

PERSONALITY TRAITS OF COACHES OF WOMEN'S
INTERCOLLEGIATE BASKETBALL

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PREFACE

This study is concerned with a comparison of personality traits of coaches of women's intercollegiate basketball. The primary purpose is to determine if significant differences exist in the personality traits of male and female, winning and losing coaches. A secondary purpose is to determine if personality differences exist in coaches when they are classified into sub-groups according to age, years of coaching experience, and level of competition coached. A t ratio and analysis of variance are utilized in the statistical treatment of the data, with the .05 level of confidence as the determining factor in the acceptance or rejection of the null hypotheses.

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

Athletics hold an important place in American society. The values of participation in athletics have been stressed for many years. According to Gallon (1980, p. 286), ". . . players will be citizens of tomorrow and the lessons they learn on their way to maturity will influence the basic fiber of American society." He further stated that ". . . the specific values that athletics can teach . . . depend on the coach and the leadership provided" (p. 286).

Although there is wide spread recognition that a coach must have certain qualifications to be successful, there is some disagreement as to what those qualifications should be. Some research indicates that certain personality traits can be related to successful coaches, while other studies have found no significant differences in the personality traits of successful and unsuccessful coaches.

A primary form of athletics in the United States has been intercollegiate competition which began in the mid 1800's (Bucher, 1979). Historically, intercollegiate athletics have been considered a male domain and coaching has been considered a male occupation (Figler, 1981). Prior to the 1970's, intercollegiate sports programs for women consisted primarily of a less intense, sportsday type of competition (Freeman, 1977). The majority of coaches of women's teams were female

physical education teachers who had limited preparation for high level coaching and who initiated the women's competitive sports program with little or no direction, support, or financing from college and university administrators.

The establishment of the Association for Intercollegiate Athletics for Women in 1971, and the 1972 passage of Title IX of the Education Amendments Act, stimulated a significant and extensive expansion of women's intercollegiate athletic programs. During the 1970's, the number and intensity of women's programs increased. College and university administrators began to support them by providing some direction and allocation of monies. More attention began to be given to winning, and win-loss records became a factor in the hiring and retention of coaches of women's sports.

The need for more coaches increased greatly. It was met, to a large extent, by the infusion of large numbers of male coaches into the women's programs. "Since Title IX legislation, male coaches of women's teams have increased by 159% while women coaches have decreased by 89%" (Lopiano, 1980, p. 3). The older, more experienced women coaches, who were primarily trained as physical educators, have begun relinquishing their coaching responsibilities. They are being replaced by younger, less experienced male and female coaches.

Empirical observation suggests that some college women athletes prefer to be coached by males, and some parents prefer that their daughters be coached by males. From the increase in the number of male coaches employed to coach women's intercollegiate athletics, it appears that many college and university administrators, who are responsible for hiring coaches, feel that a male coach is preferable to a female coach,

especially when winning is a priority.

For many years there has appeared to be a role conflict in women athletes regarding the compatibility of their desire to be successful in athletics and their feminine image as dictated by society (Figler, 1981). It is possible that there has been a similar role conflict for women coaches. Now that society is becoming more accepting of females participating as players, the athlete's role conflict appears to be diminishing and more young women are taking part in intercollegiate programs. At the same time, however, fewer women are participating as coaches of intercollegiate teams. This may be due to a continued role conflict related to society's belief that coaching is a male occupation. It may also be due to the changed emphasis in women's intercollegiate athletic programs, from one of participation to one of winning. This different emphasis may require a different type of personality on the part of the coach.

Neal and Tutko (1975, p. 131) indicated that ". . . there is a lack of information on the female coach . . . and a noted lack of research about personality traits of male coaches as well." Gallon (1980) pointed out that very little research has been conducted on female athletics and competition, although the situation has improved in recent years. It is the intent of this study to supplement the research in the area of personality traits of coaches; to investigate personality differences in male and female coaches, winning and losing coaches; and to compare personality traits of coaches according to age, years of coaching experience, and level of competition coached.

Statement of the Problem

Since 1970 there has been a significant increase in the number of women's athletic programs, with a corresponding increase in the number of coaches of women's intercollegiate athletic teams. At the same time, the emphasis of women's intercollegiate athletic programs has shifted from participation to winning. The need for a larger number of coaches, who are capable of producing winning women's teams, has stimulated inquiry as to the type of persons who can be most successful in filling these coaching positions. Personality of the coach may be a factor that should be considered.

Personality assessment instruments have been utilized to determine the relationship of personality traits to success in certain occupations. However, much of what has been written about personality traits of successful coaches appears to be authors' opinions rather than scientific research findings. It has been primarily concerned with male coaches. Very little information is available concerning the personality traits of female coaches. There is also a lack of research concerning the relative success of male and female coaches; the differences in their personalities; and the relationship of personality to age, amount of coaching experience, and level of competition coached. The need for quality coaches of women's intercollegiate athletics, and the lack of research concerning whom these persons should be, were factors which initiated the selection of the problem for this study.

Purpose of the Study

The primary purpose of this study was to determine if significant differences existed in the personality traits of male and female,

winning and losing, coaches of women's intercollegiate basketball in the four state Southwest Region of the Association for Intercollegiate Athletics for Women. A secondary purpose was to determine if significant differences existed in the personality traits of these coaches when they were classified into sub-groups according to age, years of coaching experience, and level of competition coached.

Need for the Study

"The relationship between sports and personality has fascinated physical educators, athletic coaches, and sportsmen for years" (Sage, 1970, p. 199). During the 1960's, psychologists began to use a psychometric approach to investigate personality factors in athletics but the emphasis was primarily on revealing personality traits of athletes (Gallon, 1980). Research on personality traits of coaches has been limited and has been confined almost entirely to male coaches. Neal and Tutko (1975) emphasized that there is a need to separate male and female psychological responses regarding coaching.

The coach has an important influence on the values derived from athletic participation, and one aspect of the total makeup of the coach is personality. Neal and Tutko (1975, p. 133) indicated that ". . . if the coach is to fully develop the potential of the athlete, he or she must first know himself or herself." Rothney (1959, p. 39) and others have pointed out that the ". . . aspects of personality are important for an understanding of the ways we will act." Tutko and Richards (1971) stated:

Psychological insight can offer increased effectiveness in coaching The degree of success a coach enjoys may be seriously diminished by his unwillingness to examine the mechanisms as responsible for his attitudes and personality (p. 16).

Those who are responsible for the professional preparation of coaches should be aware of personality traits of students that may enhance or negate their potential effectiveness in the coaching profession. According to Alderman (1974):

If one can accurately identify what traits exist within a person, and to what degree he possesses each of them, it is thought that one can proceed to predict how the person will act in the future, or at least be able to explain his current behavior. If the means for accurately identifying these traits are valid and reliable, then the observer possesses a powerful instrument for analyzing human behavior (p. 127).

Athletic directors and other administrators could benefit from a knowledge of whether there are specific personality traits to look for when employing coaches, and whether there are certain traits they may expect in coaches according to their gender, success in coaching, age, years of coaching experience, and level of competition coached. Although Tyler (1956, p. 162) has stated ". . . we do not know what the personality traits essential to the various occupations are," she has also recognized that:

. . . anyone who is responsible for hiring or supervising workers soon realizes that he must make his judgements partly on the basis of their personal characteristics . . . personality must constantly be evaluated (p. 162).

Rothney (1959, p. 303) and others indicated that ". . . certain occupations do require certain personalities."

This study will add to the body of knowledge related to personalities of coaches. In addition, it may aid coaches to better understand their own personalities and the relationship between their personalities and their coaching; give meaningful insight for counseling to those who are responsible for the professional preparation of coaches; and assist athletic directors and other administrators who are responsible for employing and working with coaches in the selection and retention process.

Assumptions

This study was based upon the following underlying assumptions:

1. Coaches who agreed to participate as subjects were typical of the group of coaches located in the four state Southwest Region of the Association for Intercollegiate Athletics for Women.
2. The larger number of coaches from the two geographical states of Oklahoma and Texas would not affect the results of the study of the four state region.
3. The coaches who served as subjects understood the directions and honestly responded to the statements on the personality assessment instrument.
4. The coaches who served as subjects accurately reported their win - loss record for the three year period immediately preceding the study.
5. The coaches who coached at institutions in the Division I of the Association for Intercollegiate Athletics for Women were coaching at a higher competitive level than the coaches who were coaching at institutions in the Division II of the Association for Intercollegiate Athletics for Women.
6. The coaches who coached at institutions in the National Association of Intercollegiate Athletics were coaching at the same competitive level as coaches who coached at institutions in the Division II of the Association for Intercollegiate Athletics for Women.
7. The parameters selected for the various sub-groups accurately defined the subjects within each group, i.e., male - female, winning - losing, older - younger, more experienced - less

experienced, and higher competitive level - lower competitive level.

Hypotheses

1. There are no significant differences in the personality traits of male and female coaches of women's intercollegiate basketball.

2. There are no significant differences in the personality traits of winning and losing coaches of women's intercollegiate basketball.

3. There are no significant differences in the personality traits of winning male coaches and winning female coaches of women's intercollegiate basketball.

4. There are no significant differences in the personality traits of losing male coaches and losing female coaches of women's intercollegiate basketball.

5. There are no significant differences in the personality traits of older and younger coaches of women's intercollegiate basketball.

6. There are no significant differences in the personality traits of more experienced and less experienced coaches of women's intercollegiate basketball.

7. There are no significant differences in the personality traits of higher competitive level and lower competitive level coaches of women's intercollegiate basketball.

Delimitations

This study was delimited to:

1. Coaches of women's intercollegiate basketball at four year colleges and universities located in the four state Southwest

Region of the Association for Intercollegiate Athletics for Women during the 1980-81 school year.

2. Coaches of women's intercollegiate basketball who had been employed as a head coach for a minimum of three years.
3. Win - loss records of coaches for the three year period immediately preceding the collection of data.
4. The use of one personality trait assessment instrument, the Guilford-Zimmerman Temperament Survey.

Limitations

This study may have been limited by:

1. The self-administration of the assessment instrument with no standardized testing environment and no enforced time limit.
2. The ability of the subjects to interpret the directions and the various items on the assessment instrument, and the honesty with which they responded to those items.
3. The accuracy and honesty of the subjects in reporting their win - loss records.
4. The imbalance in the number of subjects in some of the subgroups, which was not known prior to the initiation of the study.

Definition of Terms

Association for Intercollegiate Athletics for Women (AIAW): the primary governing body for women's intercollegiate athletics in the United States. The Association had a 1980-81 membership of 961 colleges and universities and conducted a program including three divisions of

competition and 40 national championships in 18 different sports (Association for Intercollegiate Athletics for Women, 1981-82).

Division I - AIAW: a competitive category of AIAW member institutions that awards financial aid for athletes but not exceeding the respective maximums permitted by AIAW regulations (Association for Intercollegiate Athletics for Women, 1981-82).

Division II - AIAW: a competitive category of AIAW member institutions that awards financial aid for athletes up to, but not exceeding, 50 percent of the maximum dollar amount permitted by AIAW regulations (Association for Intercollegiate Athletics for Women, 1981-82).

Guilford-Zimmerman Temperament Survey: a 300 item, yes - no questionnaire designed to produce scores for 10 different personality traits (Buros' Eighth Mental Measurements Yearbook, 1978).

Head Coaches: persons who had primary authority and responsibility for the instruction, supervision, guidance and organization of a women's intercollegiate basketball team.

Less Experienced Coaches: coaches whose number of years of coaching experience fall below the median number of years of coaching experience of all subjects in this study.

Level of Competition: the magnitude of a women's intercollegiate athletic program including emphasis and intensity, degree of skill of players and opponents, and financial support provided both for athletic scholarships and for operating budgets.

Losing Coaches: coaches whose teams won less than 50 percent of the games played during the three consecutive basketball seasons immediately preceding collection of data for this study.

More Experienced Coaches: coaches whose number of years of coaching

experience fell above the median number of years of coaching experience for all subjects in this study.

National Association of Intercollegiate Athletics (NAIA): the primary governing body in the United States for men's intercollegiate athletics at four year institutions with moderate enrollments averaging about 1500 students (Gallon, 1980). The Association had a 1979 membership of 515 colleges and universities and conducted a two division program of competition with 16 national championship in 15 different sports (Official Records Book of the National Association of Intercollegiate Athletics, 1979). In 1980 the Association began offering women's championships.

Older Coaches: coaches in this study whose ages were in the 41 year old to 65 year old age group.

Personality: ". . . the dynamic organization within the individual that determines his characteristic behavior" (Allport, 1961, p. 21).

Personality Traits: ". . . enduring and persistent behavioral patterns by which one person can be readily distinguished from others" (Cattell, 1957, p. 15).

Southwest Region of the Association for Intercollegiate Athletics for Women: the four state geographical area of the United States which includes Arkansas, Louisiana, Oklahoma, and Texas and is one of the nine regional governing organizations of the Association for Intercollegiate Athletics for Women (Southwest Association for Intercollegiate Athletics for Women, 1979-80).

Sportsday Competition: a less intense form of intercollegiate athletic competition including play by identifiable teams from several institutions with no overall champion determined and no awards given.

The emphasis of this type of competition is on participation rather than on winning.

Temperament: ". . . attributes of a somewhat persisting nature which characterize an individual's most frequent behavior" (Lawther, 1972, p. 88).

Title IX: a section of the 1972 Education Amendments Act which prohibits sex discrimination in educational programs receiving federal funds.

Winning Coaches: coaches whose teams had won 50 percent or more of the games played during the three consecutive basketball seasons immediately preceding the collection of data for this study.

Women's Intercollegiate Basketball: a competitive program for college and university basketball teams composed of skilled female students who practice regularly and play a complete schedule of games under the direction of employed coaches. This program is different from less organized and less intense intramural, extramural, or sportsday competition.

Younger Coaches: coaches in this study whose ages were in the 20 year old to 40 year old age group.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

To insure adequate coverage of all factors related to the study, it was felt that the review of literature should include information in several areas. Those areas were: the personality of the coach, personality and gender, personality and role conflict, and personality and success. This chapter is organized according to the above topics.

The Personality of the Coach

The success of many athletic teams is dependent upon the talent available, but even the most talented of teams often attribute much of their success to the coach. According to Singer (1972):

. . . the coach is a leader of athletes, a developer of skills, a molder of team unity, a source of inspiration, and an asset, in general, to any school, community, or state He has weaknesses and strengths as does any human, but in the American society, the coach's personal qualities are magnified (p. 362).

Prior to the 1960's, the coach was the unquestioned authority in the athletic program. Since the 60's, however, many social changes have occurred to affect sports. The movement for individual rights, student rights and women's rights has had a great impact on athletic programs. There is now more interaction between coaches and athletes. An athletic program is considered by some to be a reflection of, and sometimes an

extension of, the personality of the coach. If the interaction of personalities of the coach and the athletes is critical enough to affect athletic performance, the coach must consider the effect of his or her personality on each athlete. It seems imperative, therefore, that coaches know themselves very well.

While there have been numerous essays and observations of what coaches are like, there have been few psychological studies concerned with the personality structure of coaches. Of the few studies which have been done, the majority have used small, unrepresentative samples and usually have been limited to male populations. Most of the studies have used physical educators, high school coaches, or amateur athletic coaches, rather than college coaches.

There seems to be varying opinions about what a coach should be. Hendry (1969) conducted a study comparing swimming coaches' views of the ideal coach with those of junior swimmers. Results revealed that the "ideal" coach should be outgoing, dominating, stable, highly intelligent and conscientious, realistic, practical, confidently secure, decisive, and self-sufficient. Fuoss and Troppmann (1981) identified the following characteristics of a "good" coach: should have technical sports knowledge, knowledge of the characteristics and needs of participants, teaching skills, and desirable personality and character traits.

Moore (1970) suggested coaches could use a self-evaluation test to determine the degree to which he or she possesses traits that are considered to be socially desirable and necessary. Traits that were listed as positive or highly desirable for a coach to possess were: leadership, sense of humor, friendliness, forcefulness, honesty, industriousness, reliability, emotional stability, loyalty, persistence,

ambitiousness, creativeness, optimism, integrity, understanding, cooperation, self-discipline, and trust. The negative traits that would lessen the chance for a coach to be successful were: sensitive to criticism, disloyal, emotionally unstable, overly critical, lazy, undisciplined, intemperant, selfish, worries excessively, discourteous, aloofness, and vulgar.

Tutko and Richards (1971) outlined a guide for coaching styles so that each personality type would fall into one of the following categories: hard-nosed or authoritarian coach, nice-guy coach, intense and driven coach, easy-going coach, and businesslike coach. They imply that these categories are not all-inclusive and that not all coaches fall exclusively into any one category. Fuoss and Troppmann (1971) indicated that the coach's personality is reflected in his or her type of discipline, leadership style, methods of motivation, practice schedule, game plan and conduct, and coaching philosophy.

Ogilvie and Tutko (1970) assessed personalities of 132 high school coaches. They found that the coaches were high in need for achievement, order, dominance, deference, endurance, abasement, and aggression, and that, they were low in need for intraception, exhibition, nurturance, and change. They suggested that coaches are high in those traits that promote getting ahead and succeeding and which do not require personal involvement, but low in traits which contribute most to being sensitive to supportive of close interpersonal relationships.

Andrud (1970), in a study of 19 coaches at a clinic, found them to possess a strong drive to succeed, and the energy and activity to follow the drive. Three other variables - ascendance, sociability, and personal relations - were represented by scores in the upper 50th percentile.

These traits suggest that leadership and social activity habits were characteristic of the coaches. Restraint, objectivity, friendliness and thoughtfulness were represented by scores which ranked in the lower 50th percentile.

Hendry (1972) indicated that coaches were authoritarian types who enjoy being the center of attention. He also suggested that they are extremely aggressive. Lanning (1979) found that coaches are traditionally very externally oriented.

Ogilvie and Tutko (1966) stated that coaches' profiles were similar to those of outstanding athletes in numerous sports and different, in a number of respects, from the college norm. They found the coach to be: success driven, with a need to be on top; organized, outgoing, and warm with others, with finely developed consciences; able to handle emotions under stress; trusting, not defensive; high in leadership; more dominant; prone to blame themselves; highest in psychological endurance with regard to all men studied; unusually emotionally mature; and free to express natural aggressive tendencies.

Beisser (1967) said that the model of the good coach is the same as the model of the good father. He is strong, tough, and virile, deserves and expects respect, is not punitive, and is not easy. The coach demands and receives obedience. He is the expert and the teacher. The successful coach is one who gains the respect of his team, and whom the young athlete generally obeys. Beisser (1967) also said that even the alumni, parents, and spectators look upon the coach as a father. Not only does the coach's image as a father figure usually place him in a favorable and acceptable leadership role, but it also can be assumed that he will be able to use it to inspire a winning attitude.

Most of the literature prior to 1980 refers to the coach as "he". Literature written in 1980 and 1981 has begun to combine the references to the coach as both "he" and "she". Females are currently in coaching positions, yet most of the research on coaches pertains to males. Therefore, it becomes necessary to look in the literature for information related to the personality differences of males and females in general, and to male and female coaches, in particular.

Personality and Gender

To identify basic characteristics which underlie the social stereotype of the male and female, comparisons have been made by several researchers. On the Allport-Vernon Study of Values (Allport and Vernon, 1931), men obtained higher averages for theoretical, economic and political values, indicating more interest in abstract ideas, more emphasis on practical success, and more desire for influence and power over others. Women scored higher on aesthetic, social and religious values, indicating more interest in art, religion, and concern for welfare of others.

Norms of the Bernreuter Personality Inventory (Bernreuter, 1933) showed that women are more neurotic, less self-sufficient, more introverted, less dominant, less self-confident, and more socially dependent than men. Aggressiveness, ascendance, and dominance were distinctly the most common traits that indicated differences in males and females. Men score much higher in these areas on the Bernreuter dominance scale than did the women.

Broverman et al. (1970) substantiated the contention that there is behavior that is considered appropriate for men and for women.

Subjects, in a clinical study, described a healthy adult male as independent, self-confident, aggressive, and logical. However, the healthy adult female was categorized as dependent, intuitive, passive, and emotional. Studies by Broom and Selznick (1968) described the appropriate feminine behavior as dependent, passive, and subservient while masculinity was associated with active, aggressive, and dominant behaviors.

Rider (1973) compared personality traits of 40 male and female secondary school physical education teachers, 40 university male and female physical education majors, 40 collegiate physical education instructors. The results indicated that male secondary school physical education teachers were more tough-minded than females and more intelligent, emotionally stable, conscientious, self-assured, conservative, group dependent, and controlled than the the normal population. Male college physical education instructors were more conscientious than females and more intelligent, conscientious, trusting, self-assured, conservative, and controlled than the normative group. Female secondary school physical education teachers were more intelligent, emotionally stable, happy-go-lucky, conscientious, forthright, conservative, group dependent and controlled than the normative group. The college physical education teachers were more reserved, intelligent, emotionally stable, tough-minded, self-assured, conservative, and controlled when compared to the norms.

Figler (1981) believes that reactive emotional aggressiveness tends to be male behavior. Goldberg (1973) emphasized that testosterone levels are positively related to aggressive behavior. He feels that role modeling, genetic factors, and social learning through reward and punishment are crucial factors leading to the actual display of

aggressive behavior. Role expectations of women tend to encourage lesser displays of aggression.

Vanderzwaag and Sheehan (1978) indicated that many authors dismiss the question of whether female coaches possess personality characteristics that are the same or different from those of male coaches. It is felt by some that since the nature of the position of coach does not vary, the persons directing the behavior of athletes do not differ either. Others have indicated that because of the cultural lag, the pressures of society on the women athlete, the stereotyped roles of men and women, and the difference in motivational factors, there exists a need to separate male and female psychological responses regarding coaching (Vanderzwaag and Sheehan, 1978).

Neeley (1979) compared personality traits of male and female high school and college coaches with standardized norms. She found that athletic coaches display personality traits different from the general norms of the population. Female coaches were significantly different from the norms in achievement, affiliation, autonomy, dominance, endurance, exhibition, succorance, and understanding. Male coaches were different from the norms in abasement, cognitive structure, exhibition, harmvoidance, and understanding. Neeley indicated that additional research is needed on athletic coaches personality traits which are common to both males and females.

According to Neal and Tutko (1975), research indicated that women coaches differ little from men coaches. They also reported that the women tend to display similar intellectual emotional behavior, including tough-mindedness. They recommend that personal requirements of women coaches be the same as those required for men coaches. Those

requirements are emotional stability, ability to handle people well, and knowledge of sport or activity.

Tutko, Elliott, and Berendson (1971) tested 194 women physical educators and coaches. They found that women involved in athletics had a greater breadth of interest, had more energy, were more innovative, were better organized, assumed responsibility more readily, took fewer risks, and had greater confidence in themselves than most women.

Some studies indicated that male athletes and coaches possess similar personality profiles. If male athletes and coaches possess similar personality traits, it is possible that female athletes and coaches might also have similar personality profiles. Cooper (1969), in a review of literature on personality and male athletes, described the following to be indicative of the athlete: out-going and socially confident, socially aggressive and a leader, self-confident, low in anxiety, high in emotional stability, less compulsive, high in pain tolerance, and low in femininity and high in masculinity.

Balazs (1975) conducted life histories on 240 Olympic female champions and isolated the following psychological dynamics which were most constant: had a strong drive to excel, were early goal-setters and persevering, and had a positive self-image. These characteristics are often listed as necessary for athletic success regardless of gender. Clay (1974) identified personality traits of female college athletes and female college coaches. Results showed female coaches to be more intelligent and more suspicious than female athletes. Vanderzwaag and Sheehan (1978) pointed out that as total acceptance of women in sport evolves, the personality profiles of women who become active in sport, both as participants and as coaches, will likely change.

Personality and Role Conflict

Society has established certain roles for males and for females. These roles are associated with specific personality traits. "Role relates to a position; not to an individual. The term role conflict refers to that situation in which a person confronts competing or conflicting expectations" (Fuoss and Troppmann, 1981, p. 186). It appears that females in athletics, both participants and coaches, may have a real role conflict when attempting to harmonize the personality traits associated with their gender with the personality traits associated with athletics.

Cultural attitudes toward the male role expectation is different from that of the female. Society's inability to relate femininity with ambition and personal accomplishment is well documented in research (Morgan, 1980). Women worry not only about failure, but also about success. This situation is most evident in sports. The more successful a woman becomes as an athlete, the more afraid she seems to be that she will lose her feminine image (Morgan, 1980). The stereotype female athlete is aggressive, frustrated, and unfeminine as described by Malumphy (1971). This poses a threat, or at least seems to discourage many girls who would like to participate in sports. Society appears to be saying that females are different if they pursue excellence in sports.

Harris (1971) reported that the female athlete is able to separate her social self from her competitive self. Off the field or court, she maintains the necessary qualities for being social. On the field or court, she thinks of herself as competitive, aggressive, and committed to achievement.

Wark and Wittig (1971) conducted an investigation of the

relationship of sex roles and competitive trait anxiety. Thirty-two males and 30 females participated in the study. It was found that sex-typed standards of desirable behavior for men and women generated less anxiety regarding sport competition for masculine males than for feminine females. This seemed to indicate that sport competition is considered a masculine role in our society.

Brown (1965) examined college students perceptions of women's roles in terms of evaluative, potency, and activity factors. It was found that women's roles, perceived as highly associated with activity and potency, were not highly evaluated roles and therefore, less socially desirable. Desirable roles for women were perceived to be extremely low in potency and activity. The potent and active roles were seen as more masculine, more intelligent, stronger, more competitive, more aggressive, and less interesting, less attractive, and less nice.

Griffin (1972) studied women's roles, using the terms housewife, woman athlete, girlfriend, woman professor, mother, and ideal women. It was perceived that the woman athlete and woman professor had active and potent roles. The highly evaluated roles were ideal woman, girlfriend, and mother. Brown (1965) investigated college female roles such as cheerleader, sexy girls, twirler, tennis player, feminine girl, swimmer, and basketball player. College men and women viewed the female athlete roles as less desirable for women, and more potent and active than other roles.

Bem (1974), Harris (1973), and Kagan (1973) stated that traditionally the masculine roles have been characterized as strong, large, ambitious, self-reliant, outgoing, independent, active, assertive, and hard-headed. The feminine role has been labeled as small, weak, passive,

dependent, understanding, moderate, appreciative, sincere, and accepting of others. In a study by Terman and Miles (1936), men who were athletes and engineers had the most "masculine" averages while journalists, artists, and clergymen has the least "masculine" scores. Among women, domestic employees were the most "feminine", while athletes and doctors were the least "feminine". According to Sabo (1980), students at Radcliffe were asked to describe a hypothetical student named Anne who is at the top of her medical school class. Nearly 75 percent of the group pictured her as unattractive and hard up for dates.

Uguccioni (1980) conducted a study of 333 females to determine if significant differences existed in the way in which participants perceived their sex role in society. Subjects were athletes, those who participated in athletic activities on a limited basis, and non-participants in athletic activities. Sex role differences were found between women who participated in athletic activities. A greater portion of the women athletes were found to be masculine and androgynous, whereas a greater portion of the nonathletes were found to be feminine and undifferentiated. In general, the results suggested differences that could produce a conflict when choices had to be made in terms of the group with which to affiliate.

Achieved roles traditionally have been the domain of men. Alderman (1974, p. 275) stated: "The most accessible and acceptable achieved roles available to women have been those of wife and mother. Roles such as nurse and teachers have acceptable for women."

Individual differences in competitiveness, as a function of the person's sex, seem to be culturally determined. Values of society have tended to suppress what natural competitive drives women might possess

for sports and physical activity. This has resulted in a conflict between what a large number of girls would like to do and what they are pressured to do by their culture.

Many girls and women who participate in sports lack complete and uninhibited joy in their competition and play experiences because of the conflict is creates between their need to play and their concept of themselves as girls and women (Neal and Tutko, 1975, p. 1).

Active females have difficulty coping with their own inner desires and society's expectations. "They struggle for the right to be physical and creative creatures without the loss of male or female social approval" (Neal and Tutko, 175, p. 2).

It has been the opinion of some that the female is the weaker of the two sexes. Creative and intellectual pursuits and desires have caused women to seek fulfillment outside the roles of wife and mother. This has caused some women to pay a price in terms of peer and social approval. Unpopularity with men, sense of guilt, limited opportunities and training, lack of social approval or acceptance, and induced psychological factors have influenced girls and women to suppress their unfulfilled desires.

In the past, women's sports programs have been modified in an attempt to tailor the activity to be more consistent with the accepted female image. Highly competitive programs were discouraged in favor of the more social atmosphere of the playday, sportsday, or intramurals. Rule adaptations were made in many instances in order to eliminate some of the "masculine" elements of the game. Staff, facilities, and equipment were often quite limited. External feminine traits were emphasized as exemplified by participants on women's teams being required to wear dresses and high heels to travel to other schools.

Since traditionally athletics have been the domain of the male, the mass populace continues to think of highly competitive athletics in particular, as masculine and what the male is supposed to represent in today's society (Fuoss and Troppmann, 1981, p. 151).

Harris (1975) stated:

Society continues to applaud the positive psychological and social benefits "he" gains from participation. On the other side, experience in competitive athletics brings about undesirable behaviors in the female according to some people. The traditional role of the male has allowed him to determine the range of behavior he will condone as being feminine and this does not include those behaviors that appears essential for success in a competitive event (p. 32).

There is some evidence to show that sex role patterns in American society are changing. Harris (1975) stated that many American university students no longer identify with the traditional male and female sex roles. Thirty-five percent of all respondents in her study were termed androgynous, or showed an absence of rigid sex role expectations and 15 percent were classified as cross-typed.

The image of the ideal American women is changing, and activities that were once suspect are now admired. Nobody laughs any more if a women jogs around a park or darts into a supermarket wearing a sweatshirt. Being in shape is fashionable, and through sports, women are affirming their existence as flesh-and-blood entities (Kaplan, 1979, p. 2).

Professional women athletes, aided by the passage of Title IX of the Education Amendments Act, have brought a surge of acceptance of sports among more typical American women and American society in general. Women are participating in activities such as marathon running and football. They are seen in such positions as coaches, sports officials, athletic administrators, and athletic trainers. Previously, these positions were considered male positions.

In the past, girls proved they were women by having babies and boys played football to prove they were men. A major change in social structure has altered somewhat this stereotyped way

of thinking. Women who realize that they're not fragile and don't need to be protected, are less likely to fall into a culturally mandated sex role (Kaplan, 1979, p. 13).

Ugucioni (1980, p. 47) said that ". . . although the type of opportunities for women are increasing in society, the pressures of societal norms which expect conformity to established sex roles continues to exist. There appears to be a continuing concern as to the sex role orientation and attitudes relating the women's place in society, especially for those females who participate in organized athletic programs (Ugucioni, 1980). It would appear that currently there are some American women who are uncertain whether to engage in activities they would like to do, such as sports, or to hold back and do as society has encouraged in the past.

It appears that females of all ages are pursuing involvement in athletics in increasing numbers, despite a possible role conflict. McGee (1956) found that coaches and parents had more positive attitudes toward athletic participation for women than school teachers or administrators.

The decade of the 70's has witnessed women's increased involvement in activities which are characterized by the desire to excel. Whether in business, education, or athletics, women have ventured into areas where competition, striving for goals, and a willingness to work hard are important (McElroy and Willis, 1979, p. 241).

Women's participation in the leadership positions of coaching has been relatively limited. In the mid-1930's, the results of an AAU questionnaire survey mailed to 850 competitors favored men coaches (Gerber et al., 1974). Gerber et al. pointed out that women's Olympic teams have rarely had female coaches and that

. . . the coaches of high level competition for women have rarely been females. The logical reason for this is that with few exceptions, organized competition for women in a given sport was not developed until after it had been established for men. Therefore, when women in each sport decided to form teams

or clubs for the purpose of playing against other groups, there were few females with adequate experience in the activity (p. 43).

Figler (1981) indicated that:

Often a women's team will be coached by a man. One reason suggested is that in an era of transition, men possess more knowledge about the intricacies of those sports. Another belief is that men dominate women because they are unwilling to relinquish power and dominance gained (p. 271).

If society feels that women should be coached by men, one of the reasons may be the belief that men can be more successful as coaches. This could imply that men possess more of the personality traits that are required for success in leadership positions, including that of coaching.

Personality and Success

Several researchers have reported favorable research findings relevant to the trait theory of effective leadership. Ghiselli (1963) found that leaders who have the drive to act independently and are self-assured are successful in achieving organizational goals. He also concluded that an individual's intelligence is an accurate predictor of managerial success within a certain range. Ghiselli (1963) studied eight personality traits and five motivational traits to determine the importance of each to management success. He found that masculinity-femininity and power over others seemed to have little to do with success while intelligence and self-actualization were important factors.

Fuoss and Troppmann (1981) believe:

Those who have succeeded (identified frequently as winners) as well as those who have failed (losing coaches, who should not necessarily be labeled losers) represent the young and the old, unexperienced and experienced, the hard and soft, good-natured and foul-tempered, the proud and profane, the

articulate and inarticulate, and the dedicated and the casual. There seems to be some subtle, secret chemistry of personality that enables a person to lead successfully and to motivate others and no one really knows what that is (p. 75).

Ogilvie (1965) believes that successful coaches have characteristics such as emotional maturity, independence, and "tough-mindedness". These characteristics, he believes, are related to success and are necessary to withstand the pressures of coaching.

Hendry (1969) found no differences between highly successful and less successful coaches and concluded that the ability of the coach to accept and project a role compatible with an athlete's expectations, combined with his expertise in the sport, probably would override anything but marked deficiencies in his personality pattern. Sage (1972) also found no personality differences between coaches with winning records (over 60 percent) and coaches with losing records (under 60 percent).

Clark (1974) used athletes to assess perceptions of selected characteristics of successful women intercollegiate coaches. Characteristics cited most frequently by the athletes were: knowledge of sport, ability to teach, personal appearance, and fairness in dealing with each player. Penman, Hastad, and Cords (1974) conducted a study to examine the success of high school coaches who exhibited an authoritarian personality. The results showed that more successful coaches were more authoritarian. Singer (1972) indicated that heredity and environmental influences, body build, early and timely experiences, personality, and various abilities all contribute to the coach's achievement. Rosenblum (1979, p. 199) stated: "To compete successfully, one must be able to act aggressively in controlled nondestructive, goal-oriented ways. Conflicts affecting aggressive behavior tend to interfere with competitive

success." Tutko, Ogilvie, and Lyon (1969) concluded, after repeated studies, that those attributes which lead to athletic success were drive, determination, aggression, leadership, intelligence, self-confidence, and mental toughness.

Perry A. Card (1980) studied the orientation toward winning as a function of athletic participation, grade level and gender. The conclusion was that males possessed a greater orientation toward winning than do females. Females seemed to be more concerned with fairness being the paramount element of participation. Males stressed skill development and winning as the most important elements. Kidd and Woodman (1975) examined sex differences of athletes toward winning. They found the female athlete was concerned with performing well, but at the same time exhibited a lower desire to win than her male counterpart.

Sabo (1980) stated:

Most women are losers. Sometimes they lose through lack of opportunity; more often, they lose by choice. Even those who have the odds in their favor in terms of education, and intelligence and who are competing in the most favorable feminist climate the world has seen for some three thousand years, still end up throwing the game. Women don't know how to win or how to compete, and they're programmed not to try (p. 212).

Winning games against men elicits such a negative response that girls learn early to lose rather than to face rejection - whether from boys and girls their own age, or from fathers (Sabo, 1980). Having been taught that winning means losing love, girls usually find that achievement is accompanied by anxiety. In a survey conducted at the University of Michigan, a group of women expressed anxiety over feminine success figures, equating success with a loss of femininity (Horner, 1973).

Ayer (1981) compared personality traits of winning and losing high school volleyball coaches. Results showed a significant difference

between winning and losing coaches on nine personality factors. There were significant differences between male and female winning coaches on seven factors. On only two factors was there a significant difference between male and female losing coaches.

It is possible that a coach's personality could be affected by such variables as age, amount of coaching experience, and level of competition coached. Sage (1972) selected a sample of 300 college football and basketball coaches. He found no personality differences between athletic coaches and male college students, and no differences among coaches with regard to age or head coaching experience. Clay (1974) found no significant differences in personality between coaches at large schools and coaches at small schools. Strong (1943) studied men ranging from 15 to 59 years of age. He concluded that interests change very little throughout the entire adult life span. On the Bernreuter Personality Inventory, there was some tendency for dominance to be lower in older men. With age, there seemed to be more feelings of inferiority, anxiety, and guilt; more intolerance and conservatism; and increasing tendencies toward regression.

Summary

Having reviewed the literature, there have been few studies conducted on coaches' personality traits, and even fewer on women coaches. With the emergence of formalized women's intercollegiate athletics, there is a need to find out more about both male and female coaches of women's sports.

The traditional concept of what is an appropriate role for a woman continues to exist. It seems that there is a role conflict for those

women who choose to pursue a "non-feminine" profession. There appears to be a conflict between having certain traits desirable for success in fields such as sports and being a woman within the American social system.

Contrary points of view emerge in discussing sex differences, sex role socialization, and the place of women in sport. One perspective suggests that women do not belong in a highly competitive environment. The contrasting view suggests that women not only are able to stand the physical and emotional stresses of intense competition, but that they can thrive in the environment.

The literature that females who possess many of the same characteristic personality traits as "successful" men coaches should also be successful in their coaching careers. According to Neal (1969),

Women should be encouraged to be athletes and coaches - not to emulate men - but so that women, too, may enjoy the benefits of health and the psychological satisfaction of competition as part of a full and satisfying life (p. 20).

In summary, Vanderzwaag and Sheehan (1978) stated:

Popular acceptance of women in sport will be achieved very slowly. But if the pioneering women will remain creative and willing to experiment, we may learn much more than if sport were strictly under the guidance of male coaches (p. 272).

CHAPTER III

METHODS AND PROCEDURES

The primary purpose of this study was to determine if significant differences existed in the personality traits of male and female, winning and losing coaches of women's intercollegiate basketball in the four state Southwest Region of the Association for Intercollegiate Athletics for Women. A secondary purpose was to determine if significant differences existed in the personality traits of these coaches when they were classified into sub-groups according to age, years of coaching experience, and level of competition coached. This chapter includes the methods and procedures used in the selection of the subjects, the classification of subjects into sub-groups, the selection and administration of the assessment instrument, and the analysis of data.

Selection of Subjects

The subjects for this study were coaches of women's intercollegiate basketball in the four state Southwest Region of the Association for Intercollegiate Athletics for Women during the 1980-81 school year. In order to delimit the study, only one geographical region of the United States was used and coaches of only one sport were chosen. The Southwest Region was selected because the researcher was an officer of that regional association and had access to information pertaining to the member institutions and their coaching personnel. Basketball

coaches were selected because a larger number of institutions in the Southwest Region had teams in basketball than in any other sport.

The names and addresses of the women's basketball coaches were obtained from the 1980-81 Directory of the Southwest Region of the Association for Intercollegiate Athletics for Women. An initial letter was sent to the coaches explaining the study, describing what their participation would involve, and asking if they would be willing to serve as subjects (Appendix A). Included with the letter was an information form for them to complete and return if they agreed to participate in the study (Appendix B). The information form solicited demographic data regarding gender, age, win - loss record, years of coaching experience, and level of competition coached. Follow-up letters were sent six weeks later to all coaches who had not responded to the initial letter (Appendix C). A total of 50 coaches out of a possible 76 agreed to, and did, participate in the study. This constituted 66 percent of the total population. The representative participant proportions by geographical state are presented in Table I.

Assignment of Subjects to Sub-Groups

On the basis of the data obtained from the information forms completed by the subjects, the coaches were classified into five sets of sub-groups. The sub-groups were: male - female, winning - losing, older - younger, more experienced - less experienced, and higher level - lower level of competition.

Male coaches numbered 19 and constituted 38 percent of the population. Female coaches numbered 31 and constituted 62 percent of the population.

TABLE I
REPRESENTATIVE PARTICIPANT PROPORTIONS

States	Total No. of Basketball Coaches in Each State	% of Total Population (N = 76)	Total No. of Participants in Each State	% of Total Participants (N = 50)
Arkansas	12	15.7	7	14
Louisiana	15	19.7	7	14
Oklahoma	19	25.0	17	34
Texas	30	39.6	19	38
Totals	76	100.0	50	100

Criteria for each of the other sub-groups were established. Winning coaches were defined as those whose teams had won 50 percent or more of the games played during the three year period preceding the collection of data. Losing coaches were those whose teams had won less than 50 percent of the games played during the same period. Winning coaches numbered 37 and constituted 74 percent of the population. Losing coaches numbered 13 and constituted 26 percent of the population.

Older coaches were defined as those whose ages were in the 41 to 65 year old age group. Younger coaches were defined as those whose ages were in the 20 to 40 year old age group. Older coaches numbered eight and constituted 16 percent of the population. Younger coaches numbered 42 and constituted 84 percent of the population.

More experienced coaches were defined as those coaches whose number of years of coaching experience fell above the median number of years of coaching experience for all subjects in the study. Less experienced coaches were defined as those whose number of years of coaching experience fell below the median number of years of coaching experience for all subjects in the study. The median number of years of coaching experience was 4.5 years. More experienced coaches numbered 21 and constituted 42 percent of the population. Less experienced coaches numbered 29 and constituted 58 percent of the population.

Higher level coaches were defined as those who coached at a Division I AIAW school. Lower level coaches were defined as those who coached at either a Division II AIAW school or at a NAIA membership. Higher level coaches numbered 18 and constituted 36 percent of the population. Lower level coaches numbered 32 and constituted 64 percent of the population. Information concerning the sub-grouping of the subjects is summarized in Table II.

Selection and Administration of Instrument

A personality assessment instrument was needed which met acceptable validity and reliability standards; was designed for a normal population; could be self-administered in a relatively short period of time; could be interpreted by the researcher; and could provide the results needed to fulfill the purposes of the study. After a thorough review of the literature and consultations with personality assessment experts in the psychology and education departments of Oklahoma State University and Central State University, the Guilford-Zimmerman Temperament Survey (GZTS) was selected.

TABLE II

SUB-GROUPS OF COACHES ACCORDING TO GENDER, WIN-LOSS RECORD, AGE,
AMOUNT OF EXPERIENCE, AND LEVEL OF COMPETITION COACHED

Sub-Groups	Total No. of Subjects in Each Sub-Group	% of Total Population (N = 50)
Male	19	38
Female	31	62
Winning	37	74
Losing	13	26
Older	8	16
Younger	42	84
More Experienced	21	42
Less Experienced	29	58
Higher Level	18	36
Lower Level	32	64

The Guilford-Zimmerman Temperament Survey is a 300 item, yes - no questionnaire that yields scores in 10 different categories of personality traits including: general activity, restraint, ascendance, sociability, emotional stability, objectivity, friendliness, thoughtfulness, personal relations, and masculinity. The items are presented in a projective-type form which helps reduce defensiveness and possible falsification. They were selected from earlier personality inventories which had undergone factor and item analysis. A separate answer sheet

is used which may be either machine scored or hand scored by use of stencils. The scores are then recorded on a Profile Chart which relates obtained scores to a common scale (Buros, 1978).

The Guilford-Ziummerman Temperament Survey has been thoroughly tested for reliability.

Kuder-Richardson formulas were applied to the scores for men and women separately and together. Correlations between halves - first and second halves as well as odd - even halves were also obtained (Guilford, Guilford, and Zimmerman, 1978, p. 6).

The reliability coefficients for the ten traits ranged between .75 and .87 and the standard errors of obtained scores ranged from 2.2 to 2.6. Factorial, convergent, and discriminant validity of the GZTS has been documented with the main supporting evidence being derived from factor analysis of GZTS items and of homogeneous item-set scores (Guilford, Guilford, and Zimmerman, 1978).

The GZTS (Guilford, Guillford, and Zimmerman, 1978) gives explanations of what high and low scores on each trait indicate. These brief, yet thorough, explanations are easily understood and are very helpful in interpreting test scores. They are based on the experience of clinical psychologists who have used the GZTS over a long period of time in both private practice and college counseling.

The GZTS is used in many counseling and clinical situations to help predict the future success of the client or steer him or her away from certain types of vocations (Gilliland, 1981). In fact, ". . . the most frequent clinical use of the GZTS is in educational or vocational counseling as it is practiced in the university counseling center" (Guilford, Guilford, and Zimmerman, 1978). It is useful

. . . if the problem is simply one of a felt need for direction in the choice of a curriculum or vocation. Understanding

of the demonstrated relationships between GZTS traits and success and satisfaction in different occupations enables the counselor to help the client explore his or her suitability for vocations in which interest is expressed (Guilford, Guilford, and Zimmerman, 1978, p. 14).

"A major application of the GZTS has been in the selection and assessment of supervisory personnel ranging from foreman to chief executives" (Guilford, Guilford, and Zimmerman, 1978, p. 13). The objectives which are met by the GZTS are:

. . . a single booklet of items; a single answer sheet; an efficient scoring procedure; a coverage of traits that have been proven to have the greatest utility and uniqueness; and elimination of some known previous redundancies (Guilford, Guilford, and Zimmerman, 1978, p. 2).

A copy of the Guilford-Zimmerman Temperament Survey booklet, including instructions for self-administration and an answer sheet, were mailed to each of the coaches who had agreed to participate in the study. A cover letter, giving additional directions, was included (Appendix D). A self-addressed, stamped envelope was also enclosed for the subject's use in returning the materials. Fifty subjects returned the booklets and completed answer sheets. The answer sheets were hand scored by use of stencils and profile charts for each of the 50 subjects were prepared by the Counseling Center at Central State University.

Analysis of Data

Using the BMDP Statistical Package (Dixon, 1981), t tests were performed to determine whether significant differences in personality traits existed between the following sub-groups: male - female coaches, winning - losing coaches, older - younger coaches, more experienced - less experienced coaches, and higher level of competition - lower level of competition coaches. Analysis of variance was used to determine if

a significant difference occurred in the interaction of male, female, winning, and losing coaches. A t test was performed comparing male winning to female winning coaches and male losing to female losing coaches. The .05 level of confidence was used for all analyses to determine acceptance or rejection of the null hypotheses. Statistical procedures were carried out by the Central State University Computer Center.

CHAPTER IV

ANALYSIS OF DATA

The primary purpose of this study was to determine whether significant differences existed in the personality traits of male and female, winning and losing coaches of women's intercollegiate basketball in the four state Southwest Region of the Association for Intercollegiate Athletics for Women. A secondary purpose was to determine if significant differences existed in the personality traits of these coaches when they were classified into sub-groups according to age, years of coaching experience, and level of competition coached.

The Guilford-Zimmerman Temperament Survey was administered to 50 subjects during the spring and summer of 1981. Results for each subject were transferred to individual profile sheets which were categorized into 10 personality variables. Items on the profile sheet are bi-polar, i.e., a higher score indicated a positive relationship toward certain types of traits and a lower score indicated a negative relationship toward certain types of traits. Possible scores ranged from 0 to 30 on each personality variable. The median range for normal populations on all traits is between 14 and 23.

Nineteen males and 31 females participated in this study. Six hypotheses were formulated and tested. Analysis of the data has been subdivided into the following categories: comparison of male and female coaches; comparison of winning and losing coaches; interaction between

male, female, winning, and losing coaches; comparison of older and younger coaches; comparison of more experienced and less experienced coaches; and comparison of coaches of higher level of competition and coaches of lower level of competition.

A t test was used to compare all groups except for the interaction of males, females, winning and losing coaches. Analysis of variance was used for this comparison. Where significant differences occurred in the interaction, a t test was used to compare male winning to female winning coaches and male losing to female losing coaches. The .05 level of confidence was used in all comparisons to determine acceptance or rejection of the null hypothesis.

Comparison of Male and Female Coaches

Personality traits of 19 males and 31 females were compared to determine if significant differences existed. Comparisons were made on each of the 10 personality variables. In the area of general activity and energy (G), males had a mean of 23.4211 and a standard deviation of 5.0367. The mean of females was 21.8387 and the standard deviation was 4.3596. A t ratio yielded a t value of 1.13 with a probability of 0.2649. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable G for males and females.

In the area of restraint and seriousness (R), males had a mean of 18.000 and a standard deviation of 4.9889. The mean of females was 18.3226 and the standard deviation was 4.5635. A t ratio yielded a t value of -0.23 with a probability of 0.8201. At the .05 level of confidence, the t value was not significant. This indicates no significant

difference in variable R for males and females.

In the area of ascendance and social boldness (A), males had a mean of 19.7368 and a standard deviation of 5.3629. The mean of females was 17.00 and the standard deviation was 5.9217. A t ratio yielded a t value of 1.68 with a probability of 0.1000. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable A for males and females.

In the area of social interest and sociability (S), males had a mean of 22.6316 and a standard deviation of 4.0853. The mean of females was 20.3226 and the standard deviation was 6.0243. A t ratio yielded a t value of 1.61 with a probability of 0.1134. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable S for males and females.

In the area of emotional stability (E), males had a mean of 21.4737 and a standard deviation of 4.2475. The mean of females was 18.8387 and the standard deviation was 5.4351. A t ratio yielded a t value of 1.91 with a probability of 0.0625. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable E for males and females. It should be noted that a marginal significance did occur.

In the area of objectivity (O), males had a mean of 18.0526 and a standard deviation of 4.9830. The mean of females was 16.8710 and the standard deviation was 4.6169. A t ratio yielded a t value of 0.84 with a probability of 0.4083. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable O for males and females.

In the area of friendliness and agreeableness (F), males had a mean

of 13.3158 and a standard deviation of 6.9526. The mean of females was 14.2258 and the standard deviation was 3.5563. A t ratio yielded a t value of -0.53 with a probability of 0.6013. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable F for males and females.

In the area of thoughtfulness and reflectiveness (T), males had a mean of 18.2105 and a standard deviation of 3.8956. The mean of females was 19.1936 and the standard deviation was 4.7005. A t ratio yielded a t value of -0.80 with a probability of 0.4283. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable T for males and females.

In the area of personal relations and cooperativeness (P), males had a mean of 15.3684 and a standard deviation of 6.0481. The mean of females was 15.6452 and the standard deviation was 5.7245. A t ratio yielded a t value of -0.16 with a probability of 0.8736. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable P for males and females.

In the area of masculinity (M), males had a mean of 20.7368 and a standard deviation of 3.9978. The mean of females was 15.0968 and the standard deviation was 4.2533. A t ratio yielded a t value of 4.73 with a probability of 0.0000. At the .05 level of confidence, the t value was significant. This indicates a significant difference in variable M for males and females.

In comparing males to females, there were no significant differences at the .05 level of confidence in the personality variables of general activity and energy, restraint and seriousness, ascendance and social boldness, social interest and sociability, emotional stability,

objectivity, friendliness and agreeableness, thoughtfulness and reflectiveness, and personal relations and cooperation. However, there was a significant difference between males and females in the variable of masculinity.

When plotting scores on the GZTS profile sheet, two different scales are used for masculinity and femininity. According to these scales, the mean for the men place them in the 50th percentile of a normal population of males, whereas the mean for females fell in the 20th percentile of a normal population of females. This would indicate that male coaches do not differ significantly from the male population but that female coaches are more masculine than females from the normal population.

The variable of emotional stability approached a significant difference between males and females. The t value was 1.91 with a probability of 0.0625. Males scored higher in this category. Therefore, when comparing males to females, there was a significant difference only in the variable of masculinity (M) at the .05 level of confidence. A summary of the data comparing male and female coaches is presented in Table III.

Comparison of Winning and Losing Coaches

Personality traits of 38 winning and 12 losing coaches were compared to determine if a significant difference existed. Comparisons were made in each of ten personality variables.

In the area of general activity and energy (G), winning coaches had a mean of 22.2895 and a standard deviation of 4.9697. The mean of losing coaches was 22.9167 and the standard deviation was 3.5537.

TABLE III
 COMPARISON OF MALE AND FEMALE COACHES' SCORES ON THE
GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	Male		Female		t	p	Significance
	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	23.42	5.03	21.83	4.35	1.13	0.26	n. sig.
Restraint	18.00	4.98	18.32	4.56	-0.23	0.82	n. sig.
Ascendance	19.73	5.36	17.00	5.92	1.68	0.10	n. sig.
Sociability	22.63	4.08	20.32	6.02	1.61	0.11	n. sig.
Emotional Stability	22.47	4.24	18.83	5.43	1.91	0.06	n. sig.
Objectivity	18.05	4.98	16.87	4.61	0.84	0.40	n. sig.
Friendliness	13.31	6.95	14.22	3.55	-0.53	0.60	n. sig.
Thoughtfulness	18.21	3.89	19.19	4.70	-0.80	0.42	n. sig.
Personal Relations	15.36	6.04	15.64	5.72	-0.16	0.87	n. sig.
Masculinity	20.73	3.99	15.09	4.25	4.73	0.00	sig.

.05 Level of Confidence.

A t ratio yielded a t value of 0.48 with a probability of 0.6348. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable G for winning and losing coaches.

In the area of restraint and seriousness (R), winning coaches had a mean of 18.3684 and a standard deviation of 4.4139. The mean of losing coaches was 17.6667 and the standard deviation was 5.6300. A t ratio yielded a t value of -0.40 with a probability 0.6981. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable R for winning and losing coaches.

In the area of ascendance and social boldness (A), winning coaches had a mean of 18.6053 and a standard deviation of 5.5388. The mean of losing coaches was 16.2500 and the standard deviation was 6.5522. A t ratio yielded a t value of -1.12 with a probability of 0.2770. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable A for winning and losing coaches.

In the area of social interest and sociability (S), winning coaches had a mean of 21.9737 and a standard deviation of 4.6817. The mean of losing coaches was 18.7500 and the standard deviation was 7.0469. A t ratio yielded a t value of -1.48 with a probability of 0.1595. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable S for winning and losing coaches.

In the area of emotional stability (E), winning coaches had a mean of 19.5263 and a standard deviation of 5.0657. The mean of losing coaches was 20.8333 and the standard deviation was 5.4578. A t ratio

yielded a t value of 0.74 with a probability of 0.4718. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable E for winning and losing coaches.

In the area of objectivity (O), winning coaches had a mean of 17.8158 and a standard deviation of 4.1057. The mean of losing coaches was 15.7500 and the standard deviation was 6.3264. A t ratio yielded a t value of -1.06 with a probability of 0.3059. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable O for winning and losing coaches.

In the area of friendliness and agreeableness (F), winning coaches had a mean of 14.1316 and a standard deviation of 5.3885. The mean of losing coaches was 13.0833 and the standard deviation was 3.9877. A t ratio yielded a t value of -0.73 with a probability of 0.4751. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable F for winning and losing coaches.

In the area of thoughtfulness and reflectiveness (T), winning coaches had a mean of 18.7368 and a standard deviation of 4.2534. The mean of losing coaches was 19.0833 and the standard deviation was 5.0174. A t ratio yielded a t value of 0.22 with a probability of 0.8317. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable T for winning and losing coaches.

In the area of personal relations and cooperativeness (P), winning coaches had a mean of 16.3947 and a standard deviation of 5.5143. The mean of losing coaches was 12.8333 and the standard deviation was 6.0428. A t ratio yielded a t value of -1.82 with a probability of

0.0867. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable P for winning and losing coaches.

In the area of masculinity (M), winning coaches had a mean of 17.5526 and a standard deviation of 4.6771. The mean of losing coaches was 16.2500 and the standard deviation was 5.8795. A t ratio yielded a t value of -0.70 with a probability of 0.4938. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable M for winning and losing coaches.

In comparing winning and losing coaches, there is no significant difference at the .05 level of confidence in the personality variables of general activity and energy, restraint and seriousness, ascendance and social boldness, social interest and sociability, emotional stability, objectivity, thoughtfulness and reflectiveness, personal relations and cooperativeness, friendliness and agreeableness, and masculinity. It should be noted that personality variable (P), personal relations and cooperativeness, yielded a t value of -1.82 and a probability of 0.0867. Winning coaches were higher than losing coaches. Therefore, there was no significant difference between winning and losing coaches in any of the personality variables at the .05 level of confidence. A summary of the data comparing winning and losing coaches is presented in Table IV.

Interaction Between Male, Female, Winning, and Losing Coaches

Personality traits of 16 male winning coaches, 22 female winning coaches, three male losing coaches, and nine female losing coaches were compared to determine if significant differences existed. Comparisons

TABLE IV
 COMPARISON OF WINNING AND LOSING COACHES' SCORES ON THE
GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	Winning		Losing		t	p	Significance
	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	22.28	4.96	22.91	3.55	0.48	0.63	n. sig.
Restraint	18.36	4.41	17.66	5.63	-0.40	0.69	n. sig.
Ascendance	18.60	5.53	16.25	6.55	-1.12	0.27	n. sig.
Sociability	21.97	4.68	18.85	7.04	-1.48	0.15	n. sig.
Emotional Stability	19.52	5.06	20.83	5.45	0.74	0.47	n. sig.
Objectivity	17.81	4.10	15.75	6.32	-1.06	0.30	n. sig.
Friendliness	14.13	5.38	13.08	3.98	-0.73	0.47	n. sig.
Thoughtfulness	18.73	4.25	19.08	5.01	0.22	0.83	n. sig.
Personal Relations	16.39	5.51	12.83	6.04	-1.82	0.08	n. sig.
Masculinity	17.55	4.67	16.25	5.87	-0.70	0.49	n. sig.

.05 Level of Confidence.

were made on each of the 10 personality variables. In the area of general activity and energy (G), male winning coaches had a mean of 23.813 and a standard deviation of 5.369. Female winning coaches had a mean of 21.182 and standard deviation of 5.369. Female winning coaches had a mean of 21.182 and a standard deviation of 4.458. Male losing coaches had mean of 21.333 and a standard deviation of 2.082. Female losing coaches had a mean of 23.444 and a standard deviation of 3.877. An analysis of variance compared the interaction of males, females, winning and losing coaches. This analysis yielded F value of 1.91 with a probability of 0.1733. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if a significant difference existed between male winning and female winning coaches, and between male losing and female losing coaches. The t ratio between male winning and female winning coaches yielded a t value of 1.60. This was not significant at the .05 level of confidence. The t ratio between male losing and female losing coaches yielded a t value of .75. This was not significant at the .05 level of confidence. Therefore, there was no significant difference between male winning and female winning coaches nor between male losing and female losing coaches in variable G.

In the area of restraint and seriousness (R), male winning coaches had a mean of 17.625 and a standard deviation of 5.214. Female winning coaches had a mean of 18.909 and standard deviation of 3.766. Male losing coaches had a mean of 20.000 and a standard deviation of 3.606. Female losing coaches had a mean of 16.889 and standard deviation of 6.133. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 1.56 with a probability of 0.2183. At the .05 level of confidence, the F

value was not significant. A t test was performed to determine if a significant difference existed between male winning and female winning coaches and between male losing and female losing coaches. The t ratio between male winning and female winning coaches yielded a t value of .838. This was not significant at the .05 level of confidence. The t ratio between male losing and female losing coaches yielded a t value of 1.06. This was not significant at the .05 level of confidence. Therefore, there was no significant difference between male winning and female winning coaches nor between male losing and female losing coaches in variable R.

In the area of ascendance and social boldness (A), male winning coaches had a mean of 19.563 and a standard deviation of 5.549. Female winning coaches had a mean of 17.909 and a standard deviation of 5.554. Male losing coaches had a mean of 20.667 and standard deviation of 5.132. Female losing coaches had a mean 14.778 and a standard deviation of 6.534. Analysis of variance compared the interaction of males, females, winning, and losing coaches. This analysis yielded an F value of 0.99 with a probability 0.3242. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if a significant difference existed between male winning and female winning coaches, and between male losing and female losing coaches. The t ratio between male winning and female winning coaches yielded a t value of .907. This was not significant at the .05 level of confidence. The t ratio between male losing and female losing coaches yielded a t value of 1.60. This was not significant at the .05 level of confidence. Therefore, there was no significant difference between male winning and female winning coaches nor between male losing and female losing coaches

in variable A.

In the area of social interest and sociability (S), male winning coaches had a mean of 22.500 and a standard deviation of 4.442. Female winning coaches had a mean of 21.591 and a standard deviation of 4.915. Male losing coaches had a mean of 23.333 and a standard deviation of 1.155. Female losing coaches had a mean of 17.222 and a standard deviation of 7.579. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 1.78 with a probability of 0.1886. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if a significant difference existed between male winning and female winning coaches and between male losing and female losing coaches. The t ratio between male winning and female winning coaches yielded a t value of .595. This was not significant at the .05 level of confidence. The t ratio between male losing and female losing coaches yielded a t value of 2.33. This was a significant difference at the .05 level of confidence. Male losing coaches scored higher than female losing coaches. According to the GZTS profile sheet, male losing coaches fell in the 70th percentile when compared to the normal population and female losing coaches fell in the 35th percentile. Referring to the GZTS manual, those who score higher in this category need to interact with other people. Therefore, even though the interaction of male, female, winning, and losing coaches showed no significant difference, there was a difference between male losing and female losing coaches in variable S.

In the area of emotional stability (E), male winning coaches had a mean of 20.688 and a standard deviation of 4.110. Female winning coaches had a mean of 18.682 and a standard deviation of 5.601. Male

losing coaches had a mean of 25.667 and a standard deviation of 2.082. Female losing coaches had a mean of 19.222 and a standard deviation of 5.310. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 1.43 with a probability of 0.2377. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if a significant difference existed between male winning and female winning coaches and between male losing and female losing coaches. The t ratio between male winning and female winning coaches yield a t value of 1.27. This was not significant at the .05 level of confidence. The t ratio between male losing and female losing coaches yielded a t value of 3.01. This was a significant difference at the .05 level of confidence. Male losing coaches scored higher than female losing coaches. According to the GZTS profile sheet, male losing coaches fell in the 90th percentile in comparison to the normal population while female losing coaches fell in the 55th percentile. Referring to the GZTS manual, those who score higher in this category are more calm when faced with stress. Therefore, even though the interaction of male, female, winning, and losing coaches showed no significant difference, there was a difference between male losing and female losing coaches on variable E. There was no difference between male winning and female winning coaches in variable E.

In the area of objectivity (O), male winning coaches had a mean of 17.250 and a standard deviation of 4.768. Female winning coaches had a mean of 18.227 and a standard deviation of 3.611. Male losing coaches had a mean of 22.333 and a standard deviation 4.509. Female losing coaches had a mean of 13.556 and a standard deviation of 5.318. Analysis of variance compared the interaction of male, female, winning,

and losing coaches. This analysis yielded an F value of 8.99 with a probability of 0.0044. At the .05 level of confidence, the F value was significant. A t test was performed to determine the origin of the differences. A t ratio between male winning and female winning coaches yielded a t value of .6889. This was not significant at the .05 level of confidence. A t ratio between male losing and female losing coaches yielded a t value 2.787. There was a significant difference between male and female losing coaches. Male losing coaches scored higher than female losing coaches. According to the GZTS profile sheet, male losing coaches fell in the 70th percentile in comparison to the normal population while female coaches fell in the upper 20th percentile. Referring to the GZTS manual, those who score higher in this category can handle criticism and those who score fairly low are overly sensitive. This indicates no significant differences in variable 0 for male and female winning coaches, but it does indicate significant difference in variable 0 for male and female losing coaches.

In the area of friendliness and agreeableness (F), male winning coaches had a mean of 12.563 and a standard deviation of 7.155. Female winning coaches had a mean of 15.273 and a standard deviation of 3.369. Male losing coaches had a mean of 17.333 and a standard deviation of 4.726. Female losing coaches had a mean of 11.667 and a standard deviation of 2.693. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 5.27 and a probability of 0.0263. At the .05 level of confidence, the F value was significant. A t test was performed to determine the origin of the difference. A t ratio between male winning and female winning coaches yielded a t value of 1.406. This was not significant

at the .05 level of confidence. A t ratio between male losing and female losing coaches yielded a t value of 1.972. This was not significant at the .05 level of confidence. Therefore, the origin of the differences lies somewhere other than female and male winning coaches and female and male losing coaches. No further tests were performed. Even though a significant interaction yielded a significant difference, there was no difference between male winning and female winning coaches and between male losing and female losing coaches in variable F.

In the area of thoughtfulness and reflectiveness (T), male winning coaches had a mean of 18.500 and a standard deviation of 3.933. Female winning coaches had a mean of 18.909 and a standard deviation of 4.556. Male losing coaches had a mean of 16.667 and a standard deviation of 4.041. Female losing coaches had a mean of 19.889 and a standard deviation of 5.255. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 0.72 with a probability of 0.4021. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if there was a significant difference between male winning and female winning coaches and between male losing and female losing coaches. A t ratio between male and female winning coaches yielded a t value of .29. This was not significant at the .05 level of confidence. A t ratio between male losing and female losing coaches yielded a t value of 1.10. This was not significant at the .05 level of confidence. Therefore, no difference existed between male winning and female winning coaches nor between male losing and female losing coaches in variable T.

In the area of personal relations and cooperativeness (P), male winning coaches had a mean of 14.750 and a standard deviation of 5.710.

Female winning coaches had a mean of 17.591 and a standard deviation of 5.170. Male losing coaches had a mean of 18.667 and a standard deviation of 8.083. Female losing coaches had a mean of 10.889 and a standard deviation of 4.106. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 7.14 with a probability of 0.0104. At the .05 level of confidence, the F value was significant. A t test was performed to determine the origin of the difference. A t ratio between male winning and female winning coaches yielded a t value of 1.575. This was not significant at the .05 level of confidence. A t ratio between male losing and female losing coaches yielded a t value of 1.599. This was not significant at the .05 level of confidence. Therefore, the origin of the difference lies somewhere other than female and male winning coaches and female and male losing coaches. No further tests were performed. Even though a significant interaction yielded a significant difference, there was no difference between male winning and female winning coaches nor between male losing and female losing coaches in variable P.

In the area of masculinity (M), male winning coaches had a mean of 20.188 and a standard deviation of 3.970. Female winning coaches had a mean of 15.636 and a standard deviation of 4.260. Male losing coaches had a mean of 23.667 and a standard deviation of 3.215. Female losing coaches had a mean of 13.778 and a standard deviation of 4.177. Analysis of variance compared the interaction of male, female, winning, and losing coaches. This analysis yielded an F value of 3.05 with a probability of 0.0874. At the .05 level of confidence, the F value was not significant. A t test was performed to determine if there was a significant difference between male winning and female winning coaches and between male losing

and female losing coaches. A t ratio between male and female winning coaches yielded a t value of 3.35. This was a significant difference at the .05 level of confidence. A t ratio between male losing and female losing coaches yielded a t value of 4.26. This was a significant difference at the .05 level of confidence. Male winning coaches scored higher than female losing coaches, and male losing coaches scored higher than female losing coaches. According to the GZTS profile sheet, male winning coaches fell in the 50th percentile, female winning coaches fell in the 20th percentile, male losing coaches fell in the 70th percentile, and female losing coaches fell in the 30th percentile when compared to the normal population. Males who score in the 50th to 70th percentile are very average when compared to the normal population of males. Females who score in the 20th to 30th percentile are well below average when compared to the normal population of females. Referring to the GZTS manual, male coaches are comparable to the average males, while female coaches, by scoring well below average indicate masculine tendencies. This implies that the female is rebelling from the female role. Therefore, even though interaction between male, female, winning, and losing coaches only approached a significant difference, a difference existed between male winning and female winning coaches and between male losing and female losing coaches.

There were no significant differences in the interaction of male, female, winning, and losing coaches in the variables of general activity, restraint, ascendance, sociability, emotional stability, thoughtfulness, and masculinity. Significant differences in the interaction did occur in the variables of objectivity, friendliness, and personal relations. When comparing male winning coaches to female winning coaches, there were no

significant differences in the variables of general activity, restraint, ascendance, sociability, emotional stability, objectivity, friendliness, thoughtfulness, and personal relations. The only significant difference between male winning and female winning coaches was in the variable of masculinity. There were no significant differences between male losing and female losing coaches in the variables of general activity, restraint, ascendance, friendliness, thoughtfulness, and personal relations. Significant differences did occur in variables of sociability, emotional stability, objectivity, and masculinity between male losing and female losing coaches. The interaction of male, female, winning, and losing coaches is summarized in Table V. A comparison of male winning and female winning coaches is presented in Table VI. A comparison of male losing and female losing coaches is presented in Table VII.

Comparison of Older and Younger Coaches

Personality traits of 42 younger coaches and eight older coaches were compared to determine if a significant difference existed. Comparisons were made with each of the 10 personality variables.

In the area of general activity and energy (G), older coaches had a mean of 20.1250 and a standard deviation of 5.7925. The mean of younger coaches was 22.8810 and the standard deviation was 4.3348. A t ratio yielded a t value of 1.28 with a probability of 0.2344. At the .05 level of confidence, the t value was not significant. This indicates no significant differences in variable G for older and younger coaches.

In the area of restraint and seriousness (R), older coaches had a mean of 19.7500 and a standard deviation of 5.8002. The mean of younger coaches was 17.9048 and the standard deviation was 4.4602. At the .05

TABLE V

INTERACTION OF MALE, FEMALE, WINNING, AND LOSING COACHES' SCORES ON THE
GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	Male Losing		Male Winning		Female Losing		Female Winning		F	p	Signifi- cance
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	21.33	2.08	23.81	5.36	23.44	3.87	21.18	4.45	1.91	0.17	n. sig.
Restraint	20.00	3.60	17.62	5.21	16.88	6.13	18.90	3.76	1.56	0.21	n. sig.
Ascendance	20.66	5.13	19.56	5.54	14.77	6.53	17.90	5.55	0.99	0.32	n. sig.
Sociability	23.33	1.15	22.50	4.44	17.22	7.57	21.59	4.91	1.78	0.18	n. sig.
Emotional Stability	25.66	2.08	20.68	4.11	19.22	5.31	18.68	5.60	1.43	0.23	n. sig.
Objectivity	22.33	4.50	17.25	4.76	13.55	5.31	18.22	3.61	8.99	0.00	sig.
Friendliness	17.33	4.72	12.56	7.15	11.66	2.69	15.27	3.36	5.27	0.02	sig.
Thoughtfulness	16.66	4.04	18.50	3.93	19.88	5.25	18.90	4.55	0.72	0.40	n. sig.
Personal Relations	18.66	8.08	14.75	5.71	10.88	4.10	17.59	5.17	7.14	0.01	sig.
Masculinity	23.66	3.21	20.18	3.97	13.77	4.17	15.63	4.26	3.05	0.08	n. sig.

.05 Level of Confidence.

TABLE VI
 COMPARISON OF MALE WINNING AND FEMALE WINNING COACHES' SCORES
 ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	Male Winning		Female Winning		t	Significance
	\bar{X}	S.D.	\bar{X}	S.D.		
General Activity	23.81	5.36	21.18	4.45	1.60	n. sig.
Restraint	17.62	5.21	18.90	3.76	.83	n. sig.
Ascendance	19.56	5.54	17.90	5.55	.90	n. sig.
Sociability	22.50	4.44	21.59	4.91	.59	n. sig.
Emotional Stability	20.68	4.11	18.68	5.60	1.27	n. sig.
Objectivity	17.25	4.76	18.22	3.61	.68	n. sig.
Friendliness	12.56	7.15	15.27	3.36	1.40	n. sig.
Thoughtfulness	18.50	3.93	18.90	4.55	.29	n. sig.
Personal Relations	14.75	5.71	17.59	5.17	1.57	n. sig.
Masculinity	20.18	3.97	15.63	4.26	3.38	sig.

.05 Level of Confidence.

TABLE VII

COMPARISON OF MALE LOSING AND FEMALE LOSING COACHES' SCORES
ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	<u>Male Losing</u>		<u>Female Losing</u>		t	Significance
	\bar{X}	S.D.	\bar{X}	S.D.		
General Activity	21.33	2.08	23.44	3.87	.75	n. sig.
Restraint	20.00	3.60	16.88	6.13	1.06	n. sig.
Ascendance	20.66	5.13	14.77	6.53	1.60	n. sig.
Sociability	23.33	1.15	17.22	7.57	2.33	sig.
Emotional Stability	25.66	2.08	19.22	5.31	3.01	sig.
Objectivity	22.33	4.50	13.55	5.31	2.78	sig.
Friendliness	17.33	4.72	11.66	2.69	1.97	n. sig.
Thoughtfulness	16.66	4.04	19.88	5.25	1.10	n. sig.
Personal Relations	18.66	8.08	10.88	4.10	1.59	n. sig.
Masculinity	23.66	3.21	13.77	4.17	4.26	sig.

.05 Level of Confidence.

level of confidence, the t value was not significant. This indicates no significant difference in variable R for older and younger coaches.

In the area of ascendance and social boldness (A), older coaches had a mean of 19.1250 and a standard deviation of 4.0156. The mean of younger coaches was 17.8333 and the standard deviation was 6.1164. A t ratio yielded a t value of -0.76 with a probability of 0.4611. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable A for older and younger coaches.

In the area of social interest and sociability (S), older coaches had a mean of 21.5000 and a standard deviation of 3.6645. The mean of younger coaches was 21.1429 and the standard deviation was 5.7534. A t ratio yielded a t value of -0.23 with a probability of 0.8233. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable S for older and younger coaches.

In the area of emotional stability (E), older coaches had a mean of 21.1250 and a standard deviation of 5.2763. The mean of younger coaches was 19.5952 and the standard deviation was 5.1374. A t ratio yielded a t value of -0.75 with a probability of 0.4683. At the .05 level of confidence, the t value was not significant. This indicates no significant differences in variable E for older and younger coaches.

In the area of objectivity (O), older coaches had a mean of 18.2500 and a standard deviation of 4.2678. The mean of younger coaches was 17.1429 and the standard deviation was 4.8568. A t ratio yielded a t value of -0.66 with a probability of 0.5249. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable O for older and younger coaches.

In the area of friendliness and agreeableness (F), older coaches had a mean of 14.0000 and a standard deviation 3.0237. The mean of younger coaches was 13.8571 and the standard deviation was 5.3991. A t ratio yielded a t value of -0.11 with a probability of 0.9173. At the .05 level of confidence, the t value was significant. This indicates a significant difference in variable F for older and younger coaches.

In the area of thoughtfulness and reflectiveness (T), older coaches had a mean of 20.1250 and a standard deviation of 6.6855. The mean of younger coaches was 18.5714 and the standard deviation was 3.8833. A t ratio yielded a t value of -0.64 with a probability of 0.5420. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable T for older or younger coaches.

In the area of public relations and cooperativeness (P), older coaches had a mean of 17.8750 and a standard deviation of 5.7181. The mean of younger coaches was 15.0952 and the standard deviation was 5.7628. A t ratio yielded a t value of -1.26 with a probability of 0.2370. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable P for older and younger coaches.

In the area of masculinity (M), older coaches had a mean of 14.7500 and a standard deviation of 4.5904. The mean of younger coaches was 17.7143 and the standard deviation of 0.1282. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable M for older and younger coaches.

In comparing younger and older coaches, there was no significant difference at the .05 level of confidence on the personality variables

of general activity and energy, restraint and seriousness, ascendance and social boldness, social interest and sociability, emotional stability, objectivity, thoughtfulness and reflectiveness, personal relations, friendliness and agreeableness, and masculinity. Therefore, there was no significant difference between older and younger coaches in any of the personality variables at the .05 level of confidence. A summary of the comparison of older and younger coaches is presented in Table VIII.

Comparison of More Experienced and Less Experienced Coaches

Personality traits of 22 more experienced and 28 less experienced coaches were compared to determine if a significant difference existed. Comparisons were made with each of the 10 personality variables.

In the area of general activity and energy (G), more experienced coaches had a mean of 22.2273 and a standard deviation of 4.8788. The mean of less experienced coaches was 22.6071 and the standard deviation was 4.5325. A t ratio yielded a t-value of 0.28 with a probability of 0.7793. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable G for more experienced and less experienced coaches.

In the area of restraint and seriousness (R), more experienced coaches had a mean of 18.5909 and a standard deviation of 3.8503. The mean of less experienced coaches was 17.8929 and the standard deviation was 5.2939. A t ratio yielded a t value of -0.54 with a probability of 0.5921. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable R for more experienced and less experienced coaches.

TABLE VIII

COMPARISON OF OLDER AND YOUNGER COACHES' SCORES ON
THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	Older		Younger		t	p	Significance
	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	20.12	5.79	22.88	4.33	1.28	0.23	n. sig.
Restraint	19.75	5.80	17.90	4.46	-0.85	0.41	n. sig.
Ascendance	19.12	4.01	17.83	6.11	-0.76	0.46	n. sig.
Sociability	21.50	3.66	21.14	5.75	-0.23	0.82	n. sig.
Emotional Stability	21.12	5.27	19.59	5.13	-0.75	0.46	n. sig.
Objectivity	18.25	4.26	17.14	4.85	-0.66	0.52	n. sig.
Friendliness	14.00	3.02	13.85	5.39	-0.11	0.91	n. sig.
Thoughtfulness	20.12	6.68	18.57	3.88	-0.64	0.54	n. sig.
Personal Relations	17.87	5.71	15.09	5.76	-1.26	0.23	n. sig.
Masculinity	14.75	4.59	17.71	4.93	1.65	0.12	n. sig.

.05 Level of Confidence.

In the area of ascendance and social boldness (A), more experienced coaches had a mean of 16.3636 and a standard deviation of 5.9725. The mean of less experienced coaches was 19.3571 and the standard deviation was 5.4380. A t ratio yielded a t value of 1.83 with a probability of 0.0743. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable A for more experienced and less experienced coaches.

In the area of social interest and sociability (S), more experienced coaches had a mean of 19.5909 and a standard deviation of 6.3670. The mean of less experienced coaches was 22.4643 and the standard deviation was 4.2989. A t ratio yielded a t value of 1.82 with a probability of 0.0778. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable S for more experienced and less experienced coaches.

In the area of emotional stability (E), more experienced coaches had a mean of 19.7727 and a standard deviation of 5.1077. The mean of less experienced coaches was 19.8929 and the standard deviation was 5.2517. A t ratio yielded a t value of 0.08 with a probability of 0.9354. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable E for more experienced and less experienced coaches.

In the area of objectivity (O), more experienced coaches had a mean of 16.7727 and a standard deviation of 4.9467. The mean of less experienced coaches was 17.7500 and the standard deviation was 4.6238. A t ratio yielded a t value of 0.71 with a probability of 0.4793. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable O for more experienced and less experienced coaches.

In the area of friendliness and agreeableness (F), more experienced coaches had a mean of 13.5000 and a standard deviation of 4.3507. The mean of less experienced coaches was 14.1786 and the standard deviation was 5.6310. A t ratio yielded a t value of 0.48 with a probability of 0.6329. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable F for more experienced and less experienced coaches.

In the area of thoughtfulness and reflectiveness (T), more experienced coaches had a mean of 19.5455 and a standard deviation of 4.3175. The mean of less experienced coaches was 18.2500 and the standard deviation was 4.4524. A t ratio yielded a t value of -1.04 with a probability of 0.3044. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable T for more experienced and less experienced coaches.

In the area of personal relations and cooperativeness (P), more experienced coaches had a mean of 15.4545 and a standard deviation of 5.9660. The mean of less experienced coaches was 15.6071 and the standard deviation was 5.7564. A t ratio yielded a t value of 0.09 with a probability of 0.9278. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable P for more experienced coaches.

In the area of masculinity (M), more experienced coaches had a mean of 14.3182 and a standard deviation of 4.6021. The mean of less experienced coaches was 19.5357 and the standard deviation was 3.9673. A t ratio yielded a t value of 4.23 with a probability of 0.0001. At the .05 level of confidence, the t value was significant. This indicates a significant difference in variable M for more experienced and less

experienced coaches.

In comparing more experienced and less experienced coaches, there was no significant difference at the .05 level of confidence in the personality variables of general activity and energy, restraint and seriousness, ascendance and social boldness, social interest and sociability, emotional stability, objectivity, friendliness and agreeableness, thoughtfulness and reflectiveness, and personal relations and cooperativeness. There was a significant difference between more experienced and less experienced coaches in the variability of masculinity. Of marginal significance were the variables of ascendance and social boldness, and social interest and sociability. The variable of ascendance yielded a t value of 1.83 and a probability of .0743. Less experienced coaches scored higher than more experienced coaches. The variable of social interest yielded a t value of 1.82 and a probability of 0.778. Less experienced coaches scored higher than more experienced coaches. The variable of masculinity yielded a t value of 4.23 and a probability of 0.0000. This is the only variable in which there was a significant difference between more experienced and less experienced coaches.

On the GZTS profile sheet, less experienced coaches fell in the upper 10th percentile when compared to the normal population. According to the GZTS manual, males who scored lower in this percentile category than the average population are more sensitive and will be more successful in understanding women whereas the females who scored lower in this percentile category than the average population may be rebelling against the female role and attempting to play the male role.

Therefore, there was a significant difference between more

experienced and less experienced coaches in the variable of masculinity at the .05 level of confidence. The comparison of more experienced and less experienced coaches is summarized in Table IX.

Comparison of Coaches of Higher Level
and Lower Level Competition

Personality traits of 17 higher level of competition and 33 lower level of competition coaches were compared to determine if a significant difference existed. Comparisons were made with each of the 10 personality variables.

In the area of general activity and energy (G), higher level of competition coaches had a mean of 23.4118 and a standard deviation of 4.2139. The mean of lower level of competition coaches was 21.9394 and the standard deviation was 4.8344. A t ratio yielded a t value of 1.11 with a probability of 0.2733. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable G for higher and lower level of competition coaches.

In the area of restraint and seriousness (R), higher level of competition coaches had a mean of 18.1765 and a standard deviation of 5.4685. The mean of lower level of competition coaches was 18.2121 and the standard deviation was 4.3139. A t ratio yielded a t value of -0.02 with a probability of 0.9815. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable R for higher and lower level of competition coaches.

In the area of ascendance and social boldness (A), higher level of competition coaches had a mean of 19.7059 and a standard deviation of 6.1823. The mean of lower level of competition coaches was 17.1818 and

TABLE IX
 COMPARISON OF MORE EXPERIENCED AND LESS EXPERIENCED COACHES' SCORES
 ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	<u>More Experienced</u>		<u>Less Experienced</u>		t	p	Significance
	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	22.22	4.87	22.60	4.53	0.28	0.77	n. sig.
Restraint	18.59	3.85	17.89	5.29	-0.54	0.59	n. sig.
Ascendance	16.36	5.97	19.35	5.43	1.83	0.07	n. sig.
Sociability	19.59	6.36	22.46	4.29	1.82	0.07	n. sig.
Emotional Stability	19.77	5.10	19.89	5.25	0.08	0.93	n. sig.
Objectivity	16.77	4.94	17.75	4.62	0.71	0.47	n. sig.
Friendliness	13.50	4.35	14.17	5.63	0.48	0.63	n. sig.
Thoughtfulness	19.54	4.31	18.25	4.75	-1.04	0.30	n. sig.
Personal Relations	15.45	5.96	15.60	5.75	0.09	0.92	n. sig.
Masculinity	14.31	4.60	19.53	3.96	4.23	0.00	sig.

.05 Level of Confidence.

the standard deviation was 5.5196. A t ratio yielded a t value of 1.42 with a probability of 0.1669. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable A for higher and lower level of competition coaches.

In the area of social interest and sociability (S), higher level of competition coaches had a mean of 20.2353 and a standard deviation of 6.4762. The mean of lower level competition coaches was 21.6970 and the standard deviation was 4.8637. A t ratio yielded a t value of -0.82 with a probability of 0.4203. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable S for higher and lower level of competition coaches.

In the area of emotional stability (E), higher level of competition coaches had a mean of 20.4706 and a standard deviation of 5.4097. The mean of lower level of competition coaches was 19.5152 and the standard deviation was 5.0443. A t ratio yielded a t value of 0.61 with probability of 0.5495. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable E for higher and lower level of competition coaches.

In the area of objectivity (O), higher level of competition coaches had a mean of 18.9412 and a standard deviation of 4.9934. The mean of lower level of competition coaches was 16.4848 and the standard deviation was 4.4590. A t ratio yielded a t value of 1.71 with a probability of 0.0983. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable O for higher and lower level of competition coaches.

In the area of friendliness and agreeableness (F), higher level of competition coaches had a mean of 13.4706 and a standard deviation of

4.6249. The mean of lower level of competition coaches was 14.0909 and the standard deviation was 5.3407. A t ratio yielded a t value of -0.43 with a probability of 0.6727. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable F for higher and lower level of competition coaches.

In the area of thoughtfulness and reflectiveness (T), higher level of competition coaches had a mean of 19.4118 and a standard deviation of 3.9220. The mean of lower level of competition coaches was 18.5152 and the standard deviation was 4.6511. A t ratio yielded a t value of 0.72 with a probability of 0.4773. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable T for higher level and lower level of competition coaches. In the area of personal relations and cooperativeness (P), higher level of competition coaches had a mean of 15.7647 and a standard deviation of 5.7285. The mean of lower level of competition coaches was 15.4242 and the standard deviation was 5.9057. A t ratio yielded a t value of 0.20 with a probability of 0.8450. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable P for higher and lower level of competition coaches.

In the area of masculinity (M), higher level of competition coaches had a mean of 16.3529 and a standard deviation of 4.8855. The mean of lower level of competition coaches was 17.6970 and the standard deviation was 5.0093. A t ratio yielded a t value of -0.91 with a probability of 0.3675. At the .05 level of confidence, the t value was not significant. This indicates no significant difference in variable M for higher and lower level competition coaches.

In comparing higher level of competition coaches to lower level of

competition coaches, there was no significant difference at the .05 level of confidence on the personality variables of general activity and energy, restraint and seriousness, ascendance and social boldness, social interest and sociability, emotional stability, objectivity, thoughtfulness and reflectiveness, personal relations and cooperativeness, friendliness and agreeableness, and masculinity. It should be noted that personality variable 0 objectivity yielded a t value of 1.71 with a probability of 0.0983. This approached significance. Coaches of higher level of competition scored above coaches of lower level of competition. There was no significant difference between higher level of competition and lower level of competition coaches in any of the personality variables at the .05 level of confidence. The comparison of coaches of higher level competition and coaches of lower level of competition is presented in Table X.

Discussion

When comparing the personality traits of male and female coaches, there was a significant difference in the trait of masculinity and approached significance in the trait of emotional stability. Male coaches, on the average, scored very similar to the normal population of males. They were not uncharacteristically high or low on the masculinity scale. The female coaches, however, fell below the average when compared to the normal population of females. This indicated that female coaches have more masculine traits than the normal population of females. It would appear that since society has implied that coaching is a male domain, females who have more masculine traits may have fallen into this male role. Even though a significant difference did not occur

TABLE X
 COMPARISON OF HIGHER AND LOWER LEVEL OF COMPETITION COACHES' SCORES
 ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY

Personality Variable	<u>Higher Level</u>		<u>Lower Level</u>		t	p	Significance
	\bar{X}	S.D.	\bar{X}	S.D.			
General Activity	23.41	4.21	21.93	4.83	1.11	0.27	n. sig.
Restraint	18.17	5.46	18.21	4.31	-0.02	0.98	n. sig.
Ascendance	19.70	6.18	17.18	5.51	1.42	0.16	n. sig.
Sociability	20.23	6.47	21.69	4.86	-0.82	0.42	n. sig.
Emotional Stability	20.47	5.40	19.51	5.04	0.61	0.54	n. sig.
Objectivity	18.94	4.99	16.48	4.45	1.71	0.09	n. sig.
Friendliness	13.47	4.62	14.09	5.34	-0.43	0.67	n. sig.
Thoughtfulness	19.41	3.92	18.51	4.65	0.72	0.47	n. sig.
Personal Relations	15.76	5.72	15.42	5.90	0.20	0.84	n. sig.
Masculinity	16.35	4.88	17.69	5.00	-0.91	0.36	n. sig.

.05 Level of Confidence

in the variable of emotional stability, results approached significance, with males scoring higher than females. According to the GZTS manual, those who score higher are more calm when faced with stress and are more consistent in their behavior or feelings. The female scores ranked them in the 50th percentile, and the male scores placed them in the 70th percentile when compared to the normal population. This would seem to indicate that both groups could handle stress. However, since males scored higher, they may be able to deal with stress better than females. It would appear that where there is more stress associated with coaching, such as Division I competition, female coaches may not be as well suited to handle this situation as do males.

Winning coaches did not differ significantly from losing coaches on any of the personality variables. There was one trait that approached significance. In the area of personal relations and cooperativeness, winning coaches scored higher than losing coaches. Both groups fell extremely below average when compared to the norms. Winning coaches placed in the 35th percentile and losing coaches placed in the lower 20th percentile. According to the GZTS manual, persons who score low on the variable of personal relations tend to think that no one can live up to their standards. This person is conservative, intolerant, cynical, and in a social situation tends to be too outspoken about his opinion and tends to antagonize others. Although both winning and losing coaches appear to have these tendencies, the winning coaches who scored higher would be more inclined to function well in a social situation. People who score below the 70th percentile are not recommended for supervisory or managerial positions. The results in this area are almost contradictory to the anticipated expectations at the point in

time of the coaching profession. Most coaches consider themselves to be in a supervisory or managerial position. These coaches scored extremely low compared to what the researcher expected. Possibly, these coaches are more outspoken and intolerant. On the other hand, the nature of sport itself could create an environment for these traits in coaches when compared to norms of the general population.

There was a significant difference on the variable of masculinity for male winning coaches and female winning coaches. On all other traits these coaches appear to be similar. Male winning coaches scored higher and placed at approximately the 45th percentile when compared to the normal population of males. Female coaches scored in the lower 20th percentile when compared to the norms. Again, the low ranking of the female coaches indicated masculine tendencies in their personalities. Male winning coaches fell a little lower than males of the normal population. A lower score by men on this scale would have implied that they are sensitive to the needs of others and they would be more successful in understanding women. The lower score by men coaches as compared to the normal population in the area of masculinity may reflect the reason why they are coaching women instead of men. Since the results indicated that these coaches potentially relate better to women, the researcher questions whether these coaches would have a better win - loss record if coaching men. The results of this study imply that masculine traits in female coaches seem to be conducive to success in coaching.

There were more significant differences in personality traits between male losing coaches and female losing coaches than on any other comparisons made in this study. These coaches differed on the variables of social interest and sociability, emotional stability, objectivity,

and masculinity. In the area of sociability, male losing coaches scored higher than female losing coaches. Males' scores placed them in the 70th percentile when compared to norms, while female losing coaches ranked in the 30th percentile. According to the GZTS manual, those who score higher in this category have a need to be with other people. Those who score lower tend to want to be alone more than to interact with others. The ideal vocation for very sociable people is one which involves a great deal of public contact. Low scorers are more likely to choose occupations that center around ideas or things. It would appear that the male losing coaches are much more sociable than the female losing coaches.

Male and female losing coaches also differed on the variable of emotional stability. Both male losing and female losing coaches scored well above average in comparison to the norms. Males scored the highest and placed in the 90th percentile while females placed in the upper 55th percentile. However, if the scores are extremely high, as in the case of male losing coaches, these persons usually do not consider emotions to be important and may be unresponsive to situations that would trigger emotional reaction in most people. Female losing coaches, having scored a little above average, appear to handle stress in a calm manner and their behavior is consistent.

Objectivity was a third area where there was a difference between male losing coaches and female losing coaches. Male losing coaches scored higher and were above the normal population with a percentile of 70. Female losing coaches fell in the upper 25th percentile as compared to the normal population. According to the GZTS manual, those who score higher on objectivity are more thick skinned and handle criticism

better. Male coaches appear to be higher than the average male in this area. The female coaches appear to be more sensitive and do not tolerate criticism as well when compared to the normal population or to the male losing coaches.

The fourth variable that distinguished the male losing coaches from the female losing coaches was masculinity. Although there was a significant difference in the means between males and females, with males scoring higher, the lesser score for females, in this instance, places them higher than males when compared to the normal population. Female scores placed them in the 50th percentile when compared to the normal population. This indicated feminine tendencies for these coaches. It suggests that the female losing coaches were more feminine than other sub-groups of female coaches. Male scores placed them in the 30th percentile when compared to the normal population of males. A low score on masculinity indicates a more sensitive male and one who understands women better. This suggests that these coaches might be better coaches of women than coaches of men. Overall, the female losing coaches fell into an overall picture of being more unsociable than male losing coaches and the normal population; above average on emotional stability, but still not as stable as male losing coaches; well below average than the normal population and male losing coaches; well below average than the normal population and male losing coaches on objectivity and sensitivity; and more feminine than any other sub-group of women coaches. Male losing coaches were above the normal population of males in sociability, emotional stability, and objectivity but were below the normal population of males on masculinity. It appears that male losing coaches need to be with others and because of their low

score on masculinity, they possibly feel more comfortable with women. Apparently they do not display their emotions and are somewhat unresponsive; however, they handle criticisms well. If these coaches are lower on the masculinity scale, perhaps some of the characteristics necessary for success and what is expected of the male role are absent. The female losing coaches reflect the tendency to want to be alone, are more sensitive to criticism, but they are able to handle stress better than the norms of the general population of females. An interesting note, however, is that they appear to have the most feminine traits of all the female subgroups. With the combination of the other significantly different traits, the researcher believes this may reflect the need for these coaches to determine whether they are truly suited for this profession. Many outside factors could contribute to the suitability of a particular coach at the specific university, or situation.

The interaction of males, females, winning and losing coaches provides a useful means of comparing combinations of groups. The combinations of male winning and female winning, male losing to female losing coaches were of main concern to the researcher. Further research could compare male winning to male losing and female winning to female losing, as well as other combinations. The purpose of doing the interaction was to provide further support for the results to the information gained from this study.

In comparing older and younger coaches, there were no significant differences in any of the personality variables. This would imply that the coach's personality does not change significantly with age. It was interesting to find no differences between older and younger coaches. With the changing emphasis in women's athletics, the researcher expected

differences in this area because the literature implies that philosophies, situation, emphases, etc., have changed over the years; however, basic personalities have not.

Less experienced coaches differed significantly from more experienced coaches on the variable of masculinity and approached differences in the areas of sociability and ascendance. In each instance, less experienced coaches scored higher. Less experienced coaches were higher in masculinity than more experienced coaches but both groups fell below the average population. This indicated that male coaches, whether more or less experienced, are not as masculine as the normal population of males. Females, whether more or less experienced, are more masculine than the normal population of females. Less experienced coaches scored higher than more experienced coaches on ascendance. Even though approaching significance, this suggests that less experienced coaches are more dominant than more experienced coaches. Both groups placed well above the average population indicating that coaches are more dominant than the norms. Less experienced coaches placed in the 70th percentile while more experienced coaches placed in the 50th percentile in the area of sociability. This indicates that both groups are more sociable than the average population. Again, approached significance occurred in this area. However, since less experienced coaches scored higher than more experienced coaches, it would appear that they tend to want to be with people more than the more experienced coaches. Again, the researcher expected differences between more experienced and less experienced coaches. Less experienced coaches approached significance in being more dominant and reflected a desire to be with people. The more experienced coaches reflected less dominant tendencies. Perhaps, the

demands of women's athletics will create a need for more dominant coaches in the future whether they are male or female.

When comparing higher level of competition coaches with lower level of competition coaches, there were no significant differences. There was approached significance in the variable of objectivity. Higher level of competition coaches scored higher and placed in the 50th percentile when compared to the normal population. The lower level of competition coaches placed in the 40th percentile which suggested that they are more submissive than the normal population and more submissive than the higher level of competition coaches. It would appear that the personality in higher level competition coaches were no different from lower level competition coaches. This indicates that the coach could be at any level of competition but no changes would occur in personality. However, the researcher believed that the level of competition coaches might create behavioral changes rather than personality changes.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The primary purpose of this study was to determine if significant differences existed in the personality traits of male and female, winning and losing coaches of women's intercollegiate basketball in the four state Southwest Region of the Association for Intercollegiate Athletics for Women. A secondary purpose was to determine if differences existed in the personality traits of these coaches when they were classified into sub-groups according to age, years of coaching experience, and level of competition coached.

The Guilford-Zimmerman Temperament Survey was administered to 50 coaches of women's intercollegiate basketball in the spring of 1981. The coaches were located at four year institutions of higher education in the states of Arkansas, Louisiana, Oklahoma, and Texas. On the basis of the demographic information gathered from each coach, the participants were classified into the following sub-groups: male - female, winning - losing, male winning - female winning, male losing - female losing, older - younger, more experienced - less experienced, and higher level of competition - lower level of competition coaches.

A t ratio was used to determine whether significant differences in personality traits existed within each sub-group. Analysis of variance was used to determine interaction between male, female, winning, and

losing coaches. The .05 level of confidence was used for all statistical procedures to determine acceptance or rejection of the null hypotheses.

Conclusions

The conclusions of the study were as follows:

Hypothesis 1. There are no significant differences in the personality traits of male and female coaches of women's intercollegiate basketball. At the .05 level of confidence hypothesis one was rejected. There was a significant difference on the personality trait of masculinity.

Hypothesis 2. There are no significant differences in the personality traits of winning and losing coaches of women's intercollegiate basketball. At the .05 level of confidence, hypothesis two was accepted. There were no significant personality differences in winning and losing coaches.

Hypothesis 3. There are no significant differences in the personality traits of winning male coaches and winning female coaches of women's intercollegiate basketball. At the .05 level of confidence hypothesis three was rejected. There was a significant difference on the personality trait of masculinity.

Hypothesis 4. There are no significant differences in the personality traits of losing male coaches and losing female coaches of women's intercollegiate basketball. At the .05 level of confidence, hypothesis four was rejected. There were significant differences on the personality traits of sociability, emotional stability, objectivity, and masculinity.

Hypothesis 5. There are no significant differences in the personality traits of older and younger coaches of women's intercollegiate

basketball. At the .05 level of confidence, hypothesis five was accepted. There were no significant personality differences in older and younger coaches.

Hypothesis 6. There are no significant differences in the personality traits of more experienced and less experienced coaches of women's intercollegiate basketball. At the .05 level of confidence, hypothesis six was rejected. There was a significant difference on the personality trait of masculinity.

Hypothesis 7. There are no significant differences in the personality traits of higher competitive level and lower competitive level coaches of women's intercollegiate basketball. At the .05 level of confidence, hypothesis seven was accepted. There were no significant personality differences in higher competitive level and lower competitive level coaches.

Recommendations

Based upon the results of this study, the following recommendations are suggested for future study:

The same study or similar studies should be repeated with a larger population of subjects from a wider geographical area; the inclusion of coaches of other sports in addition to basketball; and a more equal number of subjects in the various sub-groups, i.e., male - female, winning - losing, older - younger, more experienced - less experienced, and higher level - lower level of competition. With additional data more comprehensive and conclusive information would be available.

More studies of personalities of intercollegiate athletic coaches should be completed utilizing a combination of personality assessment

instruments instead of only one inventory or survey. Validity and reliability of measurement devices could be tested and interrelationships determined using the specific population of coaches of intercollegiate athletics. Results of personality studies may differ according to the assessment instrument used.

Studies of coaches' personalities should be done using more specific criteria to distinguish between older and younger coaches, more experienced and less experienced coaches, and winning and losing coaches. Several degrees of differentiation could be incorporated into the studies in order to discriminate more specifically between sub-groups.

More specific personality comparisons should be made between male and female coaches; between male coaches of female athletics and male coaches of male athletics; and between female coaches of female athletics and female coaches of male athletics.

Additional studies should be completed which investigate the relationship of the personality of female athletes and female coaches and the relationship of the personality of male athletes and male coaches. If the majority of coaches are former athletes, then the personality relationship between athlete and coach could be significant.

Studies should be done in the future comparing the personalities of female athletes and female coaches to the norms for females in the United States. If the parameters of the "female role" in society change, the personality traits exhibited by females, and specifically by female athletes and female coaches, may also change. Thus, this study, and others like it, should be repeated at five year intervals to determine the societal impact on the personalities of females in coaching positions.

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APPENDIXES

APPENDIX A

INITIAL LETTER

April 21, 1981

Dear Coach:

Do you think men or women college basketball coaches would tend to be more successful? Would you like to know what type of personality traits successful coaches seem to possess and how you compare?

I am a graduate student, presently working on my doctoral degree at Oklahoma State University, Stillwater, Oklahoma. In order to collect appropriate data for my dissertation, I need your help. The purpose of the study is to compare the personality traits of coaches of women's intercollegiate basketball as it relates to winning. Data will be collected by using a "yes-no" questionnaire of three hundred items. Completion of the questionnaire will involve approximately thirty minutes of your time. Answer sheets would be kept confidential and no identification of individual responses would be made.

Your participation in the project would involve: (a) completing and returning the enclosed information sheet, and (b) answering the questionnaire, which will be mailed to you after your information form is returned to me. If you are willing to participate in the study, please fill out the information form and return it immediately in the enclosed self-addressed, stamped envelope. Results will be provided to you if you so request.

Thank you for your consideration and immediate response to my request.

Sincerely,

Gerry C. Pinkston

Enclosures

APPENDIX B

DEMOGRAPHIC INFORMATION FORM

INFORMATION FORM

Name: _____ School: _____

Sex: _____ Male _____ Female

Age: _____ 20-30 years of age

_____ 31-40 years of age

_____ 41-50 years of age

_____ 51-65 years of age

Type of Competition: _____ AIAW Division I _____ AIAW Division II _____ NAIA

Women's Intercollegiate Basketball Coaching Experience (Head Coach Only)

_____ number of years

Total Win and Loss Record of the last three years you have coached:

_____ wins _____ losses

I would like to be provided with the results of this study.

_____ yes _____ no

Mailing address where you can be reached during May and June

Address _____

City _____ State _____ Zip _____

APPENDIX C

FOLLOW-UP LETTER

June 9, 1981

Dear Coach:

A couple of months ago, I wrote and asked you whether or not you would be interested in participating in a study of coaches of women's intercollegiate basketball. I have received a good response from coaches in Texas, Arkansas, Louisiana, and Oklahoma, but I would like to include more people, if possible. There have not been many published studies done on coaches of women and I would like to add to the research in this area of athletics.

If you would like to be included in this study, please fill out the enclosed information form and mail it back in the self-addressed stamped envelope. Then, I will send you the questionnaire that will take approximately thirty minutes of your time to complete.

Results will be mailed to you upon completion of the study. Thank you for your time.

Sincerely,

Gerry C. Pinkston

Enclosures

APPENDIX D

COVER LETTER

April 29, 1981

Dear Coach:

Thank you for taking time to participate in my doctoral study. Enclosed is the questionnaire, answer sheet, and a stamped self-addressed envelope. You'll need to put your name on the answer sheet and use of a number two pencil is preferred, although not required. The counseling center at my university will hand score all answer sheets. No personal identification of any items will be made by the counseling center or myself. Let me assure you that anonymity will be protected.

I know this is a busy time for you since you are nearing completion of the school year. I really appreciate you taking the time to answer and would also appreciate a quick return so that I can meet my deadline.

Please be sure to return both the test booklet and the answer sheet. Just as soon as the results are compiled, I'll send you a copy. Thanks again.

Sincerely,

Gerry C. Pinkston

Enclosures

APPENDIX E

SECOND FOLLOW-UP LETTER

June 30, 1981

Dear Coach:

After receiving the information form you sent back to me, a questionnaire and answer sheet were mailed to you concerning my doctoral study of coaches of women's intercollegiate basketball. As I am nearing completion of the data collection, I need your response to the questionnaire. Please take the time to fill out the answer sheet and mail it back to me so that I can begin the last phase of my study. Your help and speed would be greatly appreciated. Thank you.

Sincerely,

Gerry C. Pinkston

APPENDIX F

RAW DATA

PERSONALITY VARIABLES

Subject	G	R	A	S	E	O	F	T	P	M
1	23	19	15	22	25	22	21	17	20	20
2	14	12	22	20	19	18	18	17	19	18
3	22	22	20	20	23	21	15	25	18	12
4	18	30	14	15	15	19	19	18	13	17
5	29	23	15	13	10	10	15	25	9	17
6	28	15	27	22	25	13	5	23	12	22
7	19	18	21	19	24	21	20	16	20	18
8	17	19	9	11	9	18	16	22	15	15
9	27	21	23	27	25	23	16	26	22	16
10	21	11	13	22	14	16	13	21	16	8
11	30	19	22	20	21	15	13	19	17	22
12	28	22	8	16	27	16	19	18	16	26
13	20	23	14	22	18	14	21	21	14	16
14	27	19	22	28	20	15	18	19	17	20
15	25	8	19	26	18	21	13	17	15	14
16	21	23	22	26	13	16	11	23	20	21
17	26	17	23	28	26	23	16	17	19	11
18	22	21	20	16	21	18	15	23	26	12
19	24	12	7	5	16	9	9	15	7	8
20	24	21	16	23	22	17	16	16	15	19
21	25	17	16	19	10	14	15	24	6	19
22	27	17	23	22	24	16	8	17	11	25
23	27	27	20	18	26	16	12	28	13	18
24	22	24	22	24	28	27	19	19	26	25
25	23	12	6	21	17	12	14	20	13	13
26	22	18	19	21	10	14	10	23	7	19
27	15	17	17	18	18	16	11	14	18	21
28	24	20	18	21	16	10	10	24	8	11
29	23	15	20	23	24	14	9	14	7	7

Subject	G	R	A	S	E	O	F	T	P	M
30	23	21	20	21	23	23	17	20	18	13
31	27	11	28	26	23	24	3	15	7	22
32	24	17	17	22	17	13	13	17	15	14
33	28	13	21	29	26	22	7	22	18	24
34	15	20	16	20	23	24	20	22	23	23
35	15	18	6	6	15	5	9	21	6	18
36	22	24	24	19	27	24	15	11	23	21
37	19	17	25	24	24	18	12	19	10	26
38	20	20	5	12	17	14	17	13	19	21
39	29	12	28	28	23	19	9	21	16	14
40	22	23	15	24	16	19	19	20	10	18
41	28	21	15	18	17	12	1	18	8	19
42	23	19	10	27	14	14	19	13	20	6
43	21	21	25	21	25	19	12	22	17	15
44	8	22	16	21	23	19	15	21	23	13
45	20	20	16	24	14	10	21	24	19	14
46	16	11	17	30	16	21	20	9	26	20
47	23	21	20	21	23	23	16	19	18	13
48	23	15	20	23	24	14	9	14	10	17
49	16	11	17	30	15	21	20	9	25	20
50	27	11	28	26	23	24	3	15	7	22

2
VITA

Gerry Camilla Pinkston

Candidate for the Degree of

Doctor of Education

Thesis: PERSONALITY TRAITS OF COACHES OF WOMEN'S INTERCOLLEGIATE BASKETBALL

Major Field: Higher Education

Minor Field: Health, Physical Education, and Recreation

Biographical:

Personal Data: Born in Chickasha, Oklahoma, April 16, 1948, the daughter of Mr. and Mrs. Don E. Pinkston.

Education: Graduated from Chickasha High School, Chickasha, Oklahoma, in May, 1966; received Bachelor of Science degree in Health, Physical Education, and Recreation from Oklahoma State University in 1971; received Master of Education degree in Health and Physical Education from Central State University, Oklahoma, in 1975; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1982.

Professional Experience: Health and Physical Education teacher, Chickasha Junior High School and girls' tennis coach, Chickasha Senior High School, 1971-72; Physical Therapy Aide, St. Anthony's Hospital, Oklahoma City, Oklahoma, 1972-75; Graduate Assistant volleyball, basketball, and softball coach, Central State University, Oklahoma, 1974-75; Assistant Professor of Health, Physical Education, and Recreation and women's volleyball and softball coach, Central State University, Oklahoma, 1975 to present.

Professional and Honorary Organizations: American Alliance for Health, Physical Education, Recreation and Dance; Oklahoma Association for Health, Physical Education, Recreation, and Dance; Oklahoma Association of Physical Education for College Women; Association for Intercollegiate Athletics for Women; Fellowship of Christian Athletes; Edmond Tennis Association; American Red Cross; Delta Kappa Gamma; Delta Psi Kappa; Phi Epsilon Kappa; Kappa Delta Pi.