutko (45)(32)
1. Affection	✓							✓						✓	
2. Ambitious								✓							
3. Cheerful	✓														
4. Confident						✓		✓		✓				✓	✓
5. Consistent								✓			✓				
6. Cooperative								✓							
7. Courage	✓			✓				✓				✓			
8. Creative		✓	✓		✓		✓	✓	✓			✓		✓	
9. Cultured								✓							
10. Dignity			✓				✓						✓		
11. Dominant				✓	✓	✓		✓		✓				✓	✓
12. Emotional Stability		✓	✓		✓		✓	✓		✓		✓	✓	✓	✓
13. Energy	✓					✓		✓		✓		✓		✓	✓
14. Enthusiasm	✓							✓	✓		✓			✓	
15. Hardness										✓					✓
16. Honesty	✓						✓	✓				✓	✓	✓	
17. Integration								✓			✓				
18. Kindness	✓			✓											
19. Patience	✓			✓					✓						
20. Persistence				✓				✓	✓					✓	
21. Realistic										✓					✓
22. Sense of Achievement								✓		✓		✓		✓	✓
23. Sense of Humor	✓						✓	✓					✓		
24. Sensitivity			✓							✓		✓			✓
25. Sportsmanship	✓						✓						✓		
26. Strength				✓				✓							
27. Trust			✓					✓							
28. Understanding	✓		✓					✓						✓	
29. Interest											✓				

() Bibliography Reference

Dominance and energy which are indicative of authority and perserverance were considered by seven educators to be essential personality traits. Honesty was noted by six authorities as a desirable personality trait. Honesty was reported as basis to establishing good personnel communication.

Confidence, enthusiasm and a sense of achievement were noted as essential traits by five educators. These three traits were suggested as essential to achievement of the purposes of athletic programs.

Courage and persistence were noted by four researchers as vital to the development of psychological endurance. A willingness to work long hours in the face of difficulty seemed to be a necessary part of the coaching role.

Understanding and a sense of humor were noted by four of the 15 authorities as being an aid for a coach. These two traits were noted as assisting an athletic coach in retaining a sense of perspective while meeting the demands of athletes, alumni, associates, the media and the public.

Sensitivity as a necessary personality trait for the athletic coach was cited by four of the educators. This attribute was suggested as assisting the athletic coach in being supportive of the disorganized and at times emotionally stressed athlete. Affection, patience, consistency, kindness, and cheerfulness were additional traits of athletic coaches cited in the literature.

Ambition, hardness, realism, strength, and integration were reported as those traits which might aid the athletic coach in establishing rules, limitations and direction for the athletic program. Such traits might influence the direction as well as the limitations of the athletic program.

Trust, dignity and sportsmanship were additional traits cited by educators. These three traits were reported as vital for establishing player trust, confidence and loyalty.

Interest was a trait necessary to the athletic coaches' personality which was noted by one educator. The athletic coach should be able "to sustain an abiding interest" regardless of the athletic event coached. (37) This could be extended to include the development of both individual participants and team members as a group.

The trait of change in an athletic coach is essential to the development of pertinent athletic programs. A cooperative nature is important in order to be effective with associates and participants with whom the coach must work within these programs.

Whereas desirable personality traits were suggested for athletic coaches, negative traits according to Moore could be detrimental to the athletic program and the participants. (24) The negative characteristics noted were disloyalty, thin-skinned, displays of temper, overly critical, laziness, intemperance, selfishness, worry, discourtesy, aloofness and vulgarity.

The positive and negative extremes of personality trait development in the athletic coach were studied by Tutko and Richards. (45)

They proposed a graduated scale from positive to negative for each personality trait. The importance of a personality trait was determined in relation to its utilization. For example, the authoritative coach displayed a positive trait when he was in command of the situation and well organized. The opposite use of the trait was noted when he used threats or punitive measures to enforce rules.

Several researchers identified the personality traits of the athletic coach more precisely. Loy and Neal reported that men and women athletic coaches display similar personality characteristics. (22) (27) Patrow stated that both differences and likenesses appeared when studying the personality of athletic coaches. (35)

The researchers agreed that there were specific personality traits vital to an athletic coach. The consensus did not, however, include the degree of importance of each of the personality traits.

Assessment of Personality Traits of Athletic Coaches

Research dealing with the measurement and comparison of personality traits of athletic coaches is limited. Some research has been completed with resultant profiles indicating behavioral traits which might increase the effectiveness of an athletic coach.

To assess the personality traits that enhanced a coach's effectiveness, Ogilvie and Tutko studied 64 university and professional athletic coaches. (29) (31) (32) They noted that these experienced coaches had the following positive personality traits: they were desirous of success; they were highly orderly in their organization and administration of the program; they were outgoing and warm; they had a highly developed conscience; they had appropriate values; they were open and trusting; they possessed leadership qualities; they were dominant; they were able to accept blame; they possessed the highest level of psychological endurance; they were unusually mature and they freely expressed natural aggressive tendencies.

In addition to these positive attributes, the two researchers noted two existing traits among the 64 coaches which appeared to be disadvantageous to their cause. One was a lack of interest in the dependency needs of others. As a result of their own independence they appeared unwilling or unable to provide the counsel or special understanding that those with whom they worked might need. The second negative trait was concerned with their extreme conservatism. This trait tended to restrict their use of new information and limit the consideration given to innovative techniques.

For the athletic coaches who were involved at the national level of competition, Ogilvie and Tutko noted distinct positive traits of personality. (32) These were self-control, emotional stability, tough-mindedness, conscientiousness and trust.

In a study of 132 high school coaches utilizing the Jackson Personality Research Form, two researchers noted that sensitivity and those personality traits which support a close interpersonal relationship were the least developed aspect of these high school coaches' personality. (31) The subjects scored high in achievement needs, deference, order, dominance, endurance, abasement and aggression. They achieved low scores in their need for intraception, exhibition, nurturance and change.

Andrud (2) studied 19 volunteer football coaches and found that these individuals were high in ambition, energy, and general activity. All coaches scored above the 50th percentile on the Guilford-Zimmerman Temperament Survey in ascendance, sociability and personal relations.

In a study dealing with the personality of the ideal swim coach, Hendry noted that the subjects scored well in intelligence, dominance, conscientiousness and imaginativeness. (17) But he was cautious in concluding that the results might or might not indicate a uniqueness relating specifically to the coaching personality.

The role of the female athletic coach has been studied by several researchers. In a study of undergraduate and graduate physical education women who were also women athletic coaches, Thorpe noted that when compared to the national norms these women placed high in need for deference, order and endurance. They scored low in need for nurturance, and low in aggression, autonomy and succorance. (43)

Ogilvie noted that women athletic coaches scored above the 75th percentile in aggression and in their need for achievement and autonomy. (28) These same women athletic coaches were found to be at the 67th percentile in the area of dominance while placing below the national norms in the areas of deference, intraception, succorance, abasement and nurturance.

A few studies indicate that men and women athletic coaches rank closely in many of the personality variables. These studies indicate that men and women athletic coaches are commonly high in leadership needs, endurance, orderliness and deference while both groups are low in autonomy, succorance, change, and nurturance. (22) (43) These findings would appear to support Edward's observation concerning the similarity of athletic coaches' personalities regardless of their sports involvement. (12)

One study notes that athletic coaches are more aggressive, self-assertive and highly organized than the norm. (33) This same study reported that while athletic coaches appear to listen to what others are saying they pay little attention to what is being said. Further opinions in this study concluded that athletic coaches possess a fierce psychological endurance while they display inflexibility, extreme conservatism and dislike change and experimentation. (31)

In each study presented, an assessment of the personality traits of athletic coaches has been noted. Yet the importance that each personality trait might have on the effectiveness of the athletic coach remains unknown.

CHAPTER III

PROCEDURE FOR CONDUCTING THE STUDY

Male and female interscholastic and intercollegiate athletic coaches selected by interest from the states of Oregon and California comprised the sample population. Each individual within the sample received a personality questionnaire and a personal inventory which were completed and returned to the writer by mail. Anonymity was promised to those athletic coaches who desired not to be individually identified.

Selection of Sample Population

A letter of inquiry and a self-addressed postcard were sent to all Oregon and California schools and colleges participating in a interscholastic or intercollegiate athletic program. (Appendix A and B) The athletic director in each school or college was asked to survey the athletic staff of the school for persons who would be willing to participate in the study. The athletic director was then asked to note the number of athletic coaches willing to participate in the study and to return the completed postcard to the writer.

The returned postcards were grouped according to the respondents' willingness to complete the personal inventory and the personality questionnaire. Positive returns were received from 400 intercollegiate and interscholastic coaches who were willing to participate

in the study. It should be noted that limited positive responses were received from the California interscholastic coaches due to a temporary state educational policy prohibiting unsolicited research from being conducted within all state institutions.

A letter of information, the Jackson Personality Research Form and the personal inventory were then mailed to those female and male athletic coaches who indicated they wished to participate in the study. The 400 athletic coaches in Oregon and California were asked to return the materials by mail. (Appendices D, C, and E)

To allow anonymity for the respondents, each profile and inventory was numerically coded and placed in a large manila envelope which included within it a large self-addressed stamped envelope in which the finished forms could be returned. If the sender wished to be identified to obtain results of the study, he could then so state on the answer sheets or on the envelope.

Of the 400 male and female athletic coaches, 245 athletic coaches returned the study of which 239 returns (60%) were complete. These 239 returned profiles and answer forms were grouped into four major categories and became the subjects for this study.

The four major groups were: (1) interscholastic females, (2) interscholastic males, (3) intercollegiate females and (4) intercollegiate males. Each subject was currently involved in athletic coaching and had attained a minimum of two years of coaching experience. Each major group was divided into two sub-groups: (a) athletic coaches with two to 10 years of athletic coaching experience and

(b) athletic coaches with 11 or more years of athletic coaching experience.

Collection of Data

Data were collected for this study through (1) a personal inventory and (2) a personality questionnaire, the Jackson Personality Research Form. The make-up of these two instruments can be found in Appendices D and E.

Personal Inventory. Information gained through the survey of literature, personal experiences as a coach, the opinions of other intercollegiate, as well as interscholastic coaches were considered in the formulation of the personal inventory. In drafting the inventory, consideration was given to the traveling distances involved and diversification of groups to be studied and the inventory was styled to eliminate the need for personal interviews. The personal inventory secured data not solicited on the Jackson Personality Research Form questionnaire. The check list inventory served to identify the subject by sex, education, residence and number of years' coaching experience. Respondents were also asked for information regarding coaching background, participation experience and attitudes regarding the purpose of athletics.

The personal inventory identified the title and purpose of the study and then divided the areas of information to be obtained from the respondents into three parts: (1) personal data which included sex, position residence and education, (2) coaching background which included number of years the respondents had been involved in

coaching and (3) participant-coach information which was concerned with the coach's involvement and personal values both as a participant and as a coach.

The study was then submitted to six community college athletic coaches - three male and three female; four high school athletic coaches - two male and two female; plus one male and female university athletic coach for their comments on content and clarity. After their suggestions were incorporated the inventory was submitted to three private school athletic coaches: (1) to determine whether all questions were clear and (2) to observe the length of time necessary to complete the inventory. It was found that the inventory took 15 minutes or less to complete and the final form of this tool was then constructed. (Appendix E)

Each of the inventory sheets indicated the necessary directions for answering the questions carefully. The inventory construction also noted the necessity for enough space for short inventory when appropriate. The construction of the inventory allowed for hand marking directly from the study to general purpose forms which were used to record data from the personality questionnaire as well.

Jackson Personality Research Form. (PRF) The Jackson Personality Research Form hereafter identified as the PRF, was used to assess the personality of each subject in this study. Psychological testing devices such as the Cattell Sixteen Personality Factor Questionnaire (7), the Edwards Personal Preference Schedule (11), the California

Psychological Inventory (14), and the Minnesota Multiphasic Personality Inventory (16) were rejected for a variety of reasons. The Minnesota Multiphasic Personality Inventory was rejected because it was ascertained that its 566 items would be too cumbersome to administer. Furthermore it was determined that it was best used as a clinical tool. (5) The California Psychological Inventory was difficult to interpret conceptually and cumbersome to use in counseling situations. (5) Both the Edwards Personal Preference Schedule and Cattell's Sixteen Personality Factor Questionnaire have been used with studies dealing with athletes but the validity of both devices had been questioned by researchers. (5)

The theoretical and statistical work from which the Jackson Personality Research Form (PRF) evolved seemed to make it one of the most comprehensive tests of personality available. (5) Since the PRF was designed to yield conveniently a set of scores for personality traits broadly relevant to the functioning of individuals in a wide variety of situations its usage was enhanced in this particular investigation. (19) The PRF was chosen also because it provides a measure of personality in the daily functioning of a normal person in addition to being a reliable and valid research instrument. (5) The validity correlation of the PRF includes both convergent and discriminant validity (peer ratings .52 and self-ratings .56) with reliability correlations (.54-.86) which compare favorable with figures reported of other personality scales of equal length. (2)

The original design of the PRF includes 14 variables of personality and one validity scale using a Harvard study as its foundation. (26) The Harvard study has been modified by Jackson with the shorter PRF forms (A and B) using functional characteristics considered to be the most descriptive of human personality.

The PRF norms were based on separate samples of more than 1,000 male and more than 1,000 female college students. These subjects represented more than 30 colleges and universities in the United States. The subjects were selected from different parts of the country, from private and public schools and from all academic major areas. The norms established by the subjects were used for comparisons in the present study.

The PRF is composed of 440 items which requires from 40 to 70 minutes to complete. The PRF is available in four forms. Two short forms, A and B, and Forms AA and BB which are composed of 22 personality scales. A definition of each personality trait was composed from results of the highest scores on the original test. Each of the 22 personality traits were clarified by descriptive adjectives as noted in Appendix F. These traits were designated through a process of factor analysis and have been organized into groups of scales as well as conceptual groupings. (Appendix G) Since Form AA and Form BB were designed to measure identical variables and have established norms for both men and women, Form BB was arbitrarily selected for use in this study.

The PRF booklets indicated the necessary information for taking the test. Although the test was standardized with results from a supervised group setting, it was noted that the PRF could be given to persons in other situations such as clinic, personnel office, or even on a take-home basis. (19)

Answer sheets which were chosen allowed for efficient hand scoring of the results and for manual plotting of the personality scores. (Appendix H) Scoring began by placing a template over the designs located in the upper left and the lower right hand corner of the score sheet. Each of the vertical columns were then tallied and recorded at the bottom of the answer sheet. Each scale was designated two alphabetized columns thus allowing the scorer to record the scores in alphabetical order. The recorder then transferred the score in the same order to the profile sheet. (Appendix I)

As suggested by Super and Crites, hand scoring should be reviewed at least twice by different individuals. (42) Two physical education major students hand scored and recorded the results on the profile sheets. They were instructed by the writer in this use of the template and the general scoring procedure. One scorer was a check on the other scorer. Upon completion, the scoring sheets and profiles were reviewed by the writer. The coded information from the personal inventory and the raw scores of each personality factor for each subject were then recorded on general purpose forms by the writer. The results were reviewed by the two students who assisted with the scoring. The data were transferred to key punch cards by the writer and checked by another investigator as they were put in

a data processing machine. A Biomedical Data Processing Program (1974) was used to compute the data. (10)

Tabulation of Data

Data collected for this study were analyzed from two areas: the personal inventory and the 22 personality traits of the Jackson Personality Research Form (PRF). The data assimilated from the personal inventory aided in the grouping of subjects.

Personal Inventory. Two sections of the personal inventory were used for this study: personal data and coaching experience. The information was analyzed for the following groups: (1) all athletic coaches, (2) athletic coaches by teaching position and (3) athletic coaches by coaching experience. Responses to coaching experience were separated as follows: (1) two to 10 years coaching experience, (2) 11 years coaching experience and over. The areas of information concerning personal background and the participant-coach were omitted from this study.

Analysis of Data

Jackson Personality Research Form. (PRF) All 22 personality traits were used in this study for both men and women. The raw scores from the personality test were recorded on profile sheets and the standard scores as well as the percentile equivalents of the PRF raw scores were compared.

The data from this study were subjected to a multiple group discriminant analysis procedure utilizing eight discriminant

functions and a t-ratio when comparing significant differences from the norms of the PRF. The null hypothesis of no difference was applied and tested at the .05 percent level of confidence (1.81) The Biomedical Data Program, a multivariate program, computed a set of linear classification functions by choosing the independent variables in a stepwise manner. (Appendix J) The variable entered at each step was selected according to the required criteria of the program, and a variable was deleted from further computation when the F value was lower than .005 as dictated by the multivariate program.

The Wilks' lambda (λ), which is a function of the roots of $W^{-1}A$ where W is the pooled within-groups matrix of deviation cross products, was utilized to determine the discriminating power of the predictor battery. (8) A univariate F ratio was computed so that significant differences between groups, as based on the multiple dependent variables, could be identified and analyzed.

Table 2 depicts the method of organizing and analyzing the collected data. The computed lambda of .264 indicates a rather wide diversity among the various groups. The F-ratio of 2.027 exceeded the significant discrimination level at the .05 level (1.81). Discriminant weight scores for each of the eight coaching groups were utilized to determine composite discriminant functions. The Mahalanobis method, which utilized a linear classification progression, was employed to determine distribution variances among the eight coaching groups. (36) Coordinates of the multivariate means for each group were computed and positioned on a

TABLE 2. ANALYTICAL ANALYSIS OF GROUPS AND SCORE DISTRIBUTION.

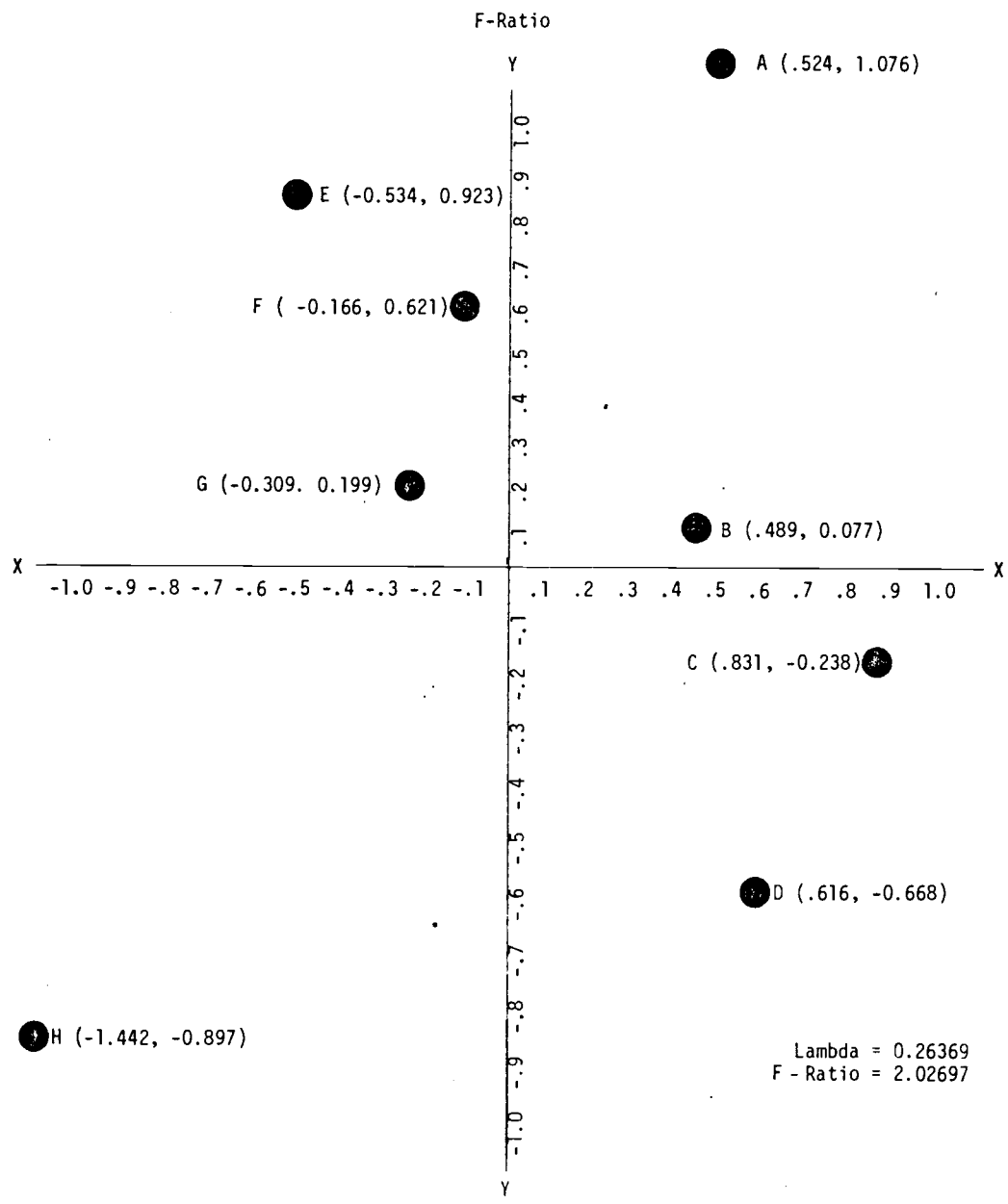
Jackson PRF Variables	MEAN ITEM RESPONSE BY COACHING GROUPS										DISCRIMINANT WEIGHTS							
	M.H.S. N = 24		M.C. N = 90		F.H.S. N = 40		F.C. N = 85		All Groups N=239	F	I	II	III	IV	V	VI	VII	VIII
	A*	B	C	D	E	F	G	H										
1. Abasement	6.647	5.571	6.795	6.219	6.441	5.833	7.375	8.000	6.857	1.566	2.632	2.346	2.492	2.344	2.302	2.024	2.526	2.586
2. Achievement	12.647	13.571	15.448	15.097	13.647	12.833	14.410	13.931	14.384	2.337	1.661	1.633	2.087	1.900	1.955	1.941	1.996	1.705
3. Affiliation	13.529	14.857	14.755	14.829	14.323	14.666	14.660	15.725	14.715	0.893	1.182	1.200	1.304	1.393	1.119	1.343	1.196	1.340
4. Aggression	7.588	6.714	6.163	5.146	5.264	5.000	4.446	3.310	5.200	3.196	.495	.226	.240	.069	.108	.032	.104	-0.150
5. Autonomy	9.058	7.857	9.551	9.292	9.352	10.333	9.321	9.896	9.401	1.524	3.017	3.032	3.213	3.190	3.131	3.427	3.067	3.300
6. Change	10.941	9.000	10.693	9.585	11.823	10.666	11.785	11.482	10.983	0.736	.302	.171	.264	.180	.296	.123	.276	.262
7. Cognitive Structure	10.235	11.285	12.061	11.829	9.705	9.166	9.857	8.862	10.556	4.288	-0.062	-0.065	.118	.088	-0.129	-0.223	-0.081	-0.191
8. Defence	7.647	10.285	6.857	7.682	6.705	6.000	6.357	6.793	6.987	2.358	2.158	2.585	2.074	2.215	2.183	2.050	2.217	2.444
9. Dominance	10.882	13.285	11.959	12.536	10.558	9.666	10.000	12.827	11.410	2.969	-0.166	-0.128	-0.290	-0.230	-0.264	-0.371	-0.474	-0.183
10. Endurance	11.588	13.428	14.102	14.634	11.500	11.333	13.321	13.724	13.326	3.518	0.031	0.220	0.042	0.165	-0.142	-0.128	0.040	0.092
11. Exhibition	8.647	10.285	9.918	9.853	8.294	8.333	9.678	10.793	9.606	2.010	-0.190	-0.043	0.089	0.077	-0.098	0.093	0.116	0.186
12. Harmavoidance	9.529	9.714	10.510	10.024	10.617	11.833	9.642	11.275	10.271	1.798	2.224	2.363	2.405	2.411	2.437	2.623	2.416	2.692
13. Impulsivity	9.647	9.857	8.081	8.585	11.205	8.500	9.464	9.862	9.326	1.287	1.264	1.374	1.340	1.434	1.495	1.350	1.417	1.495
14. Nurturance	11.941	14.285	14.448	13.731	14.941	13.833	13.982	15.758	14.246	2.031	-0.321	-0.071	-0.044	-0.171	0.038	-0.023	-0.170	0.048
15. Order	10.941	10.142	12.163	11.780	11.970	12.500	11.535	11.655	11.723	1.256	-0.066	-0.154	-0.078	-0.076	0.114	0.144	0.003	-0.007
16. Play	12.117	13.428	10.795	10.146	12.470	12.666	12.375	11.413	11.585	1.918	1.260	1.510	1.193	1.149	1.348	1.461	1.348	1.181
17. Sentience	14.882	15.000	14.551	14.512	16.500	15.333	16.071	17.448	15.585	3.854	0.852	.772	.693	.664	.946	.760	.861	.938
18. Social Recognition	12.176	12.857	10.877	10.878	10.382	10.666	9.821	9.413	10.527	1.035	1.717	1.665	1.608	1.621	1.470	1.614	1.501	1.599
19. Succorance	8.588	8.857	7.265	6.853	8.191	7.000	7.392	7.241	7.589	1.140	-0.221	-0.331	-0.399	-0.435	-0.184	-0.389	-0.334	-0.421
20. Understanding	10.657	9.000	9.979	11.097	10.823	9.333	12.214	14.206	11.330	2.169	0.569	0.424	0.382	0.504	0.483	0.429	0.561	0.708
21. Infrequency	1.000	0.571	0.489	0.658	0.470	0.500	0.750	2.655	0.878	1.043	0.232	0.2500	0.219	.252	.126	.164	1.196	.397
22. Desirability	15.294	17.714	17.387	17.707	16.735	16.166	17.446	17.620	17.221	1.111	4.187	4.687	4.396	4.480	4.384	4.202	4.559	4.416

* Groups A, C, E, G = Two to 10 years experience
 Groups B, D, F, H = 11 years coaching experience and over
 LAMBDA = .264
 F-Ratio = 2.027. (sig. at .05% level at 1.81)
 F.F. = 231

quadrant displayed centroid. An example of the centroid is found in Figure 1. A clear distinction is noted by the eight groups. At least one group was found to exist in each of the quadrant areas, indicating a definite difference among the eight coaching groups.

FIGURE 1. 8 GROUP CENTROID. DISTRIBUTION OF COACHING GROUPS. THE DEGREE OF DEVIATION BETWEEN COACHING GROUPS BASED ON F-RATIO AND LAMBDA.

- I A = Male Interscholastic - 2-10 years experience (.524, 1.076)
- B = Male Interscholastic - 11 years experience and over (.489, 0.077)
- II C = Male Intercollegiate - 2-10 years experience (.831, -0.238)
- D = Male Intercollegiate - 11 years experience and over (.616, -0.668)
- III E = Female Interscholastic - 2-10 years experience (-0.534, 0.923)
- F = Female Interscholastic - 11 years experience and over (-0.166, 0.621)
- IV G = Female Intercollegiate - 2-10 years experience (-0.309, 0.199)
- H = Female Intercollegiate - 11 years experience and over (-1.442, -0.897)



CHAPTER IV

ANALYSIS OF DATA

The specific personality traits considered in this study were abasement, achievement, affiliation, aggression, autonomy, change, cognitive structure, defence, dominance, endurance, exhibition, harmavoidance, impulsivity, nurturance, order, play, sentience, social recognition, succorance, understanding, desirability and infrequency. These 22 personality characteristics were included in data from the Jackson Personality Research. (Appendix F)

The personality characteristics of each group of athletic coaches were compared to the general norms established for the PRF. The various coaching groups also were compared to each other. A final analysis identified specific traits of the personality of athletic coaches.

Subject Analysis. The subjects for the study were 239 interscholastic and intercollegiate male and female athletic coaches selected from Oregon and California. The sample was composed of 114 male and 125 female athletic coaches. As shown in Table 3, the subjects were placed in four groups: I - 24 interscholastic male athletic coaches, II - 40 interscholastic female athletic coaches, III - 90 intercollegiate male athletic coaches and IV - 85 intercollegiate female athletic coaches.

TABLE 3. Male and Female Athletic Coaching Subjects

	Male	Female	Total
High School	24	40	64
College	90	85	175
Total	114	125	239

To determine if a relationship exists between athletic coaching experience and personality, the four athletic coaching groups were divided further into those athletic coaches with two to 10 years athletic coaching experience and those athletic coaches with athletic coaching experience of 11 years and over. The distribution is shown in Table 4.

TABLE 4. Years of Coaching Experience of Male and Female Subjects

	Male			Female			Total
	2-10	11 & Over	Total	2-10	11 & Over	Total	
Interscholastic	I A	I B	24	III E	III F	40	64
	17	7		34	6		
Intercollegiate	II C	II D	90	IV G	IV H	85	175
	49	41		56	29		
Total	66	48	114	90	35	125	239

Thus eight groups were used in the study: (IA) male interscholastic athletic coaches with two to 10 years coaching experience, (IB) male interscholastic athletic coach with over 11 years athletic coaching experience; (IIC) male intercollegiate athletic coach with two to 10

years athletic coaching experience, (II D) male intercollegiate athletic coaches with over 11 years athletic coaching experience; (III E) female interscholastic athletic coach with two to 10 years athletic coaching experience, (III F) female interscholastic athletic coach with over 11 years athletic coaching experience; (IV G) female intercollegiate athletic coach with two to 10 years athletic coaching experience, (IV H) female intercollegiate athletic coach with over 11 years athletic coaching experience.

Each group was analyzed separately to determine the degree of discrimination existing between all the athletic coaching groups in the evaluation of the 22 personality traits. A univariate F test and the discriminant weights were computed to indicate the degree of discrimination for each individual characteristic. Table 5 shows the eight groups of athletic coaches and the number of respondents for each group. The mean item analysis, the univariate F, and the discriminant weights are also presented in Table 5.

A different personality structure from the normative group was noted for the athletic coaches as the F-ratio for some of the personality traits exceeded the .05 level of confidence (2.49). (Table 5) The personality traits exceeding the level of confidence were: aggression (3.20), cognitive structure (4.29), dominance (2.97), endurance (3.52) and sentience (3.85).

TABLE 5. DISCRIMINANT ANALYSIS OF EIGHT COACHING GROUPS.

	MEAN ITEM RESPONSE BY COACHING GROUPS								All Groups	Discriminant Weights								
	I		II		III		IV			F	I	II	III	IV	V	VI	VII	VIII
	A (N=17)	B (N=7)	C (N=49)	O (N=40)	E (N=34)	F (N=6)	G (N=56)	H (N=29)										
1. Abasement	6.65	5.57	6.80	6.22	6.44	5.83	7.38	8.00	6.86	1.57	2.63	2.35	2.50	2.34	2.30	2.02	2.53	2.59
2. Achievement	12.65	13.57	15.45	15.10	13.65	12.83	14.41	13.93	14.38	2.34	1.66	1.63	2.09	1.90	1.96	1.94	2.00	1.71
3. Affiliation	13.53	14.86	14.76	14.83	14.32	14.67	14.66	15.72	14.72	0.89	1.18	1.20	1.30	1.39	1.12	1.34	1.20	1.30
4. Aggression	7.58	6.71	6.16	5.15	5.26	5.00	4.45	3.31	5.20	3.20*	0.50	0.23	0.24	0.07	0.11	0.03	0.10	-0.15
5. Autonomy	9.06	7.86	9.55	9.29	9.35	10.33	9.32	9.90	9.40	1.52	3.02	3.03	3.21	3.19	3.13	3.43	3.07	3.30
6. Change	10.94	9.00	10.69	9.59	11.82	10.67	11.79	11.48	10.98	0.74	0.30	0.17	0.26	0.18	0.30	0.12	0.28	0.26
7. Cognitive Structure	10.24	11.29	12.06	11.83	9.71	9.17	9.86	8.86	10.56	4.29*	-0.06	-0.07	0.12	0.08	-0.13	-0.22	-0.08	-0.19
8. Defence	7.65	10.29	6.86	7.68	6.71	6.00	6.36	6.79	6.99	2.36	2.16	2.59	2.07	2.22	2.18	2.05	2.22	2.44
9. Dominance	10.88	13.29	11.96	12.54	10.56	9.67	10.00	12.83	11.41	2.97*	-0.17	-0.13	-0.29	-0.23	-0.26	-0.37	-0.47	-0.18
10. Endurance	11.59	13.43	14.10	14.63	11.50	11.33	13.32	13.72	13.33	3.52*	0.03	0.22	0.04	0.17	-0.14	-0.13	0.04	0.09
11. Exhibition	8.65	10.29	9.92	9.85	8.29	8.33	9.68	10.79	9.61	2.09	-0.19	-0.04	0.09	0.08	-0.10	0.09	0.12	0.19
12. Harmavoidance	9.53	9.71	10.51	10.02	10.62	11.83	9.64	11.28	10.27	1.80	2.22	2.36	2.41	2.41	2.44	2.62	2.42	2.69
13. Impulsivity	9.65	9.86	8.08	8.59	11.21	8.50	9.46	9.86	9.33	1.29	1.26	1.37	1.34	1.43	1.50	1.35	1.42	1.50
14. Nurturance	11.94	14.29	14.45	13.73	14.94	13.83	13.98	15.76	14.25	2.03	-0.32	-0.07	-0.04	-0.17	0.03	-0.02	-0.17	0.05
15. Order	10.94	10.14	12.16	11.78	11.97	12.60	11.54	11.66	11.72	1.26	-0.07	-0.15	-0.08	-0.08	0.11	0.14	0.01	-0.01
16. Play	12.12	13.43	10.80	10.15	12.47	12.67	12.38	11.41	11.59	1.92	1.26	1.51	1.19	1.15	1.35	1.46	1.35	1.18
17. Sentience	14.88	15.00	14.55	14.51	16.50	15.33	16.07	17.45	15.59	3.85*	0.85	0.77	0.69	0.66	0.95	0.76	0.86	0.94
18. Social Recognition	12.18	12.86	10.88	10.88	10.38	10.67	9.82	9.41	10.53	1.04	1.72	1.67	1.61	1.62	1.47	1.61	1.50	1.60
19. Succorance	8.59	8.86	7.27	6.85	8.91	7.00	7.39	7.24	7.59	1.14	-0.22	-0.33	-0.40	-0.44	-0.18	-0.39	-0.33	-0.42
20. Understanding	10.65	9.00	9.98	11.10	10.82	9.33	12.21	14.21	11.33	2.17	0.57	0.42	0.38	0.50	0.48	0.43	0.56	0.71
21. Infrequency	1.00	0.57	0.49	.66	0.47	0.50	0.75	2.66	0.88	1.04	0.23	0.25	0.12	0.25	0.13	0.16	0.20	0.40
22. Desirability	15.29	17.71	17.39	17.71	16.74	16.17	17.45	17.62	17.22	1.11	4.19	4.69	4.40	4.48	4.38	4.20	4.56	4.42

Coaching Groups

- I A = Male Interscholastic - 2-10 years experience
- I B = Male Interscholastic - 11 years and over experience
- II C = Male Intercollegiate - 2-10 years experience
- II O = Male Intercollegiate - 11 years and over experience
- III E = Female Interscholastic - 2-10 years experience
- III F = Female Interscholastic - 11 years and over experience
- IV G = Female Intercollegiate - 2-10 years experience
- IV H = Female Intercollegiate - 11 years and over experience

F-ratio = .05 level of significance - (2.49)

* = personality traits exceeding .05 level of significance

Analysis of Athletic Coaching Groups

The responses of each athletic coach were examined to determine if their personality traits coincided with the personality traits of other athletic coaches. The majority of subjects in the four athletic coaching groups were found to have personality traits similar to individuals within their respective athletic coaching group. (Table 6)

TABLE 6. Probability of Personality Trait Variable Alignment

Groups	No.	Male Coaches		Female Coaches	
		Group I Inter- scholastic	Group II Inter - collegiate	Group III Inter- scholastic	Group IV Inter- collegiate
Inter- scholastic Males	24	15(63%)	5(21%)	2(8%)	2(8%)
Inter- scholastic Females	40	4(10%)	2(5%)	26(65%)	8(20%)
Inter- collegiate Males	90	14(15%)	51(57%)	10(11%)	15(17%)
Inter- collegiate Females	85	6(7%)	10(12%)	20(23%)	49(58%)

Interscholastic Male Athletic Coaches. Of the 24 inter-scholastic male athletic coaches utilized in this study, 15 (63%) were found to have personality traits that matched those traits displayed by their own group members. Five (21%) of the male interscholastic athletic coaches possessed personality traits

more in line with those traits displayed by the male intercollegiate athletic coach than the interscholastic group. The remaining two (8%) coaches were found to have personality traits that corresponded with the traits displayed by the female intercollegiate athletic coaching group.

Intercollegiate Male Athletic Coaches. Fifty-one (57%) of the intercollegiate male athletic coaches displayed personality traits which were the same as those noted by other athletic coaches within the intercollegiate group. Fifteen (17%) members of this group were found to have personality traits that were similar to the personality traits displayed by members of the female intercollegiate athletic coaches. Fourteen (15%) of the athletic coaches displayed personality traits that were similar to those noted by the male athletic coaches at the interscholastic level. Ten athletic coaches (11%) were found to have personality traits which were aligned with traits displayed by female interscholastic athletic coaches.

Interscholastic Female Athletic Coaches. There were 26 (65%) interscholastic female athletic coaches who displayed personality traits which were similar to the ones displayed by other members of the interscholastic female athletic coaching group. Eight (20%) of the female interscholastic athletic coaches possessed personality traits which were in line with those displayed by members of the female intercollegiate coaching group. Four (10%) of the coaches demonstrated personality traits which corresponded to the traits of the male interscholastic athletic coach. Two (5%) coaches were

found to have similar traits to those who were in the male intercollegiate athletic coaching group.

Intercollegiate Female Athletic Coaches. There were 49 (58%) of the intercollegiate female athletic coaches who possessed personality traits which were similar to those traits demonstrated by other members of the intercollegiate female athletic coaching group. Twenty (23%) of these coaches had traits which corresponded to those traits displayed by the interscholastic female athletic coaching group. Ten (12%) of the intercollegiate female athletic coaches possessed traits that were in line with those traits noted in intercollegiate male athletic coaches. Six (7%) of these coaches displayed traits which were similar to the personality traits of interscholastic male athletic coaches.

Comparisons of Athletic Coaches to the PRF Norms

The athletic coaching groups deviated from the norms established by the Jackson Personality Research data. When comparisons of the athletic coaching groups were made with the Jackson PRF norms, the t scores on some personality traits exceeded the .05 level of discrimination. (Table 7) These scores implied that some significant differences do exist between the coaching groups and the norms. Discriminant weights were computed to indicate the degree of discrimination for individual items.

Male Athletic Coaches. There were significant differences noted between the personality traits of male athletic coaches when compared to the norms of the male general population. Whereas the

TABLE 7. ATHLETIC COACHING GROUPS COMPARED TO PRF NORMS.

Personality Characteristics	PRF Norms Male		Mean Item Response				PRF Norms Female		Mean Item Response				DISCRIMINANT WEIGHTS			
	Mean	S.D.	Group I N = 24		Group II N = 90		Mean	S.O.	Group III N = 40		Group IV N = 85		I	II	III	IV
			Mean	t	Mean	t			Mean	t	Mean	t				
1. Abasement	6.22	2.92	6.33	-0.18	6.53	-1.01	7.27	3.07	6.35	1.88	7.59	-.96	2.59	2.29	2.47	2.59
2. Achievement	12.58	3.73	12.92	-0.45	15.29	-6.89*	12.29	3.41	13.53	-2.30*	14.25	-5.30*	1.83	2.14	2.20	2.11
3. Affiliation	14.98	3.28	13.92	1.58	14.79	0.55	16.15	3.18	14.38	3.51*	15.02	3.28*	1.16	1.12	1.31	1.20
4. Aggression	7.93	3.78	7.33	0.78	5.70	5.60*	5.86	3.23	5.23	1.25	4.06	5.14*	0.61	0.29	0.37	0.24
5. Autonomy	8.62	3.12	8.71	-0.14	9.43	-2.46*	7.08	3.43	9.50	-4.46*	9.52	-6.56*	2.97	3.11	3.14	3.07
6. Change	11.74	3.20	10.38	2.08*	10.19	4.60*	12.31	3.18	11.65	1.31	11.68	1.83	0.28	0.29	0.25	0.30
7. Cognitive Structure	10.90	3.69	10.54	0.48	11.96	-2.73*	10.65	3.71	9.63	1.74	9.52	2.81*	-0.01	-0.09	0.16	0.06
8. Defence	8.76	3.32	8.42	0.50	7.23	4.73*	7.30	3.05	6.60	1.45	6.51	2.39*	2.08	1.95	1.92	2.07
9. Dominance	11.07	4.48	11.58	-0.56	12.22	-2.44*	8.68	4.28	10.43	-2.58*	10.96	-4.91*	-0.34	-0.47	-0.45	-0.59
10. Endurance	10.67	3.82	12.13	-1.87	14.34	-9.12*	10.11	3.70	11.48	2.34*	13.46	-8.35*	0.02	-0.21	0.03	-0.01
11. Exhibition	10.83	3.87	9.12	2.17*	9.89	2.31*	9.74	3.92	8.30	2.32*	10.06	-0.75	-0.21	-0.13	0.02	0.07
12. Harmavoidance	7.46	4.05	9.58	-2.56*	10.29	-6.63	10.27	4.38	10.80	-0.77	10.20	0.15	2.13	2.32	2.26	2.35
13. Impulsivity	9.78	3.49	9.70	0.11	8.31	4.00*	10.30	3.67	10.80	-0.86	9.60	1.76	1.24	1.42	1.33	1.38
14. Nurturance	12.68	3.37	12.62	0.09	14.12	-4.06*	15.45	2.97	14.78	1.42	14.59	2.67*	-0.46	-0.02	-0.33	-0.33
15. Order	10.81	4.33	10.70	0.12	11.99	-2.59*	10.66	4.38	12.05	-2.00*	11.58	-1.94	-0.06	0.16	-0.04	0.04
16. Play	12.13	3.42	12.50	-0.53	10.50	4.52*	12.00	3.36	12.50	-0.94	12.05	-0.14	1.39	1.43	1.23	1.36
17. Sentience	15.24	2.87	14.92	0.55	14.53	2.35*	16.48	2.44	16.33	0.39	16.54	-0.23	0.80	0.89	0.65	0.85
18. Social Recognition	11.90	3.96	12.38	-0.59	10.88	2.44*	11.32	3.73	10.43	1.51	9.68	4.05*	1.71	1.49	1.61	1.53
19. Succorance	7.88	3.50	8.67	-1.11	7.08	2.17*	11.19	4.23	8.63	3.82*	7.34	8.39*	-0.20	-0.16	-0.36	-0.31
20. Understanding	12.46	3.33	10.17	3.37*	10.49	5.61*	12.78	3.19	10.60	4.32*	12.89	-0.32	0.50	0.45	0.41	0.57
21. Infrequency	0.69	1.09	0.88	-0.85	.56	1.13	0.53	0.79	0.48	0.44	1.40	-10.15*	0.13	0.02	0.12	0.14
22. Desirability	15.45	2.85	16.00	-0.95	17.53	-6.93*	15.48	2.81	16.65	-2.64*	17.50	-6.63*	4.35	4.38	4.45	4.53

Athletic Coaching Groups

- * Group I - Sig. Dif. (.05%) = 2.06
- Group II - Sig. Dif. (.05%) = 2.02
- Group III - Sig. Dif. (.05%) = 1.98
- Group IV - Sig. Dif. (.05%) = 1.99

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interscholastic male athletic coaches more closely aligned themselves with the PRF norms than did the intercollegiate male athletic coaches, significant deviations were noted by both groups. The intercollegiate male athletic coach had only three personality characteristics which coincided with the male general population: abasement, affiliation and infrequency. Extreme deviation of scores was noted on the traits of achievement (-6.89), aggression (5.60), endurance (-9.12), harmavoidance (-6.63) and desirability (-6.93).

Female Athletic Coaches. The female athletic coaches deviated from the norms established by the Jackson Personality Research data. (Table 7) The interscholastic and intercollegiate female athletic coaches scored significantly above the norms on affiliation, endurance, succorance, and desirability. The female athletic coaches scored significantly below the norms on the traits of achievement, autonomy, dominance, order and play.

The female interscholastic athletic coaches possessed 12 traits which were consistent with those of the female general population. The intercollegiate female athletic coaches differed from the general population norms on 13 of the personality traits. The two female athletic coaching groups shared deviations on achievement, affiliation, autonomy, dominance, endurance, succorance, and desirability. On all but one of these traits, affiliation, the female intercollegiate athletic coaches differed significantly more from the norms than did the interscholastic women

coaches. The interscholastic female athletic coaches were above the PRF norms on exhibition and understanding. They were below the norm on order. The intercollegiate female athletic coaches were above the general population norms on aggression, cognitive structure, defence, nurturance, social recognition, succorance and infrequency.

Interscholastic Male Athletic Coaches. The male interscholastic athletic coach showed a significant difference (2.06) from the PRF norms at the .05% level of confidence in four of the personality characteristics. (Table 8) The deviation occurred in the traits of harmavoidance, exhibition, change and understanding.

Intercollegiate Male Athletic Coaches. The male intercollegiate athletic coaches indicated a significant difference (1.98) from the PRF norm at the .05% level of confidence for 10 of the 22 personality traits. (Table 9) The deviations occurred in the traits of achievement, affiliation, autonomy, dominance, endurance, exhibition, order, social recognition, succorance, understanding and desirability.

Interscholastic Female Athletic Coaches. The female interscholastic athletic coach showed significant difference (2.20) from the PRF norms at the .05% level of confidence in 19 of 22 personality characteristics. (Table 10) Abasement, affiliation and infrequency were the only traits noting similarities to the PRF norms.

Intercollegiate Female Athletic Coaches. The female intercollegiate athletic coach indicated a significant difference (1.98)

TABLE 8. INTERSCHOLASTIC MALE ATHLETIC COACHES COMPARED TO PRF NORMS.

Personality Characteristics	PRF Norms		I A 2 - 10 (N - 17)		t	I B 11 and Over (N - 7)		t	A & B (N - 24)	
	Mean	S.D.	Mean	S.D.		Mean	S.D.		Mean	t
1. Abasement	6.22	2.92	6.65	2.60	-0.61	5.57	2.70	.59	6.33	-0.18*
2. Achievement	12.58	3.73	12.65	3.95	-.08	13.57	2.51	.70	12.92	-0.45
3. Affiliation	14.98	3.28	13.53	3.20	1.82	14.86	4.02	.10	13.92	1.58
4. Aggression	7.93	3.78	7.58	3.30	.38	6.71	4.57	.86	7.33	0.78
5. Autonomy	8.62	3.12	9.06	3.45	-.58	7.86	1.86	.65	8.71	-01.4
6. Change	11.74	3.20	10.94	3.33	1.03	9.-0	2.56	2.30	10.38	2.08*
7. Cognitive Structure	10.90	3.69	10.24	3.40	.74	11.29	2.81	-.28	10.54	0.48
8. Defenceence	8.76	3.32	7.65	2.74	1.38	10.29	3.15	-1.22	8.42	0.50
9. Dominance	11.07	4.48	10.88	4.12	0.17	13.29	4.39	-1.31	11.58	-0.56
10. Endurance	10.67	3.82	11.59	4.11	-.99	13.43	3.51	-1.91	12.13	-1.87
11. Exhibition	10.83	3.87	8.65	3.86	2.32*	10.29	4.64	.37	9.12	2.17*
12. Harmavoidance	7.46	4.05	9.53	4.30	-2.11	9.71	2.36	-1.47	9.58	-2.56*
13. Impulsivity	9.78	3.49	9.65	3.37	.15	9.86	3.98	-.06	9.70	0.11
14. Nurturance	12.68	3.37	11.94	3.94	.90	14.29	2.36	-1.27	12.62	0.09
15. Order	10.81	4.33	10.94	4.48	-.12	10.14	3.29	.41	10.70	0.12
16. Play	12.13	3.42	12.12	3.06	.01	13.43	2.51	-1.01	12.50	-0.53
17. Sentience	15.24	2.87	14.88	2.78	.52	15.00	1.63	.22	14.92	0.55
18. Social Recognition	11.90	3.96	12.18	4.30	-.29	12.86	2.19	-.64	12.38	-0.59
19. Succorance	7.88	3.50	8.59	3.71	-.84	8.86	2.18	-.74	8.67	-1.11
20. Understanding	12.46	3.33	10.65	4.69	2.24*	9.00	3.00	2.75*	10.17	3.37*
21. Infrequency	0.69	1.09	1.00	1.37	-1.17	0.57	0.79	.29	0.88	-0.85
22. Desirability	15.45	2.85	15.29	3.89	.23	17.71	1.98	-2.10	16.00	-0.95

* A group - Sig. Dif. (05%) = 2.12
 * B group - Sig. Dif. (05%) = 2.44
 * A and B group - Sig. Dif. (05%) = 2.06

TABLE 9. INTERCOLLEGIATE MALE ATHLETIC COACHES COMPARED TO PRF NORMS.

Personality Characteristics	PRF Norms		II C 2 - 10 (N = 49)			II D 11 and Over (N = 41)			II C and D (N = 90)	
	Mean	S.D.	Mean	S.D.	t	Mean	S.D.	t	Mean	t
1. Abasement	6.22	2.92	6.80	2.30	-1.39	6.22	1.99	0.00	6.53	-1.01
2. Achievement	12.58	3.73	15.45	2.69	-5.39*	15.10	2.10	-4.32	15.29	-6.89*
3. Affiliation	14.98	3.28	14.76	3.49	0.47	14.83	2.81	.29	14.79	0.55
4. Aggression	7.93	3.78	6.16	3.29	3.28*	5.15	2.82	4.71*	5.70	5.60*
5. Autonomy	8.62	3.12	9.55	3.66	-2.09*	9.29	3.08	-1.37	9.43	-2.46*
6. Change	11.74	3.20	10.69	7.33	2.30*	9.59	3.29	4.30*	10.19	4.60*
7. Cognitive Structure	10.90	3.69	12.06	3.75	-2.20*	11.83	2.98	-1.61	11.96	-2.73*
8. Defence	8.76	3.32	6.86	2.21	4.01*	7.68	2.38	2.08*	7.23	4.73*
9. Dominance	11.07	4.48	11.96	3.29	-1.39	12.54	3.49	-2.10*	12.22	-2.44*
10. Endurance	10.67	3.82	14.10	3.57	-6.29*	14.64	2.64	-6.64*	14.34	-9.12*
11. Exhibition	10.83	3.87	9.92	3.56	1.65	9.85	4.73	1.62	9.89	2.31*
12. Harmavoidance	7.46	4.05	10.51	4.35	-5.27*	10.02	3.46	-4.04*	10.29	-6.63*
13. Impulsivity	9.78	3.49	8.08	4.26	3.41*	8.59	5.68	2.18*	8.31	4.00*
14. Nurturance	12.68	3.37	14.45	3.23	-3.68*	13.73	2.36	-1.99	14.12	-4.06*
15. Order	10.81	4.33	12.16	4.18	-2.18*	11.78	3.55	-1.43	11.99	-2.59*
16. Play	12.13	3.42	10.80	3.52	2.72*	10.15	3.60	3.70*	10.50	4.52*
17. Sentience	15.24	2.87	14.55	4.00	1.68	14.51	3.43	1.63	14.53	2.35*
18. Social Recognition	11.90	3.96	10.88	3.65	1.80	10.88	2.96	1.65	10.88	2.44*
19. Succorance	7.88	3.50	7.27	3.70	1.22	6.85	3.70	1.88	7.08	2.17*
20. Understanding	12.46	3.33	9.98	4.23	5.21*	11.10	3.39	2.61*	10.49	5.61*
21. Infrequency	0.69	1.09	0.49	0.84	1.28	0.66	0.94	.17	.56	1.13
22. Desirability	15.45	2.85	17.39	1.82	-4.76*	17.71	1.95	-5.07*	17.53	-6.93*

* C group - Sig. Dif. (05%) = 2.00
 * D group - Sig. Dif. (05%) = 2.02
 * C and D group - Sig. Dif. (05%) = 1.98

TABLE 10. INTERSCHOLASTIC FEMALE ATHLETIC COACHES COMPARED TO PRF NORMS.

Personality Characteristics	PRF Norms		III E 2-10 N = 34			III F 11 and Over N = 6			III E & F N = 40	
	Mean	S.D.	Mean	S.D.	t	Mean	S.D.	t	Mean	t
1. Abasement	7.27	3.07	6.44	2.11	1.58	5.83	1.17	1.15	6.35	1.88
2. Achievement	12.29	3.41	13.65	2.57	-2.33*	12.83	1.47	-0.39	13.53	-2.30*
3. Affiliation	16.15	3.18	14.32	3.54	3.36*	14.67	4.68	1.14	14.38	3.51*
4. Aggression	5.86	3.23	5.26	3.37	1.08	5.00	4.60	0.65	5.23	1.25
5. Autonomy	7.08	3.43	9.35	2.63	-3.86*	10.33	1.75	-2.32	9.50	-4.46*
6. Change	12.31	3.18	11.82	2.66	0.90	10.67	2.42	1.26	11.65	1.31
7. Cognitive Structure	10.65	3.71	9.71	3.39	1.48	9.17	2.79	-0.98	9.63	1.74
8. Defence	7.30	3.05	6.71	2.60	1.13	6.00	2.37	1.04	6.60	1.45
9. Dominance	8.68	4.28	10.56	4.29	-2.56*	9.67	3.01	-0.57	10.43	-2.58*
10. Endurance	10.11	3.70	11.50	3.47	-2.19*	11.33	2.25	-0.81	11.48	-2.34*
11. Exhibition	9.74	3.92	8.29	3.75	2.16*	8.33	2.73	0.88	8.30	2.32*
12. Harmavoidance	10.27	4.38	10.62	3.76	-0.47	11.83	4.49	-0.87	10.80	0.77
13. Impulsivity	10.30	3.67	11.21	5.54	-1.45	8.50	2.88	1.20	10.80	-0.86
14. Nurturance	15.45	2.97	14.94	3.32	1.00	13.83	2.86	1.34	14.78	1.42
15. Order	10.66	4.38	11.97	4.98	-1.74	12.50	3.89	-1.03	12.05	-2.00
16. Play	12.00	3.36	12.47	2.40	-0.82	12.67	1.37	-0.49	12.50	-0.94
17. Sentience	16.48	2.44	16.50	1.91	-0.05	15.33	3.27	1.54	16.33	0.39
18. Social Recognition	11.32	3.73	10.38	3.07	1.47	10.67	4.23	0.43	10.43	1.51
19. Succorance	11.19	4.23	8.91	3.03	3.14*	7.00	3.22	2.43	8.63	3.82*
20. Understanding	12.78	3.19	10.82	4.26	3.58*	9.33	6.12	2.65*	10.60	4.32*
21. Infrequency	0.53	0.79	0.47	0.75	.44	0.50	0.84	0.09	0.48	0.44
22. Desirability	15.48	2.81	16.74	2.47	-2.61*	16.17	1.17	-0.60	16.65	-2.64*

* E Group - Sig. Dif. (05%) = 2.04
 * F Group - Sig. Dif. (05%) = 2.57
 * E and F Group - Sig. Dif. (05%) = 2.02

from the PRF norms at the .05% level of confidence in 11 of the 22 personality characteristics. (Table 11) The deviations occurred in the traits of achievement, affiliation, aggression, autonomy, cognitive structure, defence, dominance, endurance, nurturance, social recognition, succorance, infrequency and desirability.

Comparisons Between Athletic Coaching Groups as Compared to the PRF Norms

The scores of each athletic coaching group were compared to the Jackson PRF norms established for the general population. Deviations from these norms were then utilized for analyzing the differences between groups. The mean item analysis and discriminate weights were noted in Table 7. The t ratio for significant differences were utilized and applied at the .05 level of confidence.

Interscholastic Male Athletic Coaches Compared to Intercollegiate Male Athletic Coaches. The personality traits of the interscholastic athletic male coaches were very nearly those of the male of the general population. The largest number of significant differences from the norms was comprised by the intercollegiate male athletic coaches.

The interscholastic male athletic subject showed significant deviations in only four variables. The variables of change, exhibition, and understanding were significantly above the norms while harmavoidance was significantly below the mean score.

The intercollegiate male athletic coaches differed significantly on the PRF norms in all but two personality characteristics and one

TABLE 11. INTERCOLLEGIATE FEMALE ATHLETIC COACHES COMPARED TO PRF NORMS.

Personality Characteristics	PRF Norms		IV G 2 - 10 N = 56		t	IV H 11 and Over N = 29		t	IV G & H N = 85	
	Mean	S.D.	Mean	S.D.		Mean	S.D.		Mean	t
1. Abasement	7.27	3.07	7.37	2.55	-0.24	8.00	2.28	-1.28	7.59	-.96
2. Achievement	12.29	3.41	14.41	2.49	-4.65*	13.93	1.67	-2.59	14.25	-5.30*
3. Affiliation	16.15	3.18	14.66	2.91	3.50*	15.72	3.16	0.73	15.02	3.28*
4. Aggression	5.86	3.23	4.45	3.13	3.27*	3.31	1.98	4.26*	4.06	5.14*
5. Autonomy	7.08	3.43	9.32	3.12	-4.88*	9.90	2.35	-4.43*	9.52	-6.56*
6. Change	12.31	3.18	11.79	2.93	1.22	11.48	1.96	1.41	11.68	1.83
7. Cognitive Structure	10.65	3.71	9.86	3.29	1.59	8.86	3.04	2.60*	9.52	2.81*
8. Defence	7.30	3.05	6.36	2.84	2.31*	6.79	3.58	0.90	6.51	2.39*
9. Dominance	8.68	4.28	10.00	3.52	-2.31*	12.83	3.17	-5.23*	10.96	-4.91*
10. Endurance	10.11	3.70	13.32	2.82	-6.49*	13.72	2.49	-5.26*	13.46	-8.35*
11. Exhibition	9.74	3.92	9.68	3.80	0.11	10.79	3.97	-1.44*	10.06	-0.75
12. Harmavoidance	10.27	4.38	9.64	3.63	1.08	11.28	2.25	-1.24	10.20	0.15
13. Impulsivity	10.30	3.67	9.46	4.53	1.71	9.86	3.24	0.65	9.60	1.76
14. Nurturance	15.45	2.97	13.98	2.75	3.70*	15.76	2.59	-0.56	14.59	2.67*
15. Order	10.66	4.38	11.54	3.83	-1.50	11.66	3.67	-1.23	11.58	-1.94
16. Play	12.00	3.36	12.38	2.84	-0.85	11.41	3.49	0.95	12.05	-0.14
17. Sentience	16.48	2.44	16.07	3.13	1.26	17.45	1.68	-2.14*	16.54	-0.23
18. Social Recognition	11.32	3.73	9.82	3.73	3.01*	9.41	3.98	2.76*	9.68	4.05*
19. Succorance	11.19	4.23	7.39	3.14	6.72*	7.24	3.24	5.03*	7.34	8.39*
20. Understanding	12.78	3.19	12.21	4.00	1.34	14.21	2.72	-2.42*	12.89	-0.32
21. Infrequency	0.53	0.79	0.75	1.43	-2.08*	2.66	8.42	-14.53*	1.40	-10.15*
22. Desirability	15.48	2.81	17.45	1.70	-5.24*	17.62	1.57	-4.10*	17.50	-6.63*

* G group - Sig. Dif. (05%) = 2.00
 * H group - Sig. Dif. (05%) = 2.05
 * G and H group - Sig. Dif (05%) = 1.99

validity variable. Their t scores in abasement, affiliation and infrequency paralleled the norms of the general population that was determined by the PRF. The nine variables which showed significant differences above the norm were: aggression, change, defence, exhibition, impulsivity, play, sentience, social recognition, succorance, and understanding. Nine of the remaining norms indicated significant scores far below the norm; achievement, autonomy, cognitive structure, dominance, endurance, harm-avoidance, nurturance, and order. The validity scale of desirability was significantly below the norm although the infrequency scale indicated a near norm value.

Interscholastic Female Athletic Coaches Compared to Intercollegiate Female Athletic Coaches. The interscholastic female athletic coaches were second to the interscholastic male athletic coaches in closeness to the norms. The intercollegiate female athletic coaches indicated a total number of differences second only to the intercollegiate athletic male coaches group.

The interscholastic female athletic coaching subjects were significantly above the norms on the characteristics of affiliation, endurance, exhibition, succorance and understanding. Five of the personality traits: achievement, autonomy, dominance, order and desirability indicated scores significantly higher than the female general population norms.

The intercollegiate female athletic coaches displayed personality traits which were aligned with the intercollegiate male athletic coaches. The scales of affiliation, aggression,

cognitive structure, defence, nurturance, social recognition and succorance indicate significant differences above the norms while the scales of achievement, autonomy, dominance and endurance were far below the normative group. The two validity scales of infrequency and desirability were far below the normative data for the general female population.

Interscholastic Male Athletic Coaches with 2-10 years Coaching Experience Compared to Intercollegiate Male Athletic Coaches with 2-10 years Coaching Experience. The personality traits of the interscholastic male athletic coaches were more closely aligned with the norms than were any other groups. The interscholastic group of 17 coaches with two to 10 years coaching experience showed a significant difference at the .05 level of confidence (2.12) on only two traits - exhibition and understanding.

The intercollegiate group of 49 coaches with two - 10 years experience showed a significant level of deviation (2.00) above the norm on the following variables: aggression, change, defence, and impulsivity. The personality variables of achievement, autonomy, cognitive structure, endurance, harmavoidance and desirability were significantly below the norm.

Interscholastic Male Athletic Coaches with Coaching Experience of 11 years and over Compared to Intercollegiate Male Athletic Coaches with Coaching Experience of 11 Years and Over. The interscholastic male athletic coaches group consisted of seven coaches with more than 11 years coaching experience. This group exceeded a significant difference at the .05 level of confidence (2.44) on

only one characteristic - understanding.

The intercollegiate male athletic coaches group of 41 coaches exceeding 11 years of coaching experience showed a significant level of deviation (2.20) from the norm. The intercollegiate male athletic coaches group was above the norms on aggression, change, defence, impulsivity, play and understanding while being below the norms on achievement, dominance, endurance, harmavoidance and desirability.

Interscholastic Female Athletic Coaches with 2-10 Years Coaching Experience Compared to Intercollegiate Female Athletic Coaches with 2-10 Years Coaching Experience. The interscholastic female athletic coaches differed significantly in nine of the 22 variables. Thirty-four coaches with two to 10 years athletic coaching experience showed a significant difference (2.04) above the norm for the following variables: affiliation, exhibition, succorance, and understanding. The interscholastic female athletic coaching group was significantly below the norms on achievement, autonomy, dominance, endurance and desirability.

The intercollegiate female athletic coaches allied themselves with their intercollegiate male colleagues in that a significant difference was noted on half (12) of the variables. Fifty-six athletic coaches with two to 10 years coaching experience showed a significant difference (2.00) above the norm on the following variables: affiliation, aggression, defence, nurturance, social recognition and succorance. The intercollegiate female athletic coaches scored below the norm for achievement, autonomy, dominance,

endurance, infrequency and desirability.

Interscholastic Female Athletic Coaches with Coaching Experience of 11 Years and Over Compared to Intercollegiate Female Athletic Coaches with Coaching Experience of 11 Years and Over. Six interscholastic female athletic coaches with over 11 years coaching experience showed a significant difference (2.57) in only one of the 22 variables. This one deviation was understanding.

Twenty-nine intercollegiate female athletic coaches with over 11 years coaching experience showed a significant difference (2.05) above the norm for aggression, cognitive structure, social recognition and succorance. A significant difference below the norm occurred for achievement, autonomy, dominance, endurance, sentience, understanding, infrequency and desirability.

Comparisons Within the Athletic Coaching Groups as Compared to the PRF Norms

The original athletic coaching groups were four. To analyze the data within the athletic coaching groups a subdivision was made within each group. These groups were: male interscholastic athletic coaches with two to 10 years coaching experience (IA), male interscholastic athletic coach with over 11 years coaching experience (IB); male intercollegiate athletic coach with two to 10 years athletic coaching experience (II C), male intercollegiate athletic coaches with over 11 years coaching experience (II D); female interscholastic athletic coach with two to 10 years coaching experience (III E), female interscholastic athletic coach with

over 11 years athletic coaching experience (III F); female intercollegiate athletic coach with two to 10 years athletic coaching experience (IV G), female intercollegiate athletic coach with over 11 years athletic coaching experience (IV H). The norms considered in this analysis were the standardized means and deviations of the Jackson Personality data. The t ratio for significant differences was utilized and applied at the .05 level of confidence.

Interscholastic Male Athletic Coaches (2-10 years coaching experience) compared to Interscholastic Male Athletic Coaches (11 years or more Coaching Experience). The personality traits of the interscholastic male coach was closely aligned to the norm as noted in Table 8. Seventeen coaches with two to 10 years coaching experience showed a significant difference at the .05 level of confidence (2.12) on only two traits - exhibition and understanding. Seven coaches with more than 11 years coaching experience exceeded significant difference at the .05 level of confidence (2.44) on only one characteristic - understanding. The two combined coaching groups achieved significant differences at the .05 level of confidence (2.06) on four of the 22 characteristics-change, exhibition, harm-avoidance and understanding with harmavoidance being the only characteristic significantly below the norm.

Intercollegiate Male Athletic Coaches (2-10 years coaching experience) compared to Intercollegiate Male Athletic Coaches (11 years or more coaching experience). The intercollegiate male athletic coaches differed significantly in all but three of the 22 variables. (Table 9) Forty-nine coaches with two to 10 years

experience showed a significant level (2.00) of deviation above the norm on the following variables: aggression, change, defence, and impulsivity. These coaches were below the norm for achievement, autonomy, cognitive structure, endurance, harmavoidance, and desirability. Forty-one coaches exceeding 11 years of coaching experience showed a significant level (2.02) of deviation above the norms in aggression, change, defence, impulsivity, play, and understanding. These intercollegiate athletic male coaches were below the norm for achievement, dominance, endurance, harmavoidance, and desirability. The combined groups reached a significant difference (1.98) on 19 of the 22 variables. These athletic coaches were above the norm for aggression, change, defence, exhibition, impulsivity, play, sentience, social recognition, succorance and understanding. They were below the norms for achievement, autonomy, cognitive structure, dominance, endurance, harmavoidance, nurturance, order and desirability.

Interscholastic Female Athletic Coaches (2-10 years coaching experience) compared to Interscholastic Female Athletic Coaches (11 years or more coaching experience). The interscholastic female athletic coaches differed significantly in nine of the 22 variables. (Table 10) Thirty-four coaches with two to 10 years coaching experience exceeded the significant difference (2.04) above the norm for the following variables: affiliation, exhibition, succorance, and understanding. The following five traits were below the norms for the interscholastic female athletic coach: achievement,

autonomy, dominance, endurance, and desirability. Six coaches with over 11 years coaching experience showed a significant difference (2.57) for only one of the 22 variables - understanding. The combined coaching groups of interscholastic female athletic coaches reached a significant difference (2.02) on nine of the 22 variables. Variables above the norm were: affiliation, endurance, exhibition, succorance and understanding. Variables below the norm were: achievement, autonomy, dominance and desirability.

Intercollegiate Female Athletic Coaches (two-10 years coaching experience) compared to Intercollegiate Female Athletic Coaches (11 years or more coaching experience). The intercollegiate female athletic coaches allied themselves with their college male colleagues in that a significant difference was noted for over half (15) of the variables. (Table 11) Fifty-six coaches with two to 10 years coaching experience showed a significant difference (2.00) above the norm for affiliation, aggression, defendence, nurturance, social recognition, and succorance. Significant below the norms were the variables of achievement, autonomy, dominance, endurance, infrequency and desirability. Twenty-nine coaches with over 11 years coaching experience showed a significant difference (2.05) above the norms for aggression, cognitive structure, social recognition, and succorance. Significantly below the norms were the variables of achievement, autonomy, dominance, endurance, sentience, understanding, infrequency and desirability. The combined coaching groups of intercollegiate female athletic coaches showed a significant difference (1.99) above the norms for affiliation, aggression,

cognitive structure, dependence, dominance, nurturance, social recognition and succorance. Significantly below the norms were the variables of achievement, autonomy, endurance, infrequency and desirability.

Summary

The results of this study indicated that specific personality traits were indigenous to the athletic coaching field. Significant differences existed between athletic coaches and the norms established for the general population as noted in the PRF study. A significant difference also existed between interscholastic and intercollegiate athletic coaches.

Personality Assessment of Individual Coaching Groups

The study indicates that athletic coaches, male and female, possess various personality characteristics which differ from the characteristics of the general population. While not all athletic coaching groups differed on the same personality traits many deviations as well as similarities were evident. (Table 12)

Male Interscholastic Athletic Coaches. The male interscholastic athletic coaches were closely aligned with the traits of the general population as determined by the Jackson PRF. They shared with collegiate counterparts a desire for new experiences (change), and were not hesitant in taking physical risk (harmavoidance). Interscholastic coach's personality traits were similar to the intercollegiate coaches and the female interscholastic coaches in their

TABLE 12. ATHLETIC COACHING GROUPS PERSONALITY ASSESSMENT (SIGNIFICANT DIFFERENCES FROM THE NORMS).

Personality Characteristics	PRF Norms Males		H.S. Males			College Males			H.S. Females			College Females			PRF Norms Female	
	Mean	S.D.	I A	I B	I A&B	II C	II D	II C&D	III E	III F	III E&F	IV G	IV H	G & H	Mean	S.D.
1. Abasement	6.22	2.92													7.27	3.07
2. Achievement	12.58	3.73				-5.39	-4.32	-6.89	-2.33		-2.30	-4.65	-2.59	-5.30	12.29	3.41
3. Affiliation	14.98	3.28							3.36		3.51	3.50		3.28	16.15	3.18
4. Aggression	7.93	3.78				3.28	4.71	5.60				3.27	4.26	5.14	5.86	3.23
5. Autonomy	8.62	3.12				-2.09		-2.46	-3.86		-4.46	-4.88	-4.43	-6.56	7.08	3.43
6. Change	11.74	3.20				2.30	4.30	4.60							12.31	3.18
7. Cognitive Structure	10.90	3.69			2.08	-2.20		-2.73					2.60	2.81	10.65	3.71
8. Defence	8.76	3.32				4.01	2.08	4.73						2.39	7.30	3.05
9. Dominance	11.07	4.48					-2.10	-2.44	-2.56		-2.58	-2.31	-5.23	-4.91	8.68	4.28
10. Endurance	10.67	3.82				-6.29	-6.64	-9.12	-2.19		-2.34	-2.31	-5.26	-8.35	10.11	3.70
11. Exhibition	10.83	3.87	2.32					2.31	2.16		2.32	-6.49			9.74	3.92
12. Harmavoidance	7.46	4.05			2.17	-5.27	-4.04	-6.63							10.27	4.38
13. Impulsivity	9.78	3.49			-2.56	3.41	2.18	4.00							10.30	3.67
14. Nurturance	12.68	3.37				-3.68		-4.06				-3.70		-2.67	15.45	2.97
15. Order	10.81	4.33				-2.18		-2.59							10.66	4.38
16. Play	12.13	3.42				2.72	3.70	4.52							12.00	3.36
17. Sentience	15.24	2.87						2.35					-2.14		16.48	2.44
18. Social Recognition	11.90	3.96						2.44				3.01	2.76	4.05	11.32	3.73
19. Succorance	7.88	3.50						2.17	3.14		3.82	6.72	5.03	8.39	11.19	4.23
20. Understanding	12.46	3.33	2.29	2.75	3.37	5.21	2.61	5.61	3.58	2.65	4.32		-2.42		12.78	3.19
21. Infrequency	0.69	1.09										-2.08	-14.53	-10.15	0.53	0.79
22. Desirability	15.45	2.85				-4.76	-5.07	-6.93	-2.61		-2.64	-5.24	-4.10	-6.63	15.48	2.81

strong desires for intellectual pursuits of knowledge and to work in a logical manner (understanding).

The coaches with two to ten years experience were found to be desirous of personal attention and needed to be the center of attention (exhibition). Those coaches with extended experience did not indicate a need for special attention nor did they shun it. The coaches with more than 11 years experience differed from the PRF norms on only one trait which was their quest for knowledge.

Male Intercollegiate Athletic Coach. The male intercollegiate athletic coaches appeared to have unique personality characteristics quite unlike the general population or the two interscholastic groups. These coaches tended to be changeable and to make spur of the moment decisions. Ambiguity and uncertainty did not seem to bother them. They enjoyed a variety of activities and tended to seek new experiences without undo concern for avoiding risks. They were not overly concerned with the accomplishments of difficult tasks and did not like to work long tedious hours to solve a problem. They enjoyed recreational activities and tended to approach life in an "easy going", amusing manner. As with the interscholastic male and female coaches, intercollegiate male coaches were interested in many areas and wanted to pursue intellectual knowledge in them.

The results of the study indicated differences between the coach of two to 10 years experience and the coach with over 11 years experience. The younger coach appeared to accept restrictions; made quick decisions not readily based upon definite knowledge; was not

domineering; was restricted in the ability to help others and was not deliberate or methodical concerning personal schedules. The coach with experience of 11 years or more was more self-reliant, explicit in actions, less assertive, more solicitous of others and more organized and disciplined.

Female Interscholastic Athletic Coach. The female interscholastic coach was not as closely aligned to the norms as her male counterpart but appeared to have more in common with the normative group than the intercollegiate coaches. The female athletic coach with limited experience of two to 10 years was less ambitious and competitive; was cooperative and gregarious; tended to accept restraints; was less assertive and persevering; tended to be overly dramatic and to engage in behavior which would win the notice of others; needed reassurance and supportive advice; and had a logical and probing intellect. The female of 11 years or more experience differed from the norm only in that she was more reflective, incisive and sought to understand many areas of knowledge.

Female Intercollegiate Athletic Coaches. The female intercollegiate athletic coach had comparable deviations to her male counterpart when compared to the norms. The younger group of coaches with two to 10 years coaching experience appeared to be limited in ambition; were genial and sociable; could be blunt and aggressive; accepted restrictions; could be assertive and do well in supervisory roles. She was not always patient with daily routine but would be ready to perform favors for others. She was overly

demonstrative and tended to display conspicuous behavior. These coaches were found to desire personal recognition and frequently needed reassurance from others. The more experienced female athletic coach of 11 years or more was less competitive although she could be blunt and aggressive. The experienced group was less independent; made decisions based upon definite knowledge and was less assertive. She was concerned about opinions of colleagues and requested their advice frequently.

Male Athletic Coaches Compared to Female Athletic Coaches.

The male athletic coach deviated from the norms on more personality traits than did the female athletic coaches. (Table 12) The male athletic coach noted 18 deviations, with nine above and nine below the norms. The female athletic coach deviated on 15 traits and were above the norms on nine of them.

Both groups were significantly above their respective norms in aggression, defence, exhibition, social recognition, and understanding. Both groups were below their respective norms in achievement, autonomy, dominance, endurance and desirability.

The female athletic coaches deviated from the male athletic coaches in their need for affiliation with others and a need for succorance. These coaches tended to be organized and were able to respond in a plausible manner as demonstrated by their deviation in the area of infrequency.

The male athletic coach was found to be less organized and less concerned with tidiness than the female athletic coach. He

appeared to enjoy new experiences and challenges (change); tended to make "spur of the moment" decisions (impulsivity) and enjoyed doing things just for fun (play). Taking bodily risk was not a deterrent to his seeking of exciting activities (harmavoidance). The male athletic coach also scored high in sensory awareness (sentience).

The two groups were at opposite extremes on only one trait, which was nurturance. The female athletic coach demonstrated a personality trait which would be sympathetic, protecting and supportive. The male athletic coach appeared to shun this trait.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study analyzed the personality characteristics of selected men and women interscholastic and intercollegiate athletic coaches in Oregon and California to determine if unique personality characteristics existed within these coaching groups. The procedures of acquiring and analyzing the data were:

1. The hypotheses for study were formulated.
2. The Jackson Personality Research Form was investigated and adapted for use in the study.
3. A personal inventory was designed to acquire vital information not obtained on the Jackson Personality Research Form.
4. Four hundred subjects responded to inquiries of participation of which 239 returned the materials and were the sample in the study.
5. Groups were designed according to sex, level of coaching, and number of years in coaching.
6. A multiple discriminant analysis procedure was employed for the statistical treatment of the data.
7. The analyses of data were presented and findings of the investigation were graphically illustrated and discussed.

CONCLUSIONS

Evidence from the study confirmed findings reported in the literature concerning athletic coaching personalities. The design of the specific personality characteristics as related to the coaching personality were organized into units of conceptual groupings. The following conclusions include the personality characteristics of the athletic coaching groups relative to their respective conceptual groupings. (Appendix G)

Measures of Impulse, expression and Control. The four groups of athletic coaches were low on change which indicated that all the athletic coaches in this study appeared to be stable, reliable, durable and persevering. A low score on impulse would suggest a person who is careful, prudent and discreet which was how all but the female interscholastic athletic coach fared. In contrast to impulse and change, the traits of harmavoidance, order and cognitive structure denote an individual who is systematic, definitive and vigilant. A high scoring combination of harmavoidance, order and cognitive structure as opposed to low scores of impulse and change are desirable characteristics for persons in the coaching profession. (39) (43) All coaches with the exception of the collegiate females were high in harmavoidance with this group being only slightly low. The interscholastic athletic male coaches were the only group low on order, and on the scale of cognitive structure the male intercollegiate athletic coach was the only group which scored high above the mean.

Measures of Orientation Toward Work and Play. The higher mean of all four groups of athletic coaches on achievement indicated that coaches respond positively to competitive tasks and are resourceful in their work efforts to attain excellence. The description of endurance suggests an individual who is energetic, steadfast and unrelenting in his work habits with a willingness to work long hours. Again, all coaches were above the population sample when compared on the endurance scale.

An individual who scored high on the play scale would appear to be fun-loving, light-hearted and have an easy-going attitude toward life. Three of the athletic coaching groups placed with the population sample and the intercollegiate male coach was significantly low, perhaps indicating that the male collegiate coach appears to have a more thoughtful and earnest outlook toward life when compared to his colleagues.

Measures of Orientation Towards Direction from Other People. Attaining a higher mean in succorance indicated that athletic coaches need constant reassurance from other individuals and feel insecure without continual support and advice. Only the interscholastic male athletic coaches appeared to be self-sufficient and without need for constant reassurance.

All of the athletic coaches except the interscholastic male athletic coach scored low on autonomy, which indicated a conforming, dependent and non-rebellious individual. Persons low in autonomy would probably be high in succorance as was the case, with the exception of the male interscholastic group.

Measures of Intellectual and Aesthetic Orientations. All but the intercollegiate female coaches possessed a mean well above the norm on understanding. This trait indicated that most coaches in this study apparently were concerned with development of an intellectual curiosity.

The lower mean scored by two groups on sentience might indicate a lack of perception and responsiveness to their environment. The intercollegiate male was only slightly more observant and sensitive to his physical surroundings than the other coaches.

Measures of Degree of Ascendancy. The higher mean on dominance suggests a type of individual who enjoys a leadership role and a need to persuade or direct other people. None of the athletic coaches were high on this trait.

Abasement in contrast to dominance indicates an individual who may be deferential, overly meek and who accepts blame and criticism even when not deserved. All athletic coaches were close to the average person on this trait.

Measures of Degree and Quality of Interpersonal Orientation. The interscholastic athletic coaches were close to the norms on nurturance. The intercollegiate female athletic coach scored significantly above the norm and the intercollegiate male was well below the norm.

On the scale of social recognition the interscholastic coaches were close to the norms. Both intercollegiate groups placed significantly higher. Being above the mean on affiliation and

nurturance may suggest that the coaches in this study enjoyed making friends and were willing to offer a "helping hand" to others.

Exhibition denotes a person who enjoys being the center of attraction, having an audience and being dramatic or witty. With the exception of the female athletic intercollegiate coaches, all of the athletic coaches scored well above the norm on this trait. In social recognition, only the women athletic coaches appeared to be concerned with the opinions of them by others.

Aggression describes the individual who enjoys combat and argument. The individual may be quarrelsome, irritable, hostile or belligerent. The intercollegiate athletic coaches were significantly above the norm in the aggressive trait, whereas the interscholastic coaches paralleled the norms.

Measures of Test-Taking Attitudes and Validity. The lower t scores on desirability for all groups suggest that the coaches may be dissatisfied with their overall personality. One group, the intercollegiate female athletic coach had extremely low t scores on infrequency. On the infrequency scale a majority of coaches were noted to have responded in a plausible manner with no apparent difficulty in comprehending or lack of order in recording.

SUMMARY

The following conclusions were derived from the study:

1. The male athletic coach was found to differ significantly from the Jackson Personality Research norms on all but three of

the personality traits. The null hypothesis which stated that no significant difference exists between the personality traits of male athletic coaches when compared to the personality norms established for men was rejected.

2. The female athletic coach was found to differ significantly from the Jackson Personality Research norms on all but six of the traits. The null hypothesis which stated that no significant difference between the personality traits of female athletic coaches when compared to the personality norms established for women was rejected.

3. The male interscholastic coach demonstrated four personality characteristics which were significantly different from the norms of the general population as determined by the Jackson Personality Research norms. These characteristics, in themselves, were not sufficient to substantiate a significant difference in personality between this group and the previously tested male general population. The null hypothesis that stated no significant difference exists among male interscholastic athletic coaches personality traits and the personality norms established for men was accepted.

4. The male intercollegiate coach was found to exhibit personality traits which differed from the Jackson Personality Research norms on all but two items. The conformity within this group lend support to the concept that these individuals possess unique personality characteristics. The null hypothesis which stated no significant difference exists among male intercollegiate athletic

coaches personality traits and the personality norms established for men was rejected.

5. The female interscholastic coaches were found to differ significantly in ten personality traits from the female general population used in the Jackson Personality Research Form. The degree and nature of differences were found to be supportive of the concept that these coaches had a unique personality when compared to the general population females. The null hypothesis which states that no significant difference exists among female interscholastic athletic coaches personality traits and the personality norms established for women was rejected.

6. The female intercollegiate athletic coach was closely aligned with her male counterpart and differed from the Jackson Personality Research norms on 13 characteristics. The study results tend to indicate that these female athletic coaches do have a specific personality which is unique to their group. The null hypothesis which stated that no significant difference exists among female intercollegiate athletic coaches personality traits and the personality norms established for women was rejected.

7. A significant contrast was found to exist in the personality traits of the male interscholastic and the male intercollegiate athletic coaches. The male interscholastic coaches aligned themselves with the normative sample whereas the intercollegiate coaches were separate entities unto themselves. Agreement between the two groups was noted in only three of the 22 characteristics. The null

hypothesis which stated that no significant difference exists between the personality scores of interscholastic male athletic coaches and the personality traits of intercollegiate male athletic coaches when compared to the personality norms established for men was rejected.

8. The interscholastic female and intercollegiate female athletic coaches were similar in their personality traits. Both groups deviated from the norms established by the Jackson Personality Research Form for the normative group on at least half of the characteristics. They were basically in agreement on the specific traits in which they deviated. The null hypothesis which stated that no significant difference exists between the personality scores of interscholastic female athletic coaches and the personality traits of intercollegiate female athletic coaches when compared to the personality norms established for women was rejected.

Recommendations

This study indicated that coaches do have unique personality characteristics different from the traits of the general population. These characteristics may have extensive ramifications in dealing with athletes and in conducting athletic programs. Additional research needs to be undertaken in the following areas:

1. The athletic coach plays an integral role in an athlete's life. The desirability and extent of the influences exerted by the athletic coach on the athlete need to be thoroughly examined and the results carefully analyzed.

2. The results of the PRF indicate an unique personality for the interscholastic as well as for the intercollegiate athletic coaches. Testing instruments need to be established to identify those who are potential interscholastic and intercollegiate athletic coaches.

3. The female athletic coach is a relative newcomer to the athletic coaching field. Many facets of the female athletic coaches' personality need to be researched. While the female athletic coach showed a distinct personality, the role that society plays in the development of her personality needs to be explored since the societal role influences the development of personality traits needed to become a successful athletic coach.

5. Because of the development of expanded athletic programs and the resulting increased need for both male and female athletic coaches, this study investigated the personality traits of both men and women athletic coaches. As a result the question arises that perhaps all athletic coaches possess the same personality traits. This study did not explore the influence of specific types of athletic activities such as individual or team events on the need for specific personality traits for specialized athletic events.

6. This study noted some definite personality differences between coaches of limited experience and those with more than 11 years experience. Additional research is needed to determine the affect of experience on the personality traits of athletic coaches.

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APPENDICES

APPENDIX A

Letter of Inquiry

Dear Athletic Program Coordinator:

During the past few months research concerning personality characteristics of coaches in California and Oregon has been conducted.

To make the study feasible the cooperation of male and female coaches is needed. Enclosed you will find the instruments developed for the study.

I would be most appreciative if you would relinquish a few moments of your time to ask any of the men and women on your staff if they would be interested in participating in the study.

Enclosed you will find a self-addressed stamped post card with which you will be able to record the number of coaches on your staff interested in participating and return this information to me with a minimal amount of effort.

If there are members of your staff interested in the study, I will then send to you the instruments to be used in the study again, I ask your indulgence in distribution of these tests.

Thank you for your time and effort.

Sincerely,

Approved: Dr. Robert Bergstrom
Graduate Advisor

Oregon State University

APPENDIX B

Self-Addressed Post Card

The number of coaches on our staff willing to
participate in your study are _____ in number.

_____ Name of High School or College

_____ City

_____ State

Athletic Coordinator's Name _____

APPENDIX C

Letter of Information

DIVISION OF HEALTH AND PHYSICAL EDUCATION
OREGON STATE UNIVERSITY
CORVALLIS, OREGON

Dear Coach:

During the past few months research concerning personality characteristics of coaches in California and Oregon has been conducted.

To make the study feasible the cooperation of male and female coaches is needed. Enclosed you will find the instruments developed for the study.

I am aware that the spring of the year is always hectic and busy for you, but I would be most appreciative if you would relinquish one hour of your time to complete the enclosed material.

As you will note, it is not necessary to place your name on the questionnaire or the Personality Research Form (unless you wish the results of the study).

Please return the completed material in the enclosed, self-addressed envelope by the second week of June, if possible. Further note that there is no return address on the manila envelope so that once the material is removed from the packet the researcher will have no indication who has returned the information. This was done in an attempt to provide anonymity if you so wish it.

Thank you for your cooperation and time.

Sincerely,

(Mrs.) F. "Sandy" Neeley
Assistant Professor of Physical Education
OREGON COLLEGE OF EDUCATION

FSN:dg

Approved: Dr. Robert Bergstrom
Oregon State University

APPENDIX D

Jackson Personality Research Form

PERSONALITY
RESEARCH
FORM
FORM BB



DIRECTIONS

On the following pages you will find a series of statements which a person might use to describe himself. Read each statement and decide whether or not it describes you. Then indicate your answer on the separate answer sheet.

If you agree with a statement or decide that it does describe you, answer TRUE. If you disagree with a statement or feel that it is not descriptive of you, answer FALSE.

In marking your answers on the answer sheet, be sure that the number of the statement you have just read is the same as the number on the answer sheet.

Answer every statement either true or false, even if you are not completely sure of your answer.



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1. When someone bumps into me in a crowd, I usually say "I'm sorry."
2. As a child I worked a long time for some of the things I earned.
3. Often I would rather be alone than with a group of friends.
4. I have been known to fly into a rage if things didn't go as I had planned.
5. I would rather submit to any demand of my neighbors than move to a lonely place.
6. For the most part, I am very receptive to new ideas of any type.
7. When I talk to a doctor, I would rather just have him tell me what to do than go into details of my problem.
8. I either ignore or agree with people who correct me rather than argue.
9. I would like to be an executive with power over others.
10. If I run into great difficulties on a project, I usually stop work rather than trying to solve the problem.
11. I seldom feel shy when I am the center of attention.
12. Thrill rides at amusement parks seem a little tame to me.
13. I have, at times, hurt someone unintentionally because I didn't think before speaking.
14. I think helping others is a waste of time.
15. I am careful to select clothes to wear that look well together.
16. I don't waste my time on foolish games of skill.
17. I enjoy the feel of cool, smooth sheets on my bed.
18. I must admit that I consider how others will evaluate my actions before I do something.
19. I don't like to be waited on.
20. I care very little about progress being made in space technology.
21. My picture has been on the cover of a national news magazine a number of times in the last year.
22. I usually use good judgment.
23. I would never deliberately call attention to any of my weaknesses.
24. The many extra hours of work needed to do a job perfectly are simply not worth the effort.
25. If a person does a favor for me, I like to do something in return.
26. I rarely swear.
27. I like to be on my own in most matters.
28. Every time I go out to eat, I like to go to the same restaurant.
29. I often try to predict what will happen in the future from my own past experiences.
30. I am ready to protect myself when someone picks on me.
31. I feel uneasy when I have to tell people what to do.
32. If I know that I must have a job finished in a short time, I work straight through on it until it is done.
33. I am much too bashful to play mischievous tricks.
34. I think it is foolish to accept a dare if doing so might cause an accident.
35. Emotion seldom causes me to act impulsively.
36. Showing people I am interested in their troubles is very important to me.
37. Even if I made a shopping list, I would probably just lose it.
38. I like to be entertained.
39. When I am indoors I rarely notice the sound of rain.
40. I'm not concerned about my reputation.
41. It is important to me to know that others care how I feel.
42. When I was a child, I loved to explore.
43. Sometimes I see cars near my home.
44. I tend to be a very nervous, irritable person.
45. I have often let others take credit for something I have done rather than be impolite about it.
46. Even when people do not see what I do, I try to do things at a level of perfection.
47. I think that fame is more rewarding than friendship.
48. When I am irritated, I let it be known.
49. If I face a crisis, I immediately look for help.
50. I have a tendency to get bored unless I can find new ways of doing routine jobs.
51. Uncertainty in a situation doesn't bother me.
52. I don't mind having my mistakes pointed out to me at times when other people can hear.
53. The ability to be a leader is very important to me.
54. I often give up in the middle of a project.
55. I am never one to sit on the sidelines at a party.
56. I like to live dangerously.
57. I get a kick out of doing something just "for the heck of it."
58. I think children are a nuisance because they require so much care.
59. If I have to pack a suitcase, I usually organize it very well.
60. I don't really enjoy going out in the evening.
61. Listening to music gives me great pleasure.
62. When I am dressing for a party, I look for something that will be liked by other guests.
63. It doesn't depress me to realize that no one is thinking about me.

64. I think it does no ~~good~~ to concentrate on abstract problems.
65. I have never had ~~any~~ hair on my head.
66. I am glad I grew ~~up~~ the way I did.
67. I don't like being ~~an~~ errand boy for others, even my friends.
68. I am sure people ~~seldom~~ think of me as a hard worker.
69. When I meet ~~old~~ acquaintances, I usually give them a very warm ~~welcome~~.
70. When I bump ~~into~~ a piece of furniture, I don't usually get angry.
71. I believe that being ~~able~~ to stand alone is a true sign of greatness.
72. I seldom like a ~~piece~~ of music when I hear it for the first time.
73. In general, I feel ~~that~~ people should be more definite and decisive.
74. Even when I can't ~~convince~~ others that my opinions are best, I can ~~always~~ justify them to myself.
75. I would rather ~~follow~~ than lead.
76. I have occasionally ~~spent~~ hours looking for something that I ~~needed~~ to have to complete a project.
77. People think I am ~~quite~~ shy.
78. I get worried just ~~watching~~ a trapeze artist so I would never ~~actually~~ want to try it myself.
79. I am careful to ~~consider~~ all pros and cons before taking action.
80. If someone is ~~lonely~~, I spend some time trying to cheer him up.
81. Having dirty hands ~~doesn't~~ bother me too much.
82. I often do ~~something~~ for no reason at all except that it sounds like it might be fun.
83. To me, there is ~~nothing~~ beautiful about falling leaves.
84. What others think of my work ~~doesn't~~ matter to me.
85. I usually try to ~~share~~ my burdens with someone who can help me.
86. Sometimes I like ~~to~~ consider concepts even though they may be of ~~no~~ practical consequence.
87. I have never ~~bought~~ anything in a store.
88. I have never ~~been~~ really happy.
89. I remember my ~~failures~~ more easily than my successes.
90. I hate to do a ~~job~~ half-heartedly.
91. I don't spend ~~much~~ of my time talking with the people I see ~~every~~ day.
92. Sometimes I feel like smashing things.
93. I think that ~~most~~ men should seek help and guidance in all that ~~they~~ do.
94. I'm horrified at ~~the~~ dull lives some people lead.
95. My work is organized loosely, if at all, and therefore it is adjustable.
96. It is usually quite easy for me to admit I am wrong.
97. In an argument, I can usually win others over to my side.
98. I can never stick to anything very long.
99. At a party I enjoy entertaining others.
100. I think it would be fun to be a test pilot for experimental jet planes.
101. My thoughts often get ahead of me.
102. I don't like it when friends ask to borrow my possessions.
103. When writing something, I keep my pencils sharpened.
104. I rarely waste my time merely amusing myself.
105. The sound of a rushing stream seems almost musical to me.
106. I am quite interested in having a good public image.
107. As a child, I disliked having to be dependent on other people.
108. I tend to shy away from intellectual discussions.
109. I usually prefer to have meat cooked before eating it.
110. Doing something that would benefit humanity appeals to me.
111. I try to avoid being blamed when things go wrong.
112. I don't stick to goals which prove hard to reach.
113. Having friends is very important to me.
114. If someone has a better job than I, I don't feel envious.
115. When I was in school, I preferred to do all my work by myself.
116. I like to return to the same vacation spot year after year.
117. When someone gives me street directions I usually ask several questions and repeat the directions to make sure I have everything clearly in mind.
118. When people say insulting things about me, I usually get back at them by pointing out their faults.
119. I don't like to have responsibility for directing the work of others.
120. I don't ~~shy~~ away from a task just because it will require me to work late into the night.
121. I don't like to be the topic of conversation even among a group of old friends.
122. I would never travel alone in another country for fear that something might happen to me.
123. I am considered rather reserved in thought and action.
124. I find satisfaction in giving sympathy to someone who is ill.
125. I always have to hunt for anything when I need it.

126. At times I get fascinated by some unimportant game and play it for hours.
127. Unless a noise startles me, I don't notice it.
128. I don't put much stock in what other people say about me.
129. I like to ask other people's opinions concerning my problems.
130. I am usually eager to find a new approach to an old problem.
131. I have never felt sad.
132. Sometimes I am afraid of my friends, although I can't say why.
133. One of my good points is that I never mind when others make fun of me.
134. If I had to make a choice, I would prefer to do a job that was very hard for me, rather than one that was very easy.
135. I don't care whether or not the people around me are my friends.
136. If someone does something I don't like, I usually tell him about it.
137. I would feel lost and lonely roaming around the world alone.
138. I would not like to work at the same job all of my life.
139. I don't mind being around people who change their minds often.
140. I enjoy playing question and answer games even if I am not very good at getting the answers.
141. I am quite effective in getting others to agree with me.
142. I don't have enough patience to do work that must be very accurate.
143. I was one of the loudest and liveliest children in my neighborhood.
144. The excitement of fighting forest fires would be worth the discomfort.
145. When I go to the store, I often come home with things I had not intended to buy.
146. To me, it seems foolish to try to solve another fellow's problems.
147. I have a plan for most things that I do.
148. I very seldom take the time to go to parties.
149. The smell of pine trees refreshes me greatly.
150. I usually try to take the course of action which is most likely to merit public approval.
151. I keep my problems to myself.
152. We have enough to think about without attempting to predict the future.
153. Some of my brain is missing.
154. I have never been an unusually weak or sickly person.
155. I dislike being criticized by younger people.
156. I seldom set standards which are difficult for me to attain.
157. People consider me to be warm and friendly.
158. I would never start a fight with someone.
159. People who try to regulate my conduct with rules are a bother.
160. My life is pretty much the same from year to year.
161. I don't like to start a project until a decision has been made as to the best way to proceed.
162. I am on guard against people who might try to make a big thing of my mistakes.
163. I am often reluctant to express my ideas publicly for fear that they might be criticized.
164. Even when I am feeling quite ill, I will continue working if it is important.
165. I could never be a popular singer because I am too shy.
166. I would not take an ocean voyage except on a large, safe ship.
167. Life is a serious matter which should be lived with caution and a cool head.
168. I would be an incomplete human being if I did not make every effort to help my fellow man.
169. My important papers are scattered in several places.
170. I think it's enjoyable to have a big celebration even for small events.
171. I rarely notice whether a woman has perfume on.
172. I don't care whether people compliment me or not.
173. I prefer to face misfortune with a friend at my side.
174. I often try to comprehend the marvellous balance of nature.
175. Things with sugar in them usually taste sweet to me.
176. I am afraid to speak to a friend who has not spoken to me first.
177. I don't mind being considered unimportant.
178. I enjoy hard work.
179. I am not considered sociable.
180. I never allow an attack on my honor to go unpunished.
181. I find that I can think better when I have the advice of others.
182. I like to see changes being made even though they don't always turn out for the best.
183. I can feel comfortable even when I have a number of questions in mind for which I have no good answer.
184. If someone made a nasty comment about me or my family I wouldn't really know what to say or do.
185. If I were a salesman, I would probably convince most people to buy what I was selling.
186. I can't keep my mind on a problem for very long without getting bored.
187. When I am in a crowd, I want others to see and notice me.

188. Sometimes I take up a sport or hobby just because there is a certain amount of danger or excitement involved in it.
189. Sometimes I get several projects started at once because I don't think ahead.
190. I think giving sympathy to people does them more harm than good.
191. Working in a room which is disorderly is very difficult for me.
192. I never play jokes on people, and prefer not to have jokes played on me.
193. I like to feel a breeze blowing through my hair.
194. I am most proud of those of my accomplishments which are recognized by others.
195. The person I marry won't have to spend much time taking care of me.
196. I seldom read extensively on any one subject.
197. I usually drink from a glass or cup.
198. I try to consider all sides of an issue before I form an opinion.
199. If someone accidentally burned me with his cigarette I would certainly mention it to him.
200. I am not working toward any specific goal.
201. I think that a person must know how to get along well with others before he can be a success.
202. I avoid quarreling with others.
203. When I work alone I frequently do a better job than when I must work with others.
204. I would rather repeat an experience that I know is fun than experiment with a new one.
205. Once I begin to solve a puzzle or problem I have a hard time concentrating on anything else until I find the answer.
206. I seldom let a critical comment pass without saying something in my own defense.
207. When I go somewhere with another person, I let him do most of the talking.
208. Often I continue to work on a task after everyone else has given up.
209. I try to be inconspicuous.
210. I don't like to go near trucks carrying explosive materials.
211. If I want to buy something, I make certain that it will be just what I want before purchasing it.
212. I like pictures of babies because they are always so cute.
213. I often have a hard time finding what I want among my belongings.
214. One of my greatest incentives to work is the promise of a good time when I am through.
215. I seldom notice how objects feel when I touch them.
216. I make few attempts to give people a favorable impression of me.
217. As a child, if I imagined frightening things, I ran to my mother for comfort.
218. I would enjoy being a scientist who was studying the effects of the sun on our earth.
219. I have never talked with anyone by telephone.
220. I am not living what I would consider to be the right kind of life.
221. I don't try to protect myself from the bullying of others, because I don't think it makes any difference.
222. People should be more involved with their work.
223. I seldom put out extra effort to make friends.
224. Sometimes I just want to hit someone.
225. I like to have specific directions before I do something.
226. If I had the chance, I would like to move to a different part of the country every few years.
227. I often start work on something when I have only a very hazy idea of what the end result will be.
228. I don't mind answering personal questions for surveys or questionnaires.
229. I would like to participate in making laws.
230. When I get to a hard place in my work I usually stop and go back to it later.
231. I like to give speeches.
232. Parachute-jumping is a hobby that appeals to me.
233. I often say the first thing that comes into my head.
234. I avoid doing too many favors for people because it would seem as if I were trying to buy friendship.
235. "A place for everything and everything in its place" is the way I like to live.
236. I watch the news reports on television more often than the comedy programs.
237. I like to have my back rubbed.
238. Social status is important to me.
239. If I have a problem, I like to work it out alone.
240. The main reason I studied while I was in school was because it was required of me.
241. On clear days the sky is usually blue.
242. If someone gave me too much change I would tell him.
243. I refuse to be pushed around.
244. I am not really very certain what I want to do or how to go about doing it.
245. I need the feeling of "belonging" that comes from having many friends.
246. I don't become upset when someone disagrees with me.
247. I would like to be alone and my own boss.
248. I begin to think about a second project only after the first has been completed.
249. When I go on a trip I try to plan a timetable for it beforehand.

250. I never allow anyone to talk me down on an important issue.
251. When people are arguing, I keep out of it.
252. I am more concerned with finishing what I start than is the average person.
253. I wouldn't be caught dead doing some of the silly things other people do at parties.
254. I would not explore an old deserted house on a dark night.
255. If I start one activity, I stay with it until it is finished.
256. Babysitting is a rewarding job.
257. I have a lot of trouble keeping an accurate record of my expenses.
258. Rarely, if ever, do I turn down a chance to have a good time.
259. I rarely notice the texture of a piece of clothing.
260. I don't go out of my way to earn the high esteem of those I know.
261. If I am depressed I go to friends who can snap me out of it.
262. I would rather study than watch television.
263. I often sit and stare directly into the sun for hours on end.
264. I never bother to consider the results of any act of mine before I do it.
265. I would never say anything if someone hurt my feelings.
266. I would work just as hard whether or not I had to earn a living.
267. I don't really have fun at large parties.
268. I often find it necessary to point out people's faults to them.
269. I like to do whatever is proper.
270. I make an effort to think of new things to eat for breakfast.
271. I rarely consider the daily weather report when deciding what to wear.
272. I don't mind being teased about silly things I have done.
273. I would like to be a judge.
274. I can't imagine spending hours on a chess game like some people do.
275. I think that I would like to be in show business.
276. If I discovered a cave I would explore it right away, even if I weren't sure how risky it was.
277. I often do daring things on the spur of the moment.
278. I have never done volunteer work for charity.
279. If I remove an object from a shelf, I always replace it when I have finished with it.
280. I prefer to be with people who are relatively serious.
281. One of the great pleasures in my life is eating good food.
282. What my friends think is extremely important in helping me shape my own thoughts.
283. I don't like to be with people who are always trying to protect me from danger.
284. I think that a new invention is no good unless it has an obvious practical application.
285. I don't believe in gravity.
286. I get along with people at parties quite well.
287. I am not the type of person to be always following orders.
288. I am not really bothered by learning something incompletely.
289. I think that any experience is more significant when shared with a friend.
290. I seldom make people angry by teasing them.
291. I am quite independent of the opinions of others.
292. When I travel, I usually take a route I know so I won't be bothered with road maps.
293. Often when I telephone someone, I think about what I intend to say or make a list of things to discuss.
294. Whenever I make a deal with anyone, I like to have it in writing to refer to later.
295. I usually let others take the lead and go along with their ideas.
296. I rarely let interruptions interfere with an important job.
297. I do not recall ever saying something shocking just to call attention to myself.
298. I have absolutely no desire to drive a motorcycle.
299. Statements I make are usually well thought out.
300. I often take young people "under my wing."
301. I am often disorganized.
302. I try to make my work into a game.
303. I am not particular about the taste or appearance of my food.
304. I don't often consult other people before I make a big decision.
305. I would like to be married to a protective and sympathetic person.
306. My favorite part of school was working on research and independent projects.
307. I have travelled away from my home town.
308. I did many very bad things as a child.
309. I always feel much better after I have been punished.
310. I will not be satisfied until I am confident that I am the best in my field of work.
311. I don't believe in showing lots of affection toward friends.
312. If I have to stand in line, I usually find some way to move up quickly.

313. I want the sense of security that comes with having my own home.
314. I believe the more hobbies I have the better.
315. I seldom organize my activities so completely that I can tell what I will be doing at some future time.
316. I value certain friends who can frankly criticize the way I do things.
317. I would make a powerful military leader.
318. I would quit working on an outdoor project if the weather turned bad.
319. When I was a child, I enjoyed performing for company.
320. Exploring dangerous sections of a city sounds like fun to me.
321. Many of my actions seem to be impulsive.
322. I feel no responsibility for the troubles of other people.
323. I spend quite a lot of time keeping my personal effects in order.
324. Even if I had the money and the time, I wouldn't feel right just playing around.
325. I would like the feeling of rolling down a grassy slope.
326. I follow carefully the standards set by others so as not to appear out of line.
327. I would rather act on my own responsibility than have a superior help me.
328. Study of the history of ideas has no appeal for me.
329. I can usually tell the difference between a plant and an animal.
330. Before I do something I try to figure out how it will affect my friends and family.
331. When standing in line, I am willing to wait my turn, but I don't let other people get ahead of me.
332. In my work I seldom do more than is necessary.
333. My friendships are many.
334. I would never intentionally hurt someone's feelings.
335. I could live alone and enjoy it.
336. I don't like to try new products until they have been proved to be good.
337. I keep very close track of my money and finances so that I will know how much I can spend if anything unexpected comes up.
338. I am usually suspicious of people who want to know a lot of details about my work.
339. I avoid positions of dominance.
340. No one can discourage me from completing a job I have begun.
341. I am more of a listener than a talker.
342. I don't ever go walking in places where there may be poisonous snakes.
343. I am pretty cautious.
344. I would rather have a job serving people than a job making something.
345. Being in a cluttered room doesn't bother me.
346. I enjoy children's games.
347. I don't understand why people rave about the odors of certain foods.
348. I have no desire to buy things just because they are similar to those valued by my friends.
349. I want to be sure someone will take care of me when I am old.
350. I think I would enjoy studying most of my life so I could learn as many things as possible.
351. I have little or no difficulty recognizing people I see every day.
352. I am never able to do things as well as I should.
353. Humility is my greatest virtue.
354. Even when I have just finished an excellent piece of work, I feel that I must do something even better.
355. I would not be very good at a job which required me to meet people all day long.
356. I believe in getting ahead in this world even if it means stepping on the people who get in my way.
357. To have a sense of belonging is very important to me.
358. I would like to redecorate my room about every six months.
359. I think theories are useful as guides for thought even when they are not related to facts.
360. I am willing to give in on a point when I am faced with good arguments.
361. At a party I am the one who usually organizes the games and other activities.
362. I don't have the perseverance to do some of the things I would like.
363. Appearing on the stage is so much fun that I can't understand why people get stage fright.
364. I think I would enjoy mountain climbing.
365. I find that thinking things over very carefully often destroys half the fun of doing them.
366. Caring for plants is a bother.
367. If I have brought something home, I always put it away as soon as I enter.
368. I believe in working toward the future rather than spending my time in fun now.
369. Sometimes I feel like stepping into mud and letting it ooze between my toes.
370. If I fail to receive credit for something I have accomplished, I become very upset.
371. I am not afraid of being alone.
372. I would rather be a businessman than a philosopher.
373. I have never brushed or cleaned my teeth.
374. I am careful to plan for my distant goals.
375. I think it is my right to try to get at least my share of things.
376. People rarely say I let my work interfere with the other aspects of my life.
377. I like to work with other people rather than all alone.
378. I am reluctant to distress someone even if I don't like him.

379. I would rather own a big sailing boat than an expensive house.
380. To my friends, my behavior seems predictable in most situations.
381. I try to organize for my future so that I can tell what I will be doing at any given time.
382. When I make a mistake, I usually figure that the best way to handle it is not to mention it to anyone concerned.
383. When I don't like what someone is doing, I try to keep my complaints to myself.
384. I put tireless effort into almost everything I do.
385. If others are engaged in a conversation, I usually sit quietly without interrupting.
386. I never go near the edge of cliffs or steep places.
387. My thinking is usually careful and purposeful.
388. I would enjoy spending a lot of time taking care of pets.
389. Sometimes I take a long time starting a project because I don't get everything together ahead of time.
390. I joke and talk rather than work whenever possible.
391. I don't get any particular enjoyment from sitting in the sun.
392. A person should lead a good life for his own satisfaction, not for what others will think of him.
393. If I have a problem I prefer to take it to an expert instead of solving it alone.
394. I like magazines which explain how electronic apparatus operates.
395. I was born early on the 29th of February.
396. Most people won't believe the truth no matter how obvious it is.
397. I feel very guilty when I argue with another person.
398. I cannot respect people who can be satisfied with being less than the best.
399. Sometimes I have to make a concentrated effort to be sociable.
400. If someone hurts me, I don't forget it until I can get even.
401. I want to have people show interest in what happens to me.
402. I seldom do things the same way twice in succession.
403. I enjoy a certain amount of unpredictability in my daily activities.
404. I don't mind talking with a person who disagrees with a decision I have made.
405. My friends think of me as being forceful.
406. If I become tired, I set my work aside until I am more rested and more interested.
407. When I was in school, I would speak up as soon as I thought I knew the answer to a question.
408. If the opportunity arose, I would learn to ride a surf-board in the ocean.
409. Outlining a paper or talk has always struck me as a waste of time.
410. If I could, I would hire a professional nurse to care for a sick child rather than do it myself.
411. I spend more time than most people do in making sure that my clothes are always ready to wear.
412. Many things are more important to me than having a good time.
413. I enjoy the feeling of mist and fog.
414. Doing a good job doesn't satisfy me unless others notice it.
415. I enjoy making my own decisions.
416. I read more books that deal with practical matters than books that deal with basic ideas in philosophy and science.
417. I have been inside more than one house.
418. I am one of the lucky people who could talk with my parents about my problems.
419. I would never remain in a position of inferiority if I had a choice.
420. I would rather be paid on the basis of how many hours I have worked than by how much work I have done.
421. I choose hobbies that I can share with other people.
422. I don't like to watch anyone make a fool of himself.
423. I think that marriage is just another form of bondage.
424. If I find a good brand of clothing, I stick to it.
425. I plan my work carefully in advance and follow the plan exactly.
426. I feel that I must always be on guard because so many people are trying to take advantage of me.
427. I don't force my opinions on other people.
428. Once I start to do something, nothing can distract me.
429. I seldom try to call attention to myself.
430. I never go too near a construction site for fear that something might fall on me.
431. If I have to give a talk, I like to have plenty of time to plan it.
432. Sometimes when a friend is in trouble, I am unable to sleep because I want so much to help.
433. I find it necessary to keep only general accounts rather than detailed ones.
434. I pride myself on being able to see the funny side of every situation.
435. I could not possibly identify flowers just by their fragrance.
436. The personal satisfaction I feel when doing something makes my job worthwhile, whether others approve of it or not.
437. I have trouble making decisions without advice.
438. When I was a child, I read every book in my house and went to the library frequently.
439. I am able to read English.
440. My daily life includes many activities I dislike.

APPENDIX E

Personal Inventory

DIVISION OF HEALTH AND PHYSICAL EDUCATION
OREGON STATE UNIVERSITY
CORVALLIS, OREGON

THE STUDY OF PERSONALITY CHARACTERISTICS OF SELECTED MEN AND WOMEN
INTERSCHOLASTIC AND INTERCOLLEGIATE ATHLETIC COACHES
IN OREGON AND CALIFORNIA

The purpose of this study is to determine the personality characteristics of men and women interscholastic and intercollegiate athletic coaches in Oregon and California. PLEASE CHECK ALL APPROPRIATE ANSWERS.

PART I. PERSONAL DATA

1. Position

1. High School
2. Community College
3. 4 year State College
4. 4 year State University

2. Area

1. Oregon
2. California

3. Degree Held

1. Bachelor
2. Master
3. Doctorate

4. Undergraduate Major

Major _____

Minor _____

Graduate

Major _____

Minor _____

PART II. PERSONAL BACKGROUND

1. At what age did you begin participation in formal competitive athletics?

1. 8-10
2. 11-13
3. 14-16
4. 17-19

2. Please indicate the level of athletic competition in which you have participated.

1. High School Varsity
2. High School - G.A.A.
3. High School Intramurals
4. College Varsity
5. College W.R.A.
6. College Intramural
7. A.A.U.
8. Organized Softball (Fast Pitch)
9. Organized Softball (Slow Pitch)
10. Club Hockey
11. Professional
12. Other

3. Please check High School offices or honors in which you were involved.
 1. Athletics
 2. Student Government
 3. Publications
 4. Honor Society
 5. Class Officer
 6. Drama
 7. Music
 8. Scholarship
 9. Other

4. Please indicate if you were a member of a:
 1. College Fraternity
 2. College Sorority
 3. Independent, lived in campus housing
 4. Independent, lived off campus
 5. Other

5. Please check college/university activities in which you participated.
 1. Athletics
 2. Student Government
 3. Publications
 4. Honor Society
 5. Class Officer
 6. Drama
 7. Music
 8. Scholarship
 9. Other

PART III. COACHING

1. Please check the number of years experience as an athletic coach.

1. 2-5
2. 6-10
3. 11-15
4. 16-20
5. 21 or over.

2. Coaching Specialties: Please indicate sports coached within the past three years and in which your teams competed with other schools.

- | | |
|---|---|
| 1. <input type="checkbox"/> Archery | 16. <input type="checkbox"/> Soccer |
| 2. <input type="checkbox"/> Badminton | 17. <input type="checkbox"/> Softball |
| 3. <input type="checkbox"/> Baseball | 18. <input type="checkbox"/> Swimming |
| 4. <input type="checkbox"/> Basketball | 19. <input type="checkbox"/> Tennis |
| 5. <input type="checkbox"/> Bowling | 20. <input type="checkbox"/> Track |
| 6. <input type="checkbox"/> Cross Country | 21. <input type="checkbox"/> Volleyball |
| 7. <input type="checkbox"/> Fencing | 22. <input type="checkbox"/> Wrestling |
| 8. <input type="checkbox"/> Field Hockey | 23. <input type="checkbox"/> Other |
| 9. <input type="checkbox"/> Football | |
| 10. <input type="checkbox"/> Golf | |
| 11. <input type="checkbox"/> Gymnastics | |
| 12. <input type="checkbox"/> Ice Hockey | |
| 13. <input type="checkbox"/> LaCrosse | |
| 14. <input type="checkbox"/> Rugby | |
| 15. <input type="checkbox"/> Skiing | |

PART IV. PARTICIPANT - COACH

1. You have participated in the sport you are coaching.

1. Yes
2. No

2. You have not participated in the sport you are coaching.

1. Yes
2. No

3. When you were a player which of the following depicted your concept of athletics. Rank your choices 1-6.

1. Winning is the most important.
2. Winning is important but not the most important goal.
3. Winning is not important.
4. Enjoyment in participation is the purpose of all athletics.
5. A gracious loser is more acceptable than an obnoxious winner in athletic competition.
6. Other (Explain) _____

4. As an athletic coach which of the following best depicts your present concept of coaching.

1. Winning is the most important goal.
2. Winning is an important but not the most important goal.
3. Winning is not important.
4. Enjoyment in participation is the purpose of all athletics.
5. A gracious loser is more acceptable than an obnoxious winner in athletic competition.
6. Other _____

APPENDIX F

Personality Research Form Scales

Table 1

PERSONALITY RESEARCH FORM SCALES

SCALE	DESCRIPTION OF HIGH SCORER	DEFINING TRAIT ADJECTIVES
Abasement	Shows a high degree of humility; accepts blame and criticism even when not deserved; exposes himself to situations where he is in an inferior position; tends to be self-effacing.	mEEK, self-accusing, self-blaming, obsequious, self-belittling, surrendering, resigned, self-critical, humble, apologizing, subservient, obedient, yielding, deferential, self-subordinating.
Achievement	Aspires to accomplish difficult tasks; maintains high standards and is willing to work toward distant goals; responds positively to competition; willing to put forth effort to attain excellence.	striving, accomplishing, capable, purposeful, attaining, industrious, achieving, aspiring, enterprising, self-improving, productive, driving, ambitious, resourceful, competitive.
Affiliation	Enjoys being with friends and people in general; accepts people readily; makes efforts to win friendships and maintain associations with people.	neighborly, loyal, warm, amicable, good-natured, friendly, companionable, genial, affable, cooperative, gregarious, hospitable, sociable, affiliative, good-willed.
Aggression	Enjoys combat and argument; easily annoyed; sometimes willing to hurt people to get his way; may seek to "get even" with people whom he perceives as having harmed him.	aggressive, quarrelsome, irritable, argumentative, threatening, attacking, antagonistic, pushy, hot-tempered, easily-angered, hostile, revengeful, belligerent, blunt, retaliative.
Autonomy	Tries to break away from restraints, confinement, or restrictions of any kind, enjoys being unattached, free, not tied to people, places, or obligations; may be rebellious when faced with restraints.	unmanageable, free, self-reliant, independent, autonomous, rebellious, unconstrained, individualistic, ungovernable, self-determined, non-conforming, uncompliant, undominated, resistant, lone-wolf.
Change	Likes new and different experiences; dislikes routine and avoids it; may readily change opinions or values in different circumstances; adapts readily to changes in environment.	inconsistent, fickle, flexible, unpredictable, wavering, mutable, adaptable, changeable, irregular, variable, capricious, innovative, flighty, vacillating, inconstant.
Cognitive Structure	Does not like ambiguity or uncertainty in information; wants all questions answered completely; desires to make decisions based upon definite knowledge, rather than upon guesses or probabilities.	precise, exacting, definite, seeks certainty, meticulous, perfectionistic, clarifying, explicit, accurate, rigorous, literal, avoids ambiguity, defining, rigid, needs structure.
Defence	Readily suspects that people mean him harm or are against him; ready to defend himself at all times; takes offense easily; does not accept criticism readily.	self-protective, justifying, denying, defensive, self-condoning, suspicious, secretive, has a "chip on the shoulder," resists inquiries, protesting, wary, self-excusing, rationalizing, guarded, touchy.
Dominance	Attempts to control his environment, and to influence or direct other people; expresses opinions forcefully; enjoys the role of leader and may assume it spontaneously.	governing, controlling, commanding, domineering, influential, persuasive, forceful, ascendant, leading, directing, dominant, assertive, authoritative, powerful, supervising.
Endurance	Willing to work long hours; doesn't give up quickly on a problem; persevering, even in the face of great difficulty; patient and unrelenting in his work habits.	persistent, determined, steadfast, enduring, unfaltering, persevering, unremitting, relentless, tireless, dogged, energetic, has stamina, sturdy, zealous, durable.
Exhibition	Wants to be the center of attention; enjoys having an audience; engages in behavior which wins the notice of others; may enjoy being dramatic or witty.	colorful, entertaining, unusual, spellbinding, exhibitionistic, conspicuous, noticeable, expressive, ostentatious, immodest, demonstrative, flashy, dramatic, pretentious, showy.

SCALE	DESCRIPTION OF HIGH SCORER	DEFINING TRAIT ADJECTIVES
Harmavoidance	Does not enjoy exciting activities, especially if danger is involved; avoids risk of bodily harm; seeks to maximize personal safety.	fearful, withdraws from danger, self-protecting, pain-avoidant, careful, cautious, seeks safety, timorous, apprehensive, precautionary, unadventurous, avoids risks, attentive to danger, stays out of harm's way, vigilant.
Impulsivity	Tends to act on the "spur of the moment" and without deliberation; gives vent readily to feelings and wishes; speaks freely; may be volatile in emotional expression.	hasty, rash, uninhibited, spontaneous, reckless, irrepressible, quick-thinking, mercurial, impatient, incautious, hurried, impulsive, foolhardy, excitable, impetuous.
Nurturance	Gives sympathy and comfort; assists others whenever possible, interested in caring for children, the disabled, or the infirm; offers a "helping hand" to those in need; readily performs favors for others.	sympathetic, paternal, helpful, benevolent, encouraging, caring, protective, comforting, maternal, supporting, aiding, ministering, consoling, charitable, assisting.
Order	Concerned with keeping personal effects and surroundings neat and organized; dislikes clutter, confusion, lack of organization, interested in developing methods for keeping materials methodically organized.	neat, organized, tidy, systematic, well-ordered, disciplined, prompt, consistent, orderly, clean, methodical, scheduled, planful, unvarying, deliberate.
Play	Does many things "just for fun;" spends a good deal of time participating in games, sports, social activities, and other amusements; enjoys jokes and funny stories; maintains a light-hearted, easy-going attitude toward life.	playful, jovial, jolly, pleasure-seeking, merry, laughter-loving, joking, frivolous, prankish, sportive, mirthful, fun-loving, gleeful, care-free, blithe.
Sentience	Notices smells, sounds, sights, tastes, and the way things feel; remembers these sensations and believes that they are an important part of life; is sensitive to many forms of experience; may maintain an essentially hedonistic or aesthetic view of life.	aesthetic, enjoys physical sensations, observant, earthy, aware, notices environment, feeling, sensitive, sensuous, open to experience, perceptive, responsive, noticing, discriminating, alive to impressions.
Social Recognition	Desires to be held in high esteem by acquaintances; concerned about reputation and what other people think of him; works for the approval and recognition of others.	approval seeking, proper, well-behaved, seeks recognition, courteous, makes good impression, seeks respectability, accommodating, socially proper, seeks admiration, obliging, agreeable, socially sensitive, desirous of credit, behaves appropriately.
Succorance	Frequently seeks the sympathy, protection, love, advice, and reassurance of other people; may feel insecure or helpless without such support; confides difficulties readily to a receptive person.	trusting, ingratiating, dependent, entreating, appealing for help, seeks support, wants advice, helpless, confiding, needs protection, requesting, craves affection, pleading, help-seeking, defenseless.
Understanding	Wants to understand many areas of knowledge; values synthesis of ideas, verifiable generalization, logical thought, particularly when directed at satisfying intellectual curiosity.	inquiring, curious, analytical, exploring, intellectual, reflective, incisive, investigative, probing, logical, scrutinizing, theoretical, astute, rational, inquisitive.
Desirability	Describes self in terms judged as desirable; consciously or unconsciously, accurately or inaccurately, presents favorable picture of self in responses to personality statements.	
Infrequency	Responds in implausible or pseudo-random manner, possibly due to carelessness, poor comprehension, passive non-compliance, confusion, or gross deviation.	

APPENDIX G

Conceptual Groupings

A. Measures of Impulse Expression and Control

Impulsivity
 Change
 —————
 Harmavoidance
 Order
 Cognitive Structure

B. Measures of Orientation toward Work and Play

Achievement
 Endurance
 —————
 Play

C. Measures of Orientation towards Direction from Other People

Succorance
 —————
 Autonomy

D. Measures of Intellectual and Aesthetic Orientations

Understanding
 Sentience

E. Measures of Degree of Ascendancy

Dominance
 —————
 Abasement

F. Measures of Degree and Quality of Interpersonal Orientation

Affiliation
 Nurturance
 Exhibition
 Social Recognition
 —————
 Aggression
 Defence

G. Measures of Test-Taking Attitudes and Validity

Desirability
 Infrequency

APPENDIX H

PRF Answer Sheet

APPENDIX I

PRF Profiles for Men and Women

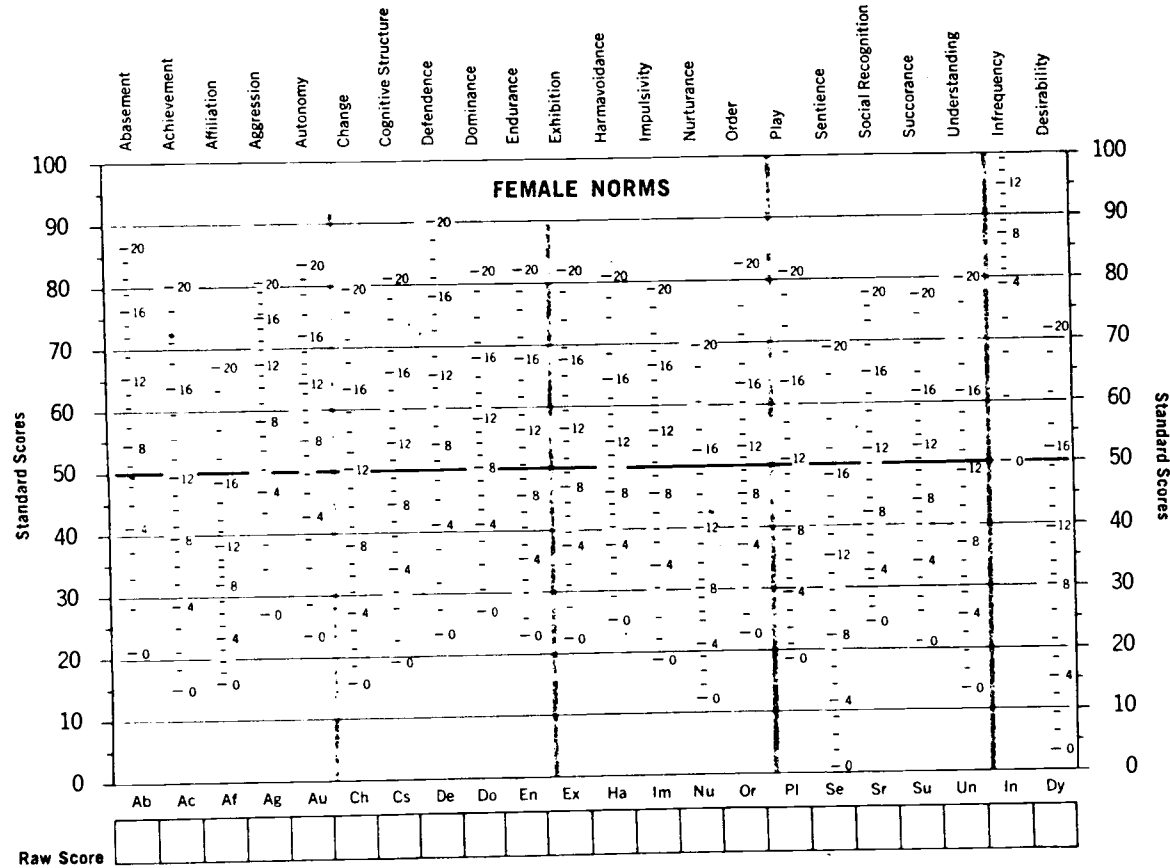
PERSONALITY RESEARCH FORM

PROFILE SHEET: FEMALE

Name _____ Age _____ Form Administered _____

Date Tested _____ Other Information _____

NOTES

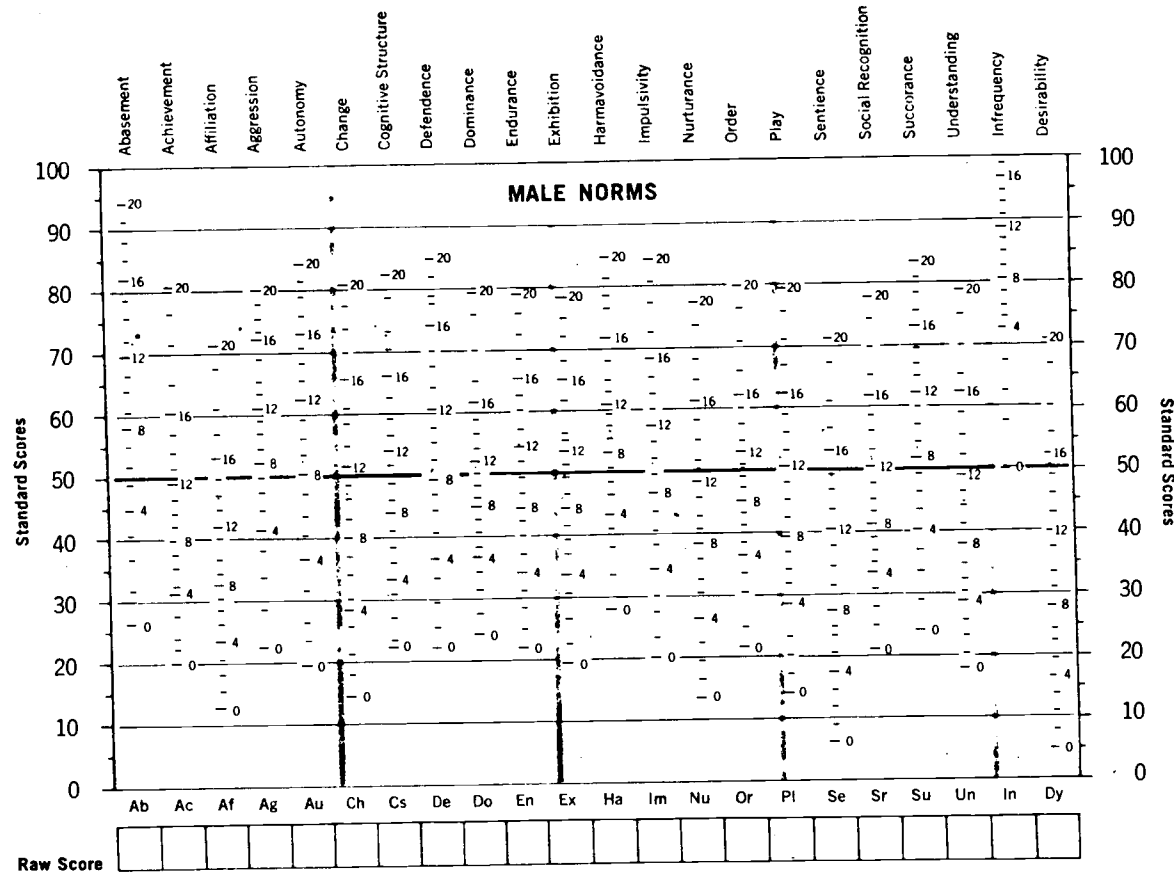


PERSONALITY RESEARCH FORM

PROFILE SHEET: MALE

Name _____ Age _____ Form Administered _____

Date Tested _____ Other Information _____



NOTES

APPENDIX J

Biomedical Program

BMD07M
STEPWISE DISCRIMINANT ANALYSIS

GENERAL DESCRIPTION

- a. This program performs a multiple group discriminant analysis. A set of linear classification functions is computed by choosing the independent variables in a stepwise manner. The variable entered at each step is selected by one of four available criteria, and a variable is deleted when its F-value becomes too low. Using these functions and prior probabilities the posterior probabilities of each case belonging to each group is computed. The program also computes the coefficients for canonical variables and plots the first two canonical variables to give an optimal two-dimensional picture of the separation of groups.
- b. The output consists of:
- (1) Group means and standard deviations
 - (2) Within groups covariance matrix
 - (3) Within groups correlation matrix
 - (4) At each step:
 - (a) Variables included and F to remove
 - (b) Variables not included and F to enter
 - (c) Wilks' Λ (or U statistic) and approximate F statistic to test equality of group means
 - (d) Matrix of F statistics to test the equality of means between each pair of groups
 - (5) At certain specified steps and after the last step:
 - (a) Classification functions
 - (b) Classification matrix
 - (6) For each case:
 - (a) The posterior probability of coming from each group (optional)
 - (b) Square of the Mahalanobis distance from each group

BMD07M

Page 2

(7) Summary table. For each step of the procedure the following is tabulated:

- (a) Variable entered or removed
- (b) F value to enter or remove
- (c) Number of variables included
- (d) Wilks' Λ (or U) statistic

(8) Eigenvalues, canonical variables and coefficients of canonical variables are printed and, optionally written on a tape. The number of canonical variables written on tape is equal to the number of original variables included in the last step.

(9) Plot of the first canonical variable against the second

(10) Residuals and canonical coefficients

c. Limitations per problem:

- (1) p, number of variables ($1 \leq p \leq 80$)
- (2) t, total number of groups ($2 \leq t \leq 80$)
- (3) j, number of Variable Format Card(s) ($1 \leq j \leq 16$)

d. Estimation of running time and output pages per problem:

$$\text{Number of seconds} = .0006 p^2 (mp + 2n) + 60 \quad (\text{for IBM 7094})$$

$$\text{Number of pages} = .02n(m + 2k) + .01 (pg^2 + p^2) + p + 10$$

where

- p = number of variables
- n = total number of cases
- m = 1 if the canonical analysis is to be performed
0 otherwise.
- k = number of steps at which the cases are to be classified