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NO. 3526

FEMALE ATHLETIC DIRECTORS' PERCEPTIONS  
OF POSITION POWER

DISSERTATION

Presented to the Graduate Council of the  
University of North Texas in Partial  
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Leigh Garnet Lewis, B.S., M.A.

Denton, Texas

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This study sought to determine female college and university athletic directors' perceptions of position power according to selected job-related characteristics, through development and use of a nineteen-item survey instrument.

The study was conducted during the 1991-1992 academic year and consisted of an initial study to determine content validity of the survey instrument, followed by construct validity and reliability determination utilizing a pilot study group of twenty female intercollegiate athletic directors. Factor analysis of the instrument produced a four-factor solution and reliability of the instrument was calculated at 0.9062.

The study was conducted utilizing 301 female intercollegiate athletic directors, as listed in the National Collegiate Athletic Directory (1991-1992). Study participants responded regarding their perception of position power related to a nineteen-item survey instrument. The study consisted of three hypotheses with four corresponding research questions that directed the study.

Analysis revealed no significant differences among female intercollegiate athletic director perceptions of

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## CHAPTER 1

### INTRODUCTION

Women have occupied administrative positions in athletic programs for many years. However, since the enactment of Title IX in 1972, there has been a steady decline in the representation of women in positions of athletic administration. Additionally, research specific to job enhancement and development of women in athletic administration has been lacking. As a result, studies involving women in athletic administration have been concerned with causes for the decline in the number of female athletic directors and administrators (Acosta & Carpenter, 1990; Cody, 1985; Desensi & Koehler, 1989), as well as with strategies for increasing the representation of women in athletic administration (Delano, 1990).

Yet, similar studies concerning women, in the fields of university administration, educational administration, business, and sociology, also have centered around the underrepresentation of women in administrative leadership positions (Dohrman, 1982) and strategies for increasing the representation of women in upper administrative positions (Holt, 1981; Kuyper, 1987). Studies relevant to women in administration have focused on influence strategies utilized

by male and female managers (Farrant, 1986; Schlueter, Barge & Blankenship, 1990) and on barriers to female advancement within administrative fields (Gupta, 1983; Kaplan & Tinsley, 1989; Slimmer, 1984; Somers, Poulton-Callahan & Bartlett, 1981).

Other studies have compared perceptions of male and female administrators concerning job-related characteristics (Austin, 1985; Barrax, 1985; Estler, 1987; Sagaria, 1985). According to Molm (1986) and Chusmir (1985). However, such studies have been ineffective in determining female perceptions of administrative traits because gender was utilized as a control variable, which limited the generalizability of the findings.

There has been a paucity of empirical research regarding women in positions of athletic administration and their perceptions of power as it relates to the athletic director position. A majority of publications concerning women in athletic administration have been either descriptive or opinion focused. Publications have concentrated on reviewing historical bases for gender inequities within athletic administration. Few studies relevant to women in athletic administration have utilized empirical methods of research concerning issues specific to position achievement and position power. Research generated within the fields of psychology and sociology have dealt

with male and female perceptions of position power, perceptions of power need, and achievement motivation (Booth, Vinograd-Bausell & Harper, 1984; Chusmire, 1985). However, studies involving male and female subjects have been comparative in nature, or have utilized a male or female-model format and then compared and generalized the results to the opposite gender. According to Chusmire (1985), studies have not been available that deal primarily with female perceptions of power.

According to Kotter (1979), power is a person's or leader's ability to get things accomplished through the influence of people, or subordinates. McClelland (1975) and Kanter (1979) defined power as the ability to mobilize resources to accomplish some end. Position power results from having access to resources, people and information (Kanter, 1976; Mechanic, 1962; Yukl, 1981). Position power, or formal power, implies that the rank which individuals hold within an organization is directly related to the degree of power held within that organization (Kanter, 1976). Fobbs (1988) contended that those individuals with position power within an organization generally occupy line positions. Line positions are those positions that imply authority and action, as compared to staff positions which imply advice giving, or a subordinate role. Positions of

power are traditionally located at the top of an organizational hierarchy (Mainiero, 1986).

The study of power has taken several different paths. A majority of the studies have been related to the acquisition of a more powerful image (Deutchman, 1985; Freeman & Lanning, 1989; Offermann & Schrier, 1985; Wallston, 1987). Some research has focused on social influence processes through examination of strategies utilized to exert power over others (Cutler & Scott, 1990; Dovidio, Brown, Heltman, Ellyson, 1988; Smith & Grenier, 1982).

Research studies specific to athletic director perceptions of power are not readily available in published form. It would be helpful to establish a body of knowledge, relative to power perception, that would assist athletic directors, specifically female athletic directors, in becoming more aware of position power. This would be possible by providing data resulting from empirical studies focused on the perceptions of position power.

#### Significance of the Study

The significance of this study was to identify perceptions of position power according to job-related characteristics. Identification of variables that impact perception of position power is necessary to provide an

awareness of items that assist in determining perceptions of position power within the athletic director position.

#### Statement of the Problem

The problem of this study was to determine female college and university athletic director perceptions of position power related to selected job-related characteristics. Specifically, the study was designed to determine whether selected variables impact perception of position power of female athletic directors. Three hypotheses were postulated to determine female athletic directors' perceptions of position power.

#### Hypothesis 1

There will be no significant differences in perceptions of position power of female athletic directors of women's programs, female athletic directors of men's programs, and female athletic directors of combined programs.

#### Hypothesis 2

There will be no significant differences in perceptions of position power between female athletic directors of women's programs and female athletic directors of combined programs, regarding specific job responsibility areas.

### Hypothesis 3

There will be no significant differences in perceptions of position power between female athletic directors of women's programs and female athletic directors of combined programs based on institution classification (NCAA Division I-III, NAIA and Independent, and Junior or Community Colleges) regarding specific job responsibilities.

### Research Questions

The following four research questions will be applied to Hypothesis II and Hypothesis III and will guide the methodology of this study:

1. Are there significant differences in female athletic director perceptions of position power based on job responsibility items specific to staff supervision, public relations, and policy and procedure development and implementation?
2. Are there significant differences in female athletic director perceptions of position power based on job responsibility items specific to fiscal management and facilities management?
3. Are there significant differences in female athletic director perceptions of position power based on job responsibility items specific to staff selection?

4. Are there significant differences in female athletic director perceptions of position power based on job responsibility items specific to staff evaluation and promotion?

#### Purpose of the Study

The purpose of this study was to determine female collegiate athletic director perceptions of position power through analysis of data collected from the Perception of Position Power instrument. Through such an analysis, it was possible to determine how women in different athletic director positions perceived position power, according to position held and classification of the institution in which they were employed. Three position options were measured: (a) athletic director for a women's athletic program (ADWP), (b) athletic director for a men's athletic program (ADMP), and (c) athletic director for a combined athletic program (ADCP). Three institution classifications were measured: (a) NCAA Division I-III, (b) NAIA and Independent institutions, and (c) Junior and/or Community Colleges.

Attitude rating scales were utilized in this study because of the following advantages: (a) they permitted anonymity of the respondent, (b) there was an absence of time constraints which provides the respondent as much time as necessary to complete the instrument, (c) they promoted an ease of data analysis and interpretation on the part of

the researcher, and (d) they enabled the researcher to sample a large number of people who were geographically dispersed (Henerson, Morris & Fitz-Gibbon, 1987). By allowing anonymity of the respondents, the chances for an adequate response rate were increased, and honest responses by the study participants were more likely.

#### Definition of Terms

Athletic Director - the individual responsible for planning, organization, leadership and evaluation of an intercollegiate athletic program (Branch, 1990).

Power - the leader's ability to get things accomplished through the influence of people, and the ability to mobilize resources to accomplish some end (Kanter, 1979; Kotter, 1979; McClelland, 1975).

Position Power - the rank an individual holds within an organization will be related to the level of potential power. The individual with position power utilizes that power to influence others to achieve organizational goals and objectives (Kanter, 1979).

Influence - the ability to affect others, to produce outcomes and results because of wealth, position, and/or ability (Kotter, 1979).

Authority - the power or right to command or influence resulting from knowledge, prestige, or position (Kotter, 1979).



### Limitations

The following limitations were noted as having a possible influence on the conclusions of this study:

1. Interpretation of survey items by study participants.
2. Variability in understanding the explanation of the instrument.
3. A lack of control of the environment in which the survey instrument was completed.

### Delimitations

This study was limited to the population of intercollegiate female athletic directors in the United States. The population included women who were athletic directors for women's athletic programs, men's athletic programs, or combined athletic programs, in four year private and public institutions junior and community colleges, as listed in the National Directory for Intercollegiate Athletics, 1991-1992.

## CHAPTER II

### REVIEW OF THE LITERATURE

Studies related to women in athletic administration have focused on reasons for gender inequities or have dealt with strategies for increasing the representation of women in positions of administration (Delano, 1990). A majority of studies concerning women in administration have involved a comparison of male and female traits, such as self-confidence, power needs, organizational and societal stereotypes, and gender-related barriers.

A lack of literature concerning female perceptions of position power in athletic administration made it necessary to summarize findings in related fields (e.g., business, educational administration, higher education administration, and sociology). This review served to provide a general summary of perceptions of position power directly related to women.

#### Power

There has been a recognized need by researchers in various fields to define the concept of power as it relates to political, social, and administrative relationships. Definitions of the concept of power were motivated by a

desire to curb abuses of power, as well as to provide a better understanding of the term. However, there has been difficulty in arriving at a common definition for the concept of power. According to Kotter (1979), power is a person's or leader's ability to get things accomplished through the influence of people, or subordinates. Weber (1947) stated that power implies the ability to carry out one's will despite resistance. McClelland (1975) and Kanter (1979) defined power as the ability to mobilize resources to accomplish some end. In addition, Sheriff (1982) stated that power is the control of resources that enables an individual to effectively initiate action, regarding organizational decisions and policies, as well as the effective use of sanctions, such as rewards and punishment within an organization. Salancik and Pfeffer (1977), and Mintzberg (1983), noted that power allows for the effective achievement of organizational goals. Ragins and Sundstrom (1989) stated that power is the influence by one person over others stemming from a position in an organization.

According to Lips (1981), if power is to be seen as good by people within the organization, it must be achieved and practiced in ways which build respect for the leader. Such respect is garnered through legitimate means such as the position held by the leader and the authority vested in that position, as well as the way in which it is employed.

Legitimate power involves having the authority to influence others in order to achieve organization goals. In addition to the authority of a position, the way in which power is exercised affects the evaluation of power. Power may be a facilitating factor when a person strives to influence others in the achievement of organizational goals (Booth, Vinograd-Bausell & Harper, 1984).

Lips added that power tends to be visualized in a negative sense due to unethical means of it's achievement and utilization. Additionally, power is believed by many to corrupt, and that those who have the power of a position are most often reluctant to relinquish it. Power is perceived as "evil" when it has a destructive effect on personnel and work environment of an organization, and implies dominance and submission, control and compliance.

According to Kotter (1979), power is often associated with exploitation and corruption, and people have a tendency to distrust those who openly seek power. Yet, power is also the ability to control and influence others, which provides for direction of an organization and attainment of organizational goals. Van Wagner and Swanson (1979), and Booth, Vinograd-Bausell and Harper (1984) agreed that there are conflicting attitudes about the concept of power. People are both attracted and repelled by the concept, yet, when exercised correctly, it is seen as a contributing

factor to increased organizational achievement and productivity. Dahl (1957) and Cartwright (1959) delineated power to consist of personal power, social power, and position power.

#### Personal Power

Personal power refers to the ability to influence another individual (Cartwright, 1959; Dahl, 1957) and is related to an individual's ability to lead. According to McClelland and Burnham (1976) personal power tends to be seen as an inhibiting factor when a person seeks to achieve individual goals at the expense of the organization and its individual members.

#### Social Power

Etzioni (1961) and Allen and Porter (1983) described social power as the ability to influence behavior of others for the good of an organization. McClelland and Burnham (1976) indicated that social power is considered a more desirable aspect of power, as compared to personal power. Personal power is perceived as an individual attempt at leadership, whereas social power is perceived as an attempt to lead a group of people in order to achieve the goals of an organization. Chusmir (1986) conducted a study of 84 women and 94 men who were employed on a full-time basis in eight different nonmanagerial and professional occupations.

Nonmanagerial and professional female subjects showed significantly higher socialized power needs than their male counterparts, but showed similar needs for power and personalized power. According to Mechanic (1962) and Yukl (1981), social power results from an access to and control over people, information, and resources, more commonly referred to as position power.

### Position Power

According to Yukl (1981), a primary source of influence in an organization, or other social systems, is derived from position power, which is integral to a person's formal role. It includes control over resources, rewards and punishments, information, work environment, and work procedures. Kanter (1979) stated that position power implies that rank held within an organization will be related to the level of power. Such power is traditionally derived from line positions which imply action and authority within an organization. A line position is one in which authority is vested to influence employees, whereas a staff position implies advice and a lack of direct leadership and influence in the organization (Davis, 1951, Fobbs, 1988; Massie, 1965). Kanter (1979) contended that without the power of a line position members are dependent upon others to implement their ideas and programs. According to Kotter (1979) position held within an organization does not automatically

ensure the position holder with power. Kotter also stated that managers tend to be dependent upon others within the organization over whom they have no formal authority. Passive acceptance to orders from persons because of the authority of the position held does not ensure the person with power. According to Ragins and Sunstrom (1989), it is possible for a person to enter an organization in a position perceived as powerful and still have little power.

#### Organizations and Power

According to the United States Department of Labor (1990), only one to two percent of all senior level executive positions are occupied by women. However, women executives, administrators and managers now represent 10.8% of all employed women, compared with 6.3% in 1978. According to Ragins and Sundstrom (1989), women occupy fewer positions of power in organizations, than men, especially in the highest ranks, and are underrepresented in powerful managerial positions.

Schlueter, Barge and Blankenship (1990) concluded that position in an organizational hierarchy is the most important source of power available to organizational members. In addition, organizational structure serves as the basis for power differences between men and women and assumes that outcomes related to productivity and career

success are primarily based in the hierarchy of an organization.

#### Power and occupational success

According to Kotter (1979), leadership is the exercise of power. Kanter (1977), in a study of corporate structure, found power to be an important factor in achieving managerial success. Kanter determined that power is generated by an individual within the structure of the job and is not a specific personality characteristic. In a study of 534 female administrators employed in community colleges and universities, conducted by Kuyper (1987), it was found that the following factors contributed to career development: (a) ability to formulate goals, (b) availability to travel, (c) professional accreditation, (d) budgeting knowledge, (e) knowledge of policies and procedures, (f) power base, (g) knowledge of fiscal operations, and (h) ability to evaluate organizational functioning. According to Kanter (1977) and Mainiero (1986) power positions are located at upper organizational levels, offering power bases to their occupants, and come in the form of access to important people and resources. Schlueter, Barge and Blankenship (1990) stated that position power positively influences communication in ways which are effective to overall community of the organization, since they have authority vested in the position which allows them



to do so. According to Silver (1988), an individual has legitimate power when that person is perceived by organization members to have a positional right to impose his or her will. Perceptions of an individual's power depend upon an individual's position in the organization, which in turn may depend upon stereotypes and personal characteristics. Perceptions of position power also depend upon recognized professional and personal competence.

Kanter (1977) suggested that individuals who are placed in a favorable position within an organization are more likely to have access to power and to operate as a leader. Ivy (1985) added that the structure of the position is a source of power for the individual. Cartwright (1959) stated that the higher an organizational position, the greater the opportunity to be more powerful, which has been determined to be positively correlated with access to resources, social status, self-confidence, expertise, rewards, and information within an organization.

Chusmir (1985) and Freeman and Lanning (1989) stated that research relevant to organization managers has excluded the study of women, focusing specifically on the social power motivation of men. Broverman, Vogel, Broverman, Clarkson and Rosenkrantz (1972) supported the conclusion that research related to sex-role socialization has led men and women to perceive women as having less power than they

actually have, via gender comparisons of power need, achievement need and affiliation need.

According to Ragins and Sundstrom (1989), power develops over time and grows out of an accumulation of resources during a person's career. Such resources include (a) educational level, (b) training and personal development, (c) authority vested within a position (position power), (d) social power, (e) networks and communication links within an organization, and (f) experience relevant to a position held. Kotter (1979) stated that acquiring power means acquiring potential influence, by way of control of information, networks, visibility, and professional achievements. In most managerial positions, an inability to acquire and utilize power results in ineffective performance. Kanter (1977) added that the route to power is through extraordinary, visible and relevant activities. Ivy (1985) stated that certain activities are necessary for the consolidation or building of a power base. Such behaviors would include memberships in professional organizations and attendance at professional meetings and workshops, which serve as a means to develop networks which mobilize power. Kotter (1979) stated that good managers use power to help them plan, organize, staff, budget, motivate and evaluate an organization and its employees. Without sufficient power,

a manager is at the mercy of others. According to Kanter (1977), networks can be a source of power by disseminating information and acquisition of information needed to perform job functions. Powerful sponsors help achieve results by bypassing the hierarchy, by passing on information, and by using their influence to smooth the way. Josefowitz (1980) added that the benefits of networking include:

- (a) strategies and inside information to assist in job success, and
- (b) professional advancement.

#### Gender and Power

The majority of research related to women and power has been directed by gender-centered theories (Fagenson, 1990; Henning & Jardim, 1977; Horner, 1972). Such theories stated that perceptions of personal attributes vary according to gender. Henning and Jardim (1977) credited such perceptual differences to sex-role socialization and Chodorow (1978) attributed them to differential gender identity formation.

According to Molm (1986), sex-role socialization theories propose that men and women acquire different personality characteristics, skills, and attitudes that predisposed some men to be more likely to utilize power and perceive themselves as powerful. In addition, it is believed that men are more effective in the acquisition of power and its use. Schlueter, Barge and Blankenship (1990) contended that traditional sex-role socialization has

prescribed varying sets of appropriate behavior expectations for men and women, which Deaux (1984) believed influenced individual perceptions of job performance. As women have attained positions of power in corporations, researchers have begun to study differences between men and women in leadership positions (Terborg, 1977). Molm (1986), however, cautioned against the generalization of sex-role socialization findings because gender has often been attached to studies as a control variable. Molm contended that many of the empirical findings have been inconsistent and not generalizable to the overall population. Few studies have utilized the same criterion variables to measure differences in the effectiveness of female and male leaders (Guido-DiBrito, Carpenter & DiBrito, 1986). Molm also argued that the use of experimental games and simulation studies are not an effective measure of gender differences, because of the limited generalizability of findings. McClelland and Steele (1973) stated that men and women should be studied separately in order to provide a more accurate measure of power motivation of women. According to Booth, Vinograd-Bausell, and Harper (1984), very little research has assessed power needs of women because of a lack of interest in the procurement and utilization of power by women.

### Power need and perception

Studies have been conducted to determine the need for power among men and women, yet little research has determined power need of women specifically (Booth, Vinograd-Bausell & Harper, 1984). McClelland (1975) and Winter and Barenbaum (1985) described the need for power as a desire to have an impact or influence on others, and that power is perceived as one of the most important motivational elements of successful managers. Winter (1973) added that need for power is a dominant drive in many nonmanagerial positions and occupations such as nursing and education, and Ritchie and Thompson (1980) supported this belief in the law enforcement field.

McClelland (1970) determined that managers who possess strong power needs are more successful than managers who express low power needs. In a study of 124 working managers (62 men and 62 women), Chusmir (1985) sought to determine needs achievement, affiliation and power. Results indicated that there was an equal need for power among women and men, and that social power need was higher among working women than among working men. In a recent study conducted by Freeman and Lanning (1989), consisting of 126 female and 50 male psychology students, results indicated no significant differences in levels of social power motivation between men and women. Booth, Vinograd-Bausell and Harper (1984)

conducted a study which involved 483 freshmen (207 men and 229 women) need for social power. Results of the study demonstrated that there were no significant differences between men and women regarding need for power.

Instone, Major and Bunker (1983) indicated that men and women supervise others in similar ways when they have equal access to power. According to results of a study conducted by Sagaria (1985), which involved 479 male and 92 female full-time administrators at public and private four year colleges and universities, men and women possess similar managerial skills. However, women place a greater emphasis on formal learning opportunities to prepare them for administrative responsibilities, whereas men place a greater emphasis on position and experience. Sagaria also added that a larger number of men in her study had obtained the terminal degree as compared with the women, which affected access to more prestigious positions within an organization.

In a study conducted by Bowker, Hinkle and Worner (1983) which involved 190 male and 136 female faculty members in land-grant institutions, it was determined that women were as interested as men in attaining leadership positions, and that women aspired to career levels as high as those sought by men.

Based on the results of such recent studies, men and women can be expected to have similar degrees of need for

power. Van Wagner and Swanson (1979) contended that a greater variation of need for power and degree of power might be more easily determined through studies that investigate differences within each gender rather than between genders. Molm (1986) and Chusmir (1985) added that studies have been ineffective in determining female perceptions because gender was utilized as a control variable.

Fagenson (1990) conducted a study that involved 246 upper and lower level men and women in a management development office of a health care company. Results indicated that (a) amount of power that people possess varied as a function of the level of the position which they occupied in a corporation, (b) upper level people reported greater access to important people, (c) upper level individuals perceived they had a greater abundance of perceived resource power, (d) perceived power varied according to a person's position in an organizational hierarchy, and (e) power perception is affected by level of education attained, with higher education level resulting in a higher degree of power perception. However, methods in which men and women continue to be socialized in their access to administrative opportunities create differences in perception of power. Kanter (1977) and Mainiero (1986) also

determined that perceptions of power vary according to the position that an individual held within an organization.

#### Women and Athletic Administration

Acosta and Carpenter (1990) conducted a thirteen-year longitudinal survey, of four-year college and university members of the NCAA with intercollegiate athletic programs for women. They concluded that Title IX legislation had a dramatic impact on the representation of women in positions of athletic administration. Prior to Title IX implementation in 1972, women occupied 90% of the administrative positions within women's athletic programs. In 1990, 15.9% of these positions were occupied by women. According to Acosta and Carpenter, since Title IX legislation, men have dominated positions of power in women's athletics.

Since passage of Title IX legislation, studies and papers have been published relevant to the causes for decline in representation of women in positions of athletic administration (Cody, 1985; Desensi & Koehler, 1989), and have focused on strategies for increasing the representation of women in athletic administration (Delano, 1990). A study conducted by Young (1990) found that networking within and outside of an organization was significant to professional advancement. Specific research related to female athletic director perceptions of position power is not available.



However, Inglis (1991) conducted a study which involved sixteen university presidents, fourteen athletic directors and eleven male and thirteen female athletic coordinators, to determine the degree of influence exerted on athletic programs from internal and external sources. Inglis found that women athletic coordinators perceived themselves as having greater influence regarding administrative decisions compared to coordinators for men's programs. Athletic directors perceived their influence in strategic decisions to be significantly greater than did the coordinators for men's and women's programs, and athletic director influence in administrative decisions was perceived to be equal or lower than that of the coordinators. Athletic directors perceived a moderate to higher degree of influence in the various decision-making activities of the position, than did the coordinators, due to the position in the program hierarchy. Women's athletic coordinators perceived their influence in administrative decisions to be significantly higher than athletic directors or coordinators for men's programs.

According to Inglis, the patterns of influence exhibited by the women athletic coordinators was consistent with theoretical expectations of second level administrators, which stated that second level administrators would be involved in administrative decisions

whereas strategic decisions would be determined by top level administrators. In addition, those aspects of the position related to marketing, while a responsibility of a coordinator, would need coordination and direction from the athletic director.

### Instrument Reliability and Validity

Several survey instruments were identified that examined the concept of power, however, these tools did not access perception of position power. Therefore, in order to adequately determine female athletic director perceptions of position power, it was necessary to develop a survey instrument that would achieve this purpose. Development of a survey instrument involves determining reliability and validity to a concept being measured. Assessing reliability of a survey instrument, as well as determining its content and construct validity, was necessary prior to surveying the sample of female intercollegiate athletic directors.

#### Reliability

According to Kerlinger (1986), instrument reliability is concerned with how consistently an instrument measures a concept of interest, and refers to the instrument's degree of internal consistency (stability). The alpha coefficient is the preferred index of internal consistency reliability.

An alpha coefficient measures the extent to which performance on any one instrument item is a good indicator of performance on any other item on the same instrument. The Cronbach's Alpha Coefficient correlates each individual item with each instrument item and the overall instrument score. As a result, an overall measure of consistency with which the score on an item can be used to predict the overall attribute being measured is provided. Nunnally (1978) added that a reliability coefficient of .80 is considered the lowest acceptable coefficient for a well-developed measurement instrument, although for developing an instrument .70 is permissible.

### Construct Validity

According to Burns and Grove (1987), construct validity is the most important type of validity to be determined. Construct validity is the extent to which a test measures the construct that it was designed to measure.

Tabachnick and Fidell (1989), indicated that factor analysis is one method of determining construct validity of a survey instrument. A major use of factor analysis is in the development of objective tests for measurement. Nunnally (1978) stated that factor analysis is useful in testing the validity of ideas about item types to determine which items should be included in a test instrument. One

goal of factor analysis is to summarize patterns of correlations among observed variables.

Tabachnick and Fidell (1983), noted that exploratory factor analysis is employed to summarize data by grouping together items that are intercorrelated. They also added that factor analysis is considered a useful technique in the early stages of research when consolidating items or variables is necessary.

According to Burns and Grove (1987), Kerlinger (1986), and Nunnally (1978), factor analysis computes a correlation matrix and new sets of variables are found on the basis of interrelationships. Nunnally (1978) stated that resulting factors are the best linear combinations of variables, which account for more variance in the data as a whole than any other linear combination of variables. Each linear combination of variables serves as a factor, and factors summarize the patterns of the correlations.

Jennings (1988) contended that three items per factor are necessary to ensure factor validity. In addition, Jennings stated that when scores on factors are estimated for each subject they are often more reliable than scores of individual observed variables.

Kerlinger (1986) noted that the first step of a factor analysis transforms a survey instrument into a new set of composite variables known as principal components. This

step calculates the best linear combination of items that are orthogonal (uncorrelated) to each other. The first factor extracts the most variance, the second the next most variance, and so on. The first components, or factors, explain most of the variance in the data and are the most important components.

Eigenvalues are also part of the output of a factor analysis. Burns and Grove (1987) noted that eigenvalues represent the total variance accounted for by a factor, and are equal to the sum of squared weights of the factor. Factors with an eigenvalue of 1.00 or more are used to form a new factor structure. In addition, Burns and Grove (1987), Munro (1986), and Nunnally (1978), stated that only those factors accounting for at least five percent of the variance (eigenvalues  $> 1.00$ ) are retained. Eigenvalues are employed to determine the number of factors to be retained.

The second step in factor analysis is that of factor rotation (Burns and Grove, 1987). Rotation of factors is employed for developing more meaningful and simplistic patterns for interpretation of the variable structure. According to Burns and Grove, varimax rotation is the preferred choice for data analysis. Varimax rotation is an orthogonal rotation to keep factors independent. Nunnally (1978) added that factors are assumed to be noncorrelated (orthogonal) because they should measure different

characteristics of a concept. Burns and Grove (1987) noted that the weights assigned to variables for an orthogonal rotation may be interpreted as correlation coefficients with .3 to .5 as cutoff values. According to Tabachnick and Fidell (1983), some items will load on more than one factor and final interpretation of data is dependent upon the researcher's assessment of the scientific usefulness and logic of the items.

#### Summary of Literature

There has been a lack of empirical research specific to women in positions of athletic administration and the perceptions of position power as it relates to the athletic director position. Research studies concerning the concept of power have been directed at determining power need, power achievement, power motivation, power bases, and power types. A majority of such studies have utilized men as subjects, or have been a comparison of male and female characteristics regarding power. Substantial research of this type has occurred in the fields of business, educational administration, psychology, and sociology. Few studies have been conducted specific to women in positions of administration, and perception of position power within an organization. According to Chusmir (1985), studies have not been available that deal primarily with female perceptions of power.

The purpose of this study was to identify perceptions of position power of female intercollegiate athletic directors according to job-related characteristics. Research studies specific to athletic director perceptions of position power are not available in published form. A review of literature specific to female administrators revealed that it would be helpful to establish a body of knowledge relative to power perception. Such research would assist female athletic directors in becoming more aware of position power. While many variables contribute to perception of position power, some variables seem more significant than others. An awareness of variables that significantly influence perception of position power might assist in furthering the careers of women in administrative positions, specifically within the field of athletic administration.

The literature review reinforced the contention that it would be beneficial to study one specific gender and determine differences within that gender rather than add to the existing body of knowledge regarding differences between men and women. This study will attempt to identify perceptions of position power of female athletic directors according to job-related characteristics. Such a study will serve to promote an understanding of female athletic director perceptions of power based on the factors of

position, experience, education level, and institution level.



## CHAPTER III

### METHODOLOGY

The purpose of this study was to identify female intercollegiate athletic director perceptions of position power as determined by selected job-related characteristics. Such a study would be beneficial in establishing a body of knowledge that would assist female athletic directors in becoming more aware of variables that have a bearing on perception of position power.

#### Instrument Development

The Perception of Position Power survey instrument was developed to determine female administrator perceptions of position power within an athletic director position. The instrument consisted of nineteen items developed from a review of various athletic director position descriptions and responsibilities, and of relevant literature (Judd, 1990; Parkhouse, 1978; Snyder, 1982).

#### Content Validity

Accuracy of the Perception of Position Power survey instrument was determined by analysis of its content validity. Validity is the ability of an instrument to measure what it is supposed to measure (Kerlinger, 1986).

Content validity verified that the survey instrument actually measured the concept it was designed to measure. Content validity is a subjective process and is estimated by employing a panel of experts in a relevant field to evaluate content of the instrument (Brink & Wood, 1988; Burns & Grove, 1987). Panel members are asked to determine the instrument item relevancy to the content area as well as to indicate whether they believe the items to be a representative sample of content behaviors (Kerlinger, 1986).

A panel of judges was selected to determine content validity of the Perception of Position Power instrument. The panel consisted of nine women with extensive experience in athletic administration, research and survey methodology, and recreation or physical education teaching or administration. Panel members were initially contacted by mail (Appendix C) requesting their assistance in determining content validity of the survey instrument and demographic data form. Panel members then were contacted by telephone to confirm their assistance in determining content validity of the instrument, as well as to respond to any questions or concerns they had regarding survey instrument items and the demographic data form.

Panel members were asked to determine the relevancy of each item to the content area, as well as to indicate if

instrument items were a representative sample of the content behaviors. They were asked to complete the instrument as if they were a survey participant. Panel members were then asked to determine clarity, appropriateness, comprehension, and completeness of each item. Responses were based upon personal experiences and opinions of panel members. This was followed by providing comments and feedback to each instrument item regarding its relevancy to the concept (position power) being measured. In addition, they were asked to designate, with a yes or no response, whether each instrument item was relevant to the concept of position power. Content validity of the Perception of Position Power instrument was determined by reviewing panel member responses to each item.

All panel members returned the survey instrument and demographic data form with feedback. Each panel member agreed that all items included in the survey instrument were relevant to the concept being measured, which resulted in an inter-rater reliability of 1.00. Feedback from panel members called for the demographic variable of "years of experience as a head coach", to be added to the Demographic Data Sheet (Appendix B), and grammatical changes were made to the survey instrument. A final revision of the survey instrument was then prepared.

### Pilot Study

Before the survey instrument could be utilized for research purposes, it was necessary to determine its internal consistency. For this study, internal consistency included both reliability and construct validity measures. The survey was administered to a pilot study group consisting of a random sample of twenty female athletic directors from those listed in the Men's and Women's Editions of the National Collegiate Athletic Directory (1991-1992). Pilot Study members were contacted via a letter (Appendix D) mailed on October 29, 1991. The letter described the purpose of the pilot study and respondents were asked to return the completed survey and comments no later than November 15, 1991. Consent to participate as a member of the pilot study group was given by completion and return of the survey instrument. Fifteen of the twenty pilot study surveys were returned resulting in a return rate of 75%.

### Reliability and Construct Validity

Accuracy of the survey instrument was determined by assessing its reliability and validity. Reliability is concerned with how consistently an instrument measures a concept of interest (Kerlinger, 1986), and refers to an instrument's degree of internal consistency (stability). Internal consistency is the extent to which all parts of a

measurement instrument are measuring the same concept. Internal consistency of a measurement instrument must be determined before an instrument can be utilized for research purposes (Brink & Wood, 1988). The procedure for determining internal consistency is to administer the survey instrument to a group of individuals under standard conditions on one occasion. From the obtained scores for an individual, measurement error occurring in the sampling of items is determined (Hinkle, Wiersma, & Jurs, 1988).

According to Waltz, Strickland, and Lenz (1984), an alpha coefficient is the preferred index of internal consistency reliability. It measures the extent to which performance on any one item on an instrument is a good indicator of performance on any other item in the same instrument. Tests of internal consistency are based on the idea of split-half correlations in which scores on one half of a subject's responses are compared to scores on the other half. Cronbach's alpha coefficient correlates each individual item with each other item and the overall score, providing an overall measure of the consistency with which the score on an item can be used to predict the overall attribute being measured (Brink & Wood, 1988). According to Nunnally (1978), a reliability coefficient of .80 is considered the lowest acceptable coefficient for a well-developed measurement instrument, although for

developing instruments .70 is permissible. Unlike most correlation coefficients based on a Pearson Product Moment Correlation, the Cronbach reliability coefficient is never squared for interpretation, and is therefore a more direct measure of reliability.

The Cronbach's Alpha Coefficient was utilized to compute reliability for the Perception of Position Power survey instrument, through use of the Statistical Package for the Social Sciences (SPSSX) data analysis program. A Cronbach's Alpha of 0.9065 indicated the homogeneity of all instrument items, which is considered an acceptable reliability for new instruments (Nunnally, 1978).

Construct validity, according to Burns & Grove (1987), is the most important type of validity to be determined. Construct validity is the degree to which a test measures the construct (power) that it was designed to measure. Factor analysis was identified as the method to determine construct validity of the Perception of Position Power instrument. Tabachnick and Fidell (1989) stated that a major use of factor analysis is in the development of objective tests for measurement. Factor analysis is also useful in testing validity of ideas about item types to determine which items should be included in an instrument (Nunnally, 1978).

The specific goal of factor analysis was to summarize patterns of correlations among observed variables and determine a new set of variables on the basis of interrelationships (Burns & Grove, 1987; Kerlinger, 1986; Nunnally, 1978). Tabachnick and Fidell (1989) stated that exploratory factor analysis is employed to summarize data by grouping together items that are intercorrelated. They believed that factor analysis is a useful technique in the early stages of research when consolidating items or variables is necessary. Resulting factors are the best linear combination of variables, and accounted for more variance in the data as a whole than any other linear combination of variables. Each linear combination of variables serves as a factor, and factors summarize correlation patterns. Jennings (1988) suggested that three items per factor are necessary to ensure factor validity. In addition, when scores on factors are estimated for each subject, they often are more reliable than scores of individual observed variables.

The first step of the factor analysis transforms the survey instrument items into a new set of composite variables known as the principle components. This step calculates the best linear combination of items that are orthogonal (uncorrelated) to each other. The first factor extracts the most variance, the second the next most

variance, and so on (Kerlinger, 1986). The first factor produces the maximum variance and the second factor is computed on the residual of the first factor and accounts for the most variance remaining. Therefore, the first components explain most of the variance in the data and are the most important components. An analysis of resulting correlations provides evidence of the extent to which all of the measures relate to the same construct. If instrument items of each subject correlate highly with one another, then it can be concluded that instrument items measure the same thing. If instrument items tend to split into clusters such that clusters correlate highly with one another and correlate less with other clusters, then it can be concluded that different constructs are being measured.

Construct validity of the Perception of Position Power instrument was determined through a factor analysis of the nineteen instrument items. Factor analysis consists of four stages, which include correlation calculation of instrument items, eigenvalue determination, varimax rotation, and factor reliability determination.

Output on the SPSSX program for the first stage of factor analysis calculated correlations between the nineteen items of the survey instrument and clarified complex interrelationships between items. Output on the SPSSX program reduced data to a set of five components (factors).



Only those factors with loadings of .30 or higher were considered.

The first stage of factor loadings for the nineteen survey instrument items is summarized in Appendix G, and items which loaded on a particular factor with a significant correlation loading, of .3 or higher, are highlighted. After the first stage of factor analysis, seventeen survey items with correlation coefficients greater than .30 loaded on Factor I, six items on Factor II, four items on Factor III, four items on Factor IV, and three items on Factor V.

The second stage in factor analysis involved the determination of eigenvalues for each factor. Eigenvalues were employed to determine the number of factors to be retained for the next stage of factor analysis, which is varimax rotation. Eigenvalues for the five factors are summarized in Table 1. Those factors with eigenvalues of 1.00 or more were used to form a new factor structure (Burns & Grove, 1987).

Burns and Grove (1987), Munro (1986), and Nunnally (1978), stated that only those factors accounting for at least 5% of the variance (eigenvalues > 1.00) should be retained. Eigenvalues of this study ranged from 1.02181 to 8.75468 for five factors, which accounted for 89.4% of the variance in the instrument, leaving 10.6% unique or

unexplained variance in the Perception of Position Power instrument.

Table 1

Initial Factor Loading Eigenvalues

<u>Factor</u>	<u>Eigenvalue</u>	<u>Percent Variance</u>
1	8.75468	46.1
2	3.76459	19.8
3	1.82970	9.6
4	1.61420	8.5
5	1.02181	<u>5.4</u>
		89.4

The third stage of factor analysis consisted of a varimax rotation, which is an orthogonal rotation to keep factors independent. Varimax rotation was employed to show pattern structure of the data and produced a five factor matrix with loadings for each item. According to Burns and Grove (1987), when orthogonal rotation occurs, weights assigned to variables within a factor may be interpreted as correlation coefficients with .3 to .5 as cutoff values. For interpretation of factor weights in this study, a cutoff value of .3 was utilized. Therefore, only four factors with a significant factor loadings greater than .3 were determined. Resulting factor values after varimax rotation

are summarized in Table 2. Each factor contains items which are highlighted to indicate that there was a significant correlation for that factor. Several survey instrument items did load on more than one factor, and final interpretation of relevant factors was dependent upon the researcher's assessment of usefulness and logic of the items.

Factors with loadings of .3 or higher were considered for further analysis after varimax rotation. Once an item was designated as significant for a particular factor, it was no longer considered in another factor. While an item might have loaded significantly high on several factors, only the highest loading was considered in this study. The one exception was item #17 (maintain in-service training opportunities for personnel) which loaded highly on Factor V, but was included in Factor I, where it had its second highest loading. As a result, Factor V was eliminated from further analysis because it only contained one item with a significant loading. In order for a reliability coefficient to be determined for a factor, it must contain more than one item of significant loading value (Nunnally, 1978).

Table 2

Resulting Factor Loadings after Varimax Rotation

<u>Item</u>	<u>Factors</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
1	.22389	-.04446	<b>.93628</b>	.17219	.14070
2	.10501	-.08237	<b>.94820</b>	.12213	.13900
3	<b>.72129</b>	<b>.30695</b>	<b>.48143</b>	-.09946	.11973
4	<b>.90319</b>	.15456	.26674	.02800	.01443
5	.09951	-.13115	.08287	<b>.82531</b>	-.31626
6	.02078	-.04428	.12191	<b>.93725</b>	.25770
7	<b>.58026</b>	-.02713	.25257	<b>.55181</b>	<b>.31457</b>
8	.26153	<b>.92581</b>	-.11437	.01805	.01559
9	<b>.35407</b>	<b>.62302</b>	<b>.58692</b>	.21001	-.16944
10	.08649	<b>.96582</b>	.02400	-.12458	-.00425
11	.23040	<b>.66437</b>	-.13355	-.30056	<b>.37531</b>
12	<b>.85946</b>	.27152	.28140	-.06882	.12690
13	<b>.85946</b>	.27152	.28140	-.06882	.12690
14	<b>.59144</b>	<b>.68162</b>	-.24498	-.02903	-.19673
15	<b>.43159</b>	-.20771	<b>.78193</b>	.00851	-.16524
16	<b>.88698</b>	.03334	.12298	.20481	.12033
17	<b>.48618</b>	-.01656	.15013	.05598	<b>.79578</b>
18	<b>.85004</b>	<b>.34645</b>	.06297	.16164	.10928
19	<b>.82563</b>	.25054	.29680	-.00101	.04959

\* Items with correlation coefficients > .30 were considered significant.

Previous interpretation of relevant literature, and review of athletic director position descriptions, suggested five major areas of job responsibility. These five loading factors were: staff supervision, policy and procedure development and implementation, public relations, fiscal management, and facilities management. However, factor analysis of the Perception of Position Power survey instrument yielded four significant factors. Only factor loadings greater than or equal to 0.30 were reported. The four resulting factors were: (I) staff supervision, public relations and policy development and implementation, (II) fiscal and facilities management, (III) staff selection and termination, and (IV) staff evaluation and promotion, which explained 84.0% of the variance for the four factors, leaving 16% unexplained or unique variance.

Survey instrument items which loaded significantly on Factor I are summarized in Table 3. Factor I explained 46.1% of the total variance, and was comprised of nine survey instrument items that pertained to staff management, public relations, and policy development (hereafter referred to as staff supervision). Snyder (1982) had delineated the job-responsibility area relating to public relations as a separate factor. However, as a result of factor analysis in this study, public relations was included within the factor of staff supervision.

Table 3

Factor I: Staff Supervision

	<u>Eigenvalue</u>	<u>% Variance</u>
Factor I	8.75468	46.1

  

<u>Variable</u>	<u>Factor Loading</u>
I-3 Assign and delegate responsibilities to personnel	.72129
I-4 Establish communication channels with personnel	.90319
I-7 Establish policies and procedures related to program goals	.58026
I-12 Establish and maintain community public relations	.85029
I-13 Establish and maintain public relations with campus administration, faculty, staff and students	.85946
I-16 Personal leadership development	.88698
I-17 Maintain in-service training opportunities for personnel	.48618
I-18 Conduct staff meetings	.85004
I-19 Manage daily conflicts	.82563

As indicated in Table 3, all survey instrument items had high correlation (.3 or greater) loadings on at least one of the factors, which represented a high correlation among items for each factor.

Survey instrument item loadings for Factor II are summarized in Table 4. Factor II consisted of five

instrument items which represented fiscal management and facilities management, and explained 19.8% of the total variance.

Table 4

Factor II: Fiscal and Facilities Management

	<u>Eigenvalue</u>	<u>% Variance</u>
Factor II	3.76459	19.8

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<u>Variable</u>	<u>Factor Loading</u>
I-8 Formulate and justify department budget	.92581
I-9 Determine coaching staff and personnel salaries	.62302
I-10 Determine the allocation of funds for scholarships	.96582
I-11 Determine fund-raising methods for the department	.66437
I-14 Facility operation and maintenance	.68162

---

As indicated in Table 4, items included under Factor II had high correlation values.

Survey instrument items which loaded significantly on Factor III are summarized in Table 5. Factor III represented three items pertaining to staff selection and termination, and adherence to conference rules and regulations (hereafter referred to as staff selection).

Factor III explained 9.6% of the total variance. All items included in Table 5 had high correlation values.

Table 5

Factor III: Staff Selection and Termination

	<u>Eigenvalue</u>	<u>% Variance</u>
Factor III	1.82970	9.6
<hr/>		
<u>Variable</u>	<u>Factor Loading</u>	
I-1 Select/hire coaching staff and personnel	.93628	
I-2 Terminate coaching staff and personnel	.94820	
I-15 Adherence to NCAA/NAIA or conference rules and regulations	.78193	

The survey instrument items that loaded for Factor IV are summarized in Table 6. Factor IV consisted of two items that represented staff evaluation and promotion (hereafter referred to as staff evaluation). This factor accounted for 8.5% of the total variance. As indicated in Table 6, both items had high correlation values.



Table 6

Factor IV: Staff Evaluation

	<u>Eigenvalue</u>	<u>% Variance</u>
Factor IV	1.61420	8.5
<hr/>		
<u>Variable</u>	<u>Factor Loading</u>	
I-5 Evaluate personnel work performance	.82531	
I-6 Make promotional decisions regarding personnel	.93725	

Factor V was eliminated from further analysis because only one survey instrument item loaded significantly on it. In order to adequately determine reliability of a factor, it must have consisted of two or more items (Nunnally, 1978).

The final stage of factor analysis consisted of determining the reliability of each factor. The Cronbach's Alpha Reliability Coefficient for each factor was calculated and is shown in Table 7. Reliability coefficients for the four job responsibility factors met the accepted .80 reliability coefficient as indicated by Nunnally (1978). As a result of the factor analysis procedure, the Perception of Position Power instrument was considered to have construct validity.

Table 7

Reliability Coefficients for Job Responsibility Factors


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<u>Factor</u>	<u>Reliability</u>
I	0.9338
II	0.8864
III	0.9727
IV	0.8336

---

Scaling method

The Perception of Position Power survey instrument was a numerical scale consisting of seven choices of position power (Appendix A). The numerical scale is considered a summated rating scale that is composed of a set of scales that are considered approximately equal in value loading or in attitude (Babbie, 1973). Subjects respond to items within a survey instrument based on a scale of agreement or disagreement and scores of all items are summated to yield an individual or group attitude score (Kerlinger, 1986). Advantages to the use of such a scale include the applicability of statistical analyses. Response set bias is a major limitation of such scales, but it is considered more economical to use than force-choice type items and is less of a strain on respondents (Kerlinger, 1986).

According to Nunnally (1978), summated scales increase instrument reliability. A high degree of reliability can be

obtained with fewer scale steps when there are a reasonable number, approximately 20, items on the scale. The Perception of Position Power instrument consisted of nineteen items.

#### Data Collection

A survey method of data collection was utilized to determine female athletic director perceptions of position power. A survey instrument has several advantages in that it: (a) ensures anonymity of respondents, (b) allows sufficient time for instrument completion, (c) solicits data which can be easily analyzed, and (d) accesses a population that is geographically dispersed (Henerson, Morris & Fitz-Gibbon, 1987). Disadvantages of survey methodology include: (a) a lack of administrative control, (b) results which may not be accurately generalized to a population, and (c) ensuring an adequate response rate (Kerlinger, 1986). Although there are disadvantages inherent in survey research, the advantages outweigh the disadvantages.

#### Subject Description

The population of female athletic directors of men's athletic programs, women's athletic programs, and combined athletic programs, was determined by using the 1991-1992 National Directory of Collegiate Athletics (Men's and Women's Editions). Participants were representative of

National Collegiate Athletic Association (NCAA) Division I - Division III programs (n=129), National Association for Intercollegiate Athletics (NAIA) programs (n=45), National Junior College Athletic Association (NJCAA) programs (n=68), and those institutions participating with independent status (n=11). Since the identified population of female athletic directors was small (N=389), all identified members of the population were included within the study.

After determining instrument content and construct validity, as well as reliability, the Perception of Position Power survey instrument was sent to each female college athletic director. A self-addressed, stamped envelope was included, as well as instructions and an explanation of the study and survey instrument (See Appendix E). The study was approved by the University of North Texas Institutional Review Board for the protection of human subjects in research. Survey participants gave consent to participate in the study by returning the completed survey instrument. A demographic sheet (Appendix B) was included to determine education level, experience level, institution classification, and specific position held by study participants. Participants were asked to return their responses within a three week period of time in order to ensure adequate time for data analysis. Each survey was coded to assure confidentiality, yet provided a means to

determine specific participant returns. After an initial time period, participants who had not returned the survey instrument were contacted via a second mailing of the survey instrument (Appendix F). A 70% response rate was established as the expected survey population return rate.

#### Data Analysis Procedures

Independent variables in this study were factors which served to differentiate the groups, including:

(a) present position, and (b) institutional classification.

Dependent variables were scores on the nineteen survey instrument items individually and cumulatively. Results of a factor analysis procedure for construct validation of the Perception of Position Power instrument revealed four factor groupings. Factor groups were analyzed to determine the impact of independent variables upon them. The factor groupings were: (I) items 2 - 3 , 7, 12 - 13, and 16 - 19, in regard to staff supervision, public relations, and policy and procedure development and implementation, (II) items 8 - 11, and 14, regarding fiscal and facilities management, (III) items 1 - 2 and 15, concerning staff selection and termination, and (IV) items 5 - 6, regarding staff evaluation and promotion.

The three hypotheses and four corresponding research questions required Analysis of Variance (ANOVA) and Multiple

Analysis of Variance (MANOVA) statistical procedures to be applied to the data.

### MANOVA Procedure

MANOVA evaluates differences among means for a set of dependent variables when there are two or more levels of an independent variable. When there are two or more independent variables, separate tests are made for each independent variable (i.e., tests of main effects). In addition, the separate tests are independent of one another so that the test of one independent variable in no way predicts the outcome of the tests of other independent variables. Multiple interactions are tested (i.e., tests of interaction) with analysis involving two or more independent variables. Each interaction is tested separately from tests of other main effects and interactions (Isaac & Michael, 1971).

MANOVA is similar to Analysis of Variance (ANOVA) in that it is a generalization of ANOVA to a situation with more than one dependent variable. The MANOVA procedure deals with correlations among groups. The analysis is accomplished within a preset alpha level. Once reliable differences are identified between groups, post hoc techniques will be utilized to determine which dependent variables had a bearing on the independent variable(s). One advantage of the MANOVA procedure, as compared to

utilization of a series of ANOVA procedures, is that when there are several dependent variables, MANOVA protects against Type I error. This occurs due to multiple tests of correlated dependent variables. A second advantage is that the MANOVA procedure may reveal differences between groups not indicated by a series of ANOVA tests. MANOVA procedures that consider dependent variables in combination sometimes may be more powerful tests than separate ANOVA procedures (Tabachnick & Fidell, 1989).

The MANOVA procedure was utilized for Hypothesis I which stated that there would be no significant differences in perceptions of position power between female intercollegiate athletic directors for women's programs and female intercollegiate athletic directors for combined programs. The MANOVA procedure was conducted to determine between group differences regarding perception of position power, as well as on individual instrument items. The interaction compared female athletic director of women's programs and female athletic director of combined programs perceptions of position power based upon each groups's cumulative responses to all survey instrument items. This cumulative response was considered the dependent variable. The MANOVA procedure then determined where there was a significant difference between female athletic director for a women's program and female athletic directors for a

combined program on each individual instrument item utilizing the ANOVA procedure.

### ANOVA Procedure

The ANOVA statistical procedure is utilized when two or more means are compared to determine if there are any reliable differences among them. One-way analysis of variance involves analysis of one independent variable with two or more levels. In one-way ANOVA the total variance can be partitioned into two sources: (a) variation of scores within groups, and (b) variation between group means and the overall sample mean. The advantages of ANOVA design include: (a) they yield information about main effects of particular variables by themselves, and (b) they also yield information about interactions between variables. If variability between group means is large enough, it can be concluded that there is a statistical difference present in the data (Isaac & Michael, 1983).

The ANOVA procedure was utilized with Hypothesis II and Hypothesis III. Hypothesis II stated there would be no significant differences in perceptions of position power between female intercollegiate athletic directors of women's programs and female intercollegiate athletic directors of combined programs, related to four job-responsibility factors. Hypothesis III stated there would be no significant differences in perception of position power



between female intercollegiate athletic directors of women's programs and female intercollegiate athletic directors of combined programs, based upon institution classification, related to four job-responsibility factors. The ANOVA procedure was conducted to determine between group differences regarding each of four factor areas by position or institution classification. Interaction tested whether perception of position power, based upon each of four factors, varied with type of position held or with classification of the institution.

#### Post-hoc Analysis

The Scheffe method of post-hoc comparison was utilized to determine differences between female athletic directors of women's programs and female athletic directors of combined programs. According to Hinkle, Wiersma and Jurs (1988), the Scheffe method is the most conservative and most flexible post-hoc method of analysis. Once a significant F is determined between groups means, any number of comparisons can be performed. All pairwise comparisons and all combinations of treatment means can be contrasted (Tabachnick & Fidell, 1989). A significance level of  $p \leq .05$  was utilized in all analysis procedures for this study.

## CHAPTER IV

### RESULTS

The results of statistical analyses of data collected from female athletic directors in colleges and universities will be presented in this chapter. Findings of this study were based upon data collected by means of a nineteen-item survey instrument mailed to female college and university athletic directors in the United States (National Directory of Collegiate Athletics, 1991-1992). Female athletic directors represented four-year, two-year, and public and private colleges and universities.

The purpose of this study was to determine female college and university athletic directors' perceptions of position power through analysis of data collected from the Perception of Position Power instrument. Specifically, the study was designed to determine whether selected variables have an impact on perception of position power of female athletic directors.

#### Demographic Information

The Perception of Position Power instrument was mailed to 389 athletic directors who were assumed to be female athletic directors in the National Directory of Collegiate

Athletics (1991-1992). A total of 343 survey instruments were returned, which resulted in a return rate of 88.17%. Of the 343 survey instruments returned, only 253 could be utilized for this study. Further explanation of sample return rate and usable survey instruments occurs in the data collection procedures section of this chapter. Survey participants were asked to respond to all items on the Demographic Data Form (Appendix B), which requested information pertaining to: (a) position, (b) years of experience as an athletic director, (c) years of experience in athletic administration, (d) years of experience as a head coach, (e) education level, and (f) institution classification. Descriptive statistics and frequency counts were collected based on subject response.

A description of demographic data provided by survey participants is summarized in Table 8. It should be noted that there was only one female athletic director indicated for men's athletic programs. Because of the lack of an adequate sample for athletic directors for men's programs, the data was eliminated from further analysis.

Table 8

Description of the Survey Sample by Demographic Variables

<u>Variables</u>	<u>Frequency</u>	<u>Percent</u>
<u>Position</u>		
Athletic Director for Women	123	48.62
<u>Athletic Director for Combined</u>	<u>130</u>	<u>51.38</u>
Total	253	100.00
<u>Education Level</u>		
Bachelor's Degree	13	5.14
Master's Degree	171	67.59
Education Specialist Degree	15	5.93
<u>Ed.D or Ph.D Degree</u>	<u>54</u>	<u>21.34</u>
Total	253	100.00
<u>Institution Classification</u>		
NCAA Division I	27	10.67
NCAA Division II	27	10.67
NCAA Division III	75	29.64
NAIA	45	17.79
Independent Status	11	4.35
<u>Junior/Community Colleges</u>	<u>68</u>	<u>26.88</u>
Total	253	100.00

According to data summarized in Table 8, 48.62% (n=123) of survey respondents were female athletic directors for a women's program, hereafter referred to as ADWP, while 51.38% (n=130) served as female athletic directors for a combined program, hereafter referred to as ADCP. In addition, 5.14% (n=13) of female athletic directors had attained a bachelor's degree, 67.59% (n=171) a master's degree, 5.93%

(n=15) an education specialist's degree, and 21.34% (n=54) the terminal degree. Female athletic directors employed in NCAA Division I and in NCAA Division II institutions represented 10.67% (n=27) of the total survey sample respectively. Female athletic directors in NCAA Division III institutions represented 29.64% (n=75) of the sample. While 17.79% (n=45) of female athletic directors were employed in NAIA institutions, 4.35% (n=11) were employed in those institutions competing on an independent basis, and 26.88% (n=68) were employed in Junior Colleges or Community Colleges.

Female athletic directors were distributed fairly equally between athletic programs for women (n=123) and combined athletic programs (n=130). However, the representation of women as athletic directors for men's programs was small (n=1). There was only one respondent who was a female athletic director for a men's program, therefore that data was eliminated from further statistical analysis. Approximately half (50.98%) of female athletic directors surveyed were employed in NCAA Division I-III institutions, with the largest representation being in NCAA Division III institutions (29.64%).

The mean number of years of experience in athletic administration for female college and university athletic directors is summarized in Table 9.

Table 9

Number of Years of Experience in Athletic Positions

<u>Variable</u>	<u>Mean</u>	<u>SD</u>
Years experience as an Athletic Director	8.81	6.95
Years experience in Athletic Administration	11.67	8.13
Years experience as a Head Coach	12.31	8.23

The average number of years of experience as an athletic director was 8.81, while the average number of years of experience as an athletic administrator and head coach was 11.67 years and 12.31 years respectively.

## Data Collection Procedures

Description of the Survey Sample

A survey instrument was developed to assess female college and university athletic director perceptions of position power (Appendix A). The survey was mailed to 389 athletic directors who were assumed to be female athletic directors in the National Directory for Collegiate Athletics (1991-1992). A total of 343 survey instruments were returned, which resulted in a return rate of 88.17%. Of 343 survey instruments returned, 69 surveys were eliminated from data analysis for one of the following reasons: athletic directors were male, athletic directors were either assistant or associate in position, or athletic directors

were no longer employed at the institution. This resulted in a survey sample of 274 female college and university athletic directors. Twenty of the identified female college and university athletic directors had participated in a pilot study, which resulted in a final usable survey sample of 254, which was a 74% return rate. However, there was only one female athletic director designated for a men's athletic program. As a result, that data was eliminated from further analysis. The return rate exceeded the established 70% acceptable return rate for the study.

An explanatory letter (Appendix E) and a stamped, self-addressed envelope accompanied each survey. All questionnaires were coded to provide a means of identifying those participants who had not responded by the requested deadline. Consent to participate in the study was given by completion and return of the Perception of Position Power instrument.

The first mailing of the survey to female athletic directors occurred on November 22, 1991. On January 2, 1992, a second mailing of surveys was sent to non-respondents. The letter stressed the importance of the survey being returned (Appendix F). A letter and stamped return envelope were included.

Respondents were asked to rate each of nineteen items using a 7-point numerical scale (Appendix A). A rating of 1

indicated the respondent considered herself very powerful, while a rating of 7 indicated the respondent perceived she had no power.

### Analysis of the Data

Three hypotheses and four corresponding research questions were developed. As a result of factor analysis for construct validation of the Perception of Position Power survey instrument, the hypotheses were corrected to reflect the delineated factors. An examination of data, relevant tables, and a summary discussion for each hypothesis is presented to facilitate review of the findings. Level of significance for all findings was set at .05 and all items found significant were reported.

#### Hypothesis 1

There will be no significant difference in perception of position power of female athletic directors for women's programs (ADWP) and female athletic directors for combined programs (ADCP).

#### Statistical Examination

A Multiple Analysis of Variance (MANOVA) procedure was applied to test for differences between group means for ADWP and ADCP. The MANOVA procedure is a generalization of ANOVA to a situation with more than one dependent variable. MANOVA deals with correlations among groups, and analysis is



accomplished within a preset alpha level (.05). The dependent variables for the MANOVA procedure were the nineteen survey instrument items. The positions of ADWP and ADCP represented the independent variables for this analysis. The MANOVA procedure first determined the overall perception of position power by calculating a cumulative score of all responses on the nineteen instrument items. Individual ANOVA procedures for each individual instrument item were then conducted. Based on results of the MANOVA procedure, no significant differences were determined in perception of position power of female athletic directors of women's programs and of female athletic directors of combined programs.

The MANOVA procedure for responses to each individual instrument item is summarized in Table 10. It should be noted that item number two was eliminated from further analysis in Hypothesis I because a significant difference was determined for female athletic directors of men's programs. Since there was only one female athletic director of a men's program, and such a sample size is considered too small for analysis, item two was eliminated from further analysis. Significant differences were found between ADWP and ADCP on the following survey instrument items:

1. A significant difference was found on position responsibility Item #5 (evaluation of personnel work

performance). A oneway analysis followed by post hoc comparison confirmed there was a significant difference ( $F=3.27$ ,  $p \leq .05$ ) between ADWP and ADCP. A test for comparison of group means for Item #5 indicated ADCP perceived themselves to be more powerful on this item than ADWP.

Table 10

Summary of MANOVA of Perceptions of Position Power: Item Analysis

<u>Variable</u>	<u>F-Ratio</u>	<u>Sign. of F</u>
Item 1	1.72748	.180
Item 3	1.12232	.327
Item 4	.02852	.972
Item 5	3.27548	.039 *
Item 6	2.07742	.127
Item 7	2.08105	.127
Item 8	2.16454	.117
Item 9	.79187	.454
Item 10	.29750	.743
Item 11	.10984	.896
Item 12	2.61218	.075
Item 13	4.80292	.009 *
Item 14	3.21139	.042 *
Item 15	.01320	.987
Item 16	.25114	.778
Item 17	1.79516	.168
Item 18	4.37330	.014 *
Item 19	1.41155	.246

\* Significant at the  $p \leq .05$

2. A significant difference was found on job responsibility Item # 13 (establishing and maintaining public relations with campus administration, faculty, staff and students). A oneway analysis followed by post hoc

comparison confirmed a significant difference ( $F=4.80$ ,  $p \leq .05$ ) between ADWP and ADCP. A test comparing group means established that ADCP perceived themselves to be more powerful in regard to maintaining public relations with campus administration, faculty, staff and students than ADWP.

3. A significant difference was found on job responsibility Item #14 (facility operation and maintenance). A oneway analysis followed by post hoc comparison confirmed there was a significant difference ( $F=3.21$ ,  $p \leq .05$ ) between ADWP and ADCP. A test comparing group means established that ADCP perceived themselves to be more powerful in regard to facility operation and maintenance than ADWP.

4. A significant difference was determined on job responsibility Item #18, which involved conducting staff meetings. A oneway analysis followed by post hoc comparison confirmed a significant difference ( $F=4.37$ ,  $p \leq .05$ ) between ADCP and ADWP. A test comparing group means established that ADCP perceived themselves to be more powerful in regard to conducting staff meetings than ADWP.

#### Summary of data

Results of the MANOVA, concerning perception of position power, revealed no overall significant differences between ADWP and ADCP. However, a significant difference

was found between ADWP and ADCP on four job responsibility items when the MANOVA procedure was applied independently to each survey item.

While there was not a significant difference in overall perception of position power, the following job responsibility items did seem to have a bearing on perceptions of position power: (a) evaluating personnel work performance, (b) establishing and maintaining public relations with campus administration, faculty, staff and students, (c) facility operation and maintenance, and (d) conducting staff meetings. Comments provided by study participants support perceptions that personnel evaluation and public relations were two of the most difficult aspects of the athletic director position. Female athletic directors also commented regarding facility management and supported perceptions that many athletic directors did not directly control or administer the facilities in which their programs were housed.

Results of the MANOVA support the hypothesis that there were no significant differences in perception of position power of female athletic directors of women's programs and of female athletic directors of combined programs. Therefore, based upon results summarized above, Hypothesis I is accepted.

### Hypothesis 2

Hypothesis 2 stated there would be no significant difference in perceptions of position power between female athletic directors of women's programs and female athletic directors of combined programs, related to four principal job responsibility factors of staff supervision, fiscal and facilities management, staff selection, and evaluation and promotion of staff.

### Statistical Examination

Table 11 presents the means and standard deviations for female athletic director perceptions of position power related to four job-responsibility factors.

Table 11

#### Female Athletic Director Perceptions of Position Power related to Four Job Responsibility Factors

	<u>Athletic Directors</u>				
<u>Job Responsibility Factors</u>	<u>Women's (n=123)</u>		<u>Combined (n=130)</u>		<u>Sign. of F</u>
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Staff Supervision	2.44	3.92	1.37	2.59	.027 *
Fiscal & Facilities Management	2.11	3.12	2.66	2.46	.432
Selection	3.44	1.29	3.29	0.90	1.010
Evaluation	2.80	1.80	2.42	0.97	.038 *

Athletic directors for combined programs perceived themselves to be significantly more powerful than athletic directors for women's programs in staff supervision ( $F=3.67$ ,  $p \leq .05$ ) and staff evaluation ( $F=3.31$ ,  $p \leq .05$ ) aspects of the position. There were no significant differences between ADCP and ADWP regarding fiscal and facilities management and staff selection aspects of the position.

#### Summary of data

Significant differences were found between ADWP and ADCP on two of the four job responsibility areas. The two significantly different job-responsibility factors were staff supervision, public relations, and policy procedure development and implementation, and, staff evaluation and promotion. Since there was a significant difference on two of the four factors, the hypothesis of no significant differences between female athletic directors of women's programs and female athletic directors of combined programs in perceptions of position power, according to specific job responsibility areas, was partially rejected.

#### Hypothesis 3

Hypothesis 3 stated there would be no significant differences in perceptions of position power between female athletic directors of women's programs and female athletic directors of combined programs based on institution

classification (NCAA Division I-III, NAIA and Independent, and Junior/Community College) in which they were employed, related to four principal job-responsibility areas.

### Statistical Examination

An ANOVA revealed no significant differences between ADCP and ADWP based on institution classification regarding perception of position power. The means and standard deviations for perception of position power based upon institution classification are summarized in Table 12.

Table 12

### Perception of Position Power Based on Institution Classification

Job Factors	<u>Institution</u>						<u>Sign.</u> <u>of F</u>
	Div I-III (n=130)		NAIA/Ind. (n=56)		JC/CC (n=68)		
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Staff Supervision	1.26	2.50	1.02	3.17	1.15	3.24	.322
Fiscal and Facilities Mngt.	6.63	2.60	7.41	2.71	7.06	2.68	.074
Staff Selection	3.26	0.80	3.14	1.21	3.44	1.19	.675
Staff Evaluation	2.39	1.05	2.69	1.09	2.76	1.34	.564

No significant differences were found between institution classification levels based upon the four job-responsibility

factor areas of staff supervision, fiscal and facilities management, staff selection, and staff evaluation.

#### Summary of Data

Results of the ANOVA utilized to determine perception of position power based on institution classification, revealed no significant differences between ADWP and ADCP on four job responsibility factors assessed by the Perception of Position Power instrument. Results support the hypothesis of no significant differences between ADWP and ADCP regarding perception of position power based on institution classification. Therefore, the hypothesis of no significant difference in perception of position power between female athletic directors for women's programs and female athletic directors of combined programs, based upon institution classification was accepted.



## CHAPTER V

### SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

The purpose of this study was to determine female athletic directors' perceptions of position power. A nineteen item survey instrument was developed to assess perception of position power (Appendix A). The instrument was subdivided into four job-responsibility components: (a) staff supervision, public relations and policy and procedure development and implementation, (b) fiscal and facilities management, (c) staff selection, and (d) staff evaluation and promotion. The four job responsibility components served as dependent variables in the analysis. Demographic information (Appendix B) was sought to determine the impact of position on perception of position power and institution classification on perception of power. The two demographic variables served as independent variables in this study.

The study was conducted during the 1991-1992 academic year. An initial study was undertaken to determine content validity of the Perception of Position Power instrument. A panel of nine experts was utilized to determine content

validity. The panel consisted of women with extensive experience in athletic administration, physical education administration and/or teaching, and research and statistical methodology.

Following content validation of the Perception of Position Power instrument, a pilot study was conducted to determine reliability and construct validity of the instrument. A panel of twenty female athletic directors, which consisted of female athletic directors from randomly selected colleges and universities within the United States, provided data to assess instrument reliability and construct validity. A Cronbach's Alpha Reliability Coefficient estimate was determined (.9062) and a factor analysis of instrument items resulted in four factors with correlation coefficients no lower than .4. In addition, reliability measures were determined on each survey instrument factor and ranged from 0.8336 to 0.9727. Resulting reliability measures for the four factors were considered good for a new survey instrument.

Once reliability and construct validity of the Perception of Position Power instrument was determined, the study was conducted utilizing an available sample of 369 female athletic directors. The sample of 369 represented all female athletic directors currently identified within the National Collegiate Athletic Directory (1991-1992). An

initial mailing resulted in a 68% return rate, and was followed by a second mailing which brought the return rate to 88.17%.

Demographic data revealed that, of 253 female athletic directors responding to the Perception of Position Power instrument, 48.62% were athletic directors of woman's programs, while 51.38% served as athletic directors of combined programs. To the question concerning education degree levels, 5.14% of female athletic directors indicated attaining a bachelor's degree, 67.59% a master's degree, 5.93% an education specialist's degree, and 21.34% the terminal degree.

Female athletic directors employed in NCAA Division I institutions (n=27) and in NCAA Division II institutions (n=27) represented 10.67% of the total survey population respectively. Female athletic directors in NCAA Division III institutions (n=75) represented 29.64% of the survey population, while 17.79% were employed in NAIA institutions (n=45). Female athletic directors employed in Junior Colleges or Community Colleges (n=68) represented 26.88% of the survey population, and 4.35% were employed in those institutions that competed on an independent basis (n=11).

According to demographic data collected, female athletic directors were evenly distributed between athletic programs for women (n=123) and combined athletic programs

(n=130). Approximately 50.98% of survey respondents were employed in NCAA Division I-III institutions (n=129), with the largest representation being in NCAA Division III institutions. Additionally, the average number of years of experience as an athletic director was 8.81 years, while the average number of years of experience as an athletic administrator and head coach was 11.67 and 12.31 years respectively.

### Discussion

Perception of position power of female intercollegiate athletic directors was assessed on nineteen instrument items and on four job-responsibility factors. The study consisted on three hypotheses with four corresponding research questions that directed the research.

It was hypothesized that there would be no significant difference in perception of position power between female athletic directors for women's programs and athletic directors for combined programs according to: (a) cumulative responses to all instrument items, (b) position held (i.e., athletic director for a women's program or athletic director for a combined program), and (c) institution classification (i.e., NCAA Division I-III, NAIA and Independent, and Junior or Community Colleges).

Content and construct validity, and instrument reliability assessment, were determined for the Perception

of Position Power instrument. Four factors were obtained by way of factor analysis from nineteen survey instrument items which related to various aspects of an athletic director position. The four survey instrument factors were: (a) staff supervision, public relations, and policy and procedure development and implementation, (b) fiscal and facilities management, (c) staff selection and termination, and (d) staff evaluation and promotion.

Hypothesis I stated there would be no significant difference in perception of position power of female athletic directors of a women's program and female athletic directors of combined programs. Results of a MANOVA procedure indicated no significant differences in perception of position power of female athletic directors.

Since there was not a significant difference between female athletic directors for women's programs and female athletic directors for combined programs, it can be assumed that athletic directors for the two different programs perceived themselves similarly regarding position power. In addition, the Perception of Position Power survey instrument was very general, and did not allow for a great degree of variability between items. A more detailed survey instrument might have produced differences in perceptions of position power. However, for purposes of this study, the

nineteen items included within the instrument were considered adequate.

Another reason for the result of no significant differences in perception of position power of female athletic directors might be that women in such positions do perceive themselves to have position power than others perceive them to have. Subordinates might feel differently about the position power that the athletic director has.

Changes in Title IX legislation and its impact on the representation of women in position as athletic director might also impact perceptions of position power of female athletic directors. With representation of women in athletic director positions increasing, perceptions of position power will tend to be more positive than if such representation was on the decline. Perception of position power is also based upon past employment experiences. Moving from a position with less power to one with more power can have a positive bearing on perception of position power.

However, further outcomes of the MANOVA procedure indicated there were significant differences between female athletic directors for women's programs and female athletic directors for combined programs in perception of position power on four of nineteen survey instrument items. The four survey instrument items included: (a) evaluation of

personnel work performance, (b) facility operation and maintenance, (c) establishing and maintaining public relations with campus administrators, faculty, staff, and students, and (d) conducting staff meetings. Female athletic directors for combined programs perceived themselves to have a greater degree of position power regarding each of the four survey instrument items for which a significant difference was determined. Based on results of the MANOVA regarding female athletic director perceptions of position power, Hypothesis I was accepted.

Hypothesis II stated there would be no significant difference in perception of position power between female athletic directors for women's programs and female athletic directors for combined programs based on four job-responsibility factors that were determined by factor analysis for construct validation of the survey instrument. As a result of an ANOVA procedure, significant differences were found in perception of position power between female athletic directors for combined programs and female athletic directors for women's programs on two of four factor areas. The two factors for which a significant differences were determined were: (a) staff supervision, public relations, and policy and procedure development and implementation, and (b) evaluation and promotion of staff/personnel. Female athletic directors for combined programs perceived

themselves to be more powerful in both factor areas for which a significant difference was found.

Such differences in perception of position power may be addressed from the following perspective: first, according to results of a study conducted by Inglis (1991), athletic directors perceive themselves to be more influential regarding marketing decisions, which corresponded directly with establishing public relations with campus administration, faculty, staff, and students. In addition, in many athletic programs, an athletic director has ultimate responsibility and authority for the overall athletic program. In most instances, this responsibility involves the supervision of an athletic director, or coordinator, of a women's athletic program, with an athletic director for a women's program being ultimately responsible to an athletic director for the entire athletic program. Therefore, evaluation and promotion of staff/personnel would be within the job responsibility of an athletic director for a combined program and not a direct responsibility of an athletic director for a woman's program.

According to Davis (1951), Massie (1965), and Fobbs (1988), power is traditionally derived from a line position, in which authority is vested to influence organization employees. A line position implies action and authority. The position of athletic director for a combined program is



considered a line position. Staff positions imply advice giving and a lack of direct leadership and influence in an organization. The position of athletic director for a women's program, at most institutions, is considered a staff position, as an athletic director for a women's program reports to the athletic director of a combined program.

Implementation of Title IX legislation has been shown to have a direct impact on the power based in men's and women's athletic programs. Prior to Title IX legislation, most men's and women's athletic programs were separate entities, with an athletic director for each program considered as the one with authority for the respective program. Following Title IX implementation and reinforcement in 1983, many institutions combined their men's and women's athletic programs which resulted in a loss of women in top athletic director positions (Acosta & Carpenter, 1990; Delano, 1990). Many women were retained in a position of athletic director of women's programs or coordinator of women's athletics. Such positions resulted in a decrease of position power for women since they became responsible to an athletic director for an entire program (Disselkoen, 1987).

Kanter (1977) and Mainiero (1986) stated that power positions are located at the upper levels within an organization. Cartwright (1959) also stated that the higher

an organizational position, the greater an opportunity to be more powerful. Fagenson (1990), asserted that the amount of power people possess varied as a result of the level of a position which they occupied in a corporation. Fagenson also stated that perceived power varied according to a person's position in an organizational hierarchy.

Based upon analysis of perceptions of position power of female athletic director for combined programs and female athletic director for women's programs, it may be concluded that position within an organization directly impacts perception of position power that an individual will have. Position within an organization is one of the most important sources of power available to organizational members (Schlueter, Barge & Blankenship, 1990). Female athletic director for a women's program will, therefore, have less position power than a female athletic director for a combined program because final decisions cannot be made or action cannot be initiated on the part of a department without approval of an athletic director to whom she is ultimately responsible. In addition, female athletic director for women's programs will have less success in asserting power in a department since her position tends to be perceived as not as powerful as the position of athletic director for an entire program by others within the organization. Women interested in obtaining a position as

an athletic director must be cognizant of the fact that position held has a direct bearing on the power that they will have within an athletic program.

Based upon results of the ANOVA procedure for determining perception of position power between female athletic director of women's programs and female athletic directors of combined programs based on four job responsibility factors, Hypothesis II was partially rejected. This partial rejection of Hypothesis II occurs since there were significant differences between female athletic directors for a women's program and female athletic directors for a combined program on two of four factor areas.

Hypothesis III stated there would be no significant differences in perception of position power between female athletic directors of women's programs and female athletic directors of combined programs based on institution classification (NCAA Division I-III, NAIA/Independent, and Junior Colleges or Community Colleges) according to four job responsibility factors. As a result of an ANOVA procedure, no significant differences were found in perception of position power between female athletic directors based on institution classifications according to four job responsibility factors.

The result of no significant differences between female athletic directors based on institution classification may be due to the fact that perception of position power is more of an internal organizational process than an external process. While institutions might vary in size and jurisdiction, issues with which they deal with on a daily basis are similar. Therefore, findings indicate that institution size has no significant impact on perception of position power.

### Conclusions

Results of the study suggest the following conclusions for the field of athletic administration regarding female athletic directors:

1. Individual job responsibility items that have a bearing on perception of position power include: (a) termination of coaching staff and personnel, (b) evaluation of personnel work performance, (c) establishing and maintaining public relations with campus administration, faculty, staff and students, (d) facility operation and maintenance, and (e) conducting staff meetings.
2. When considering the position which a female athletic director holds, the following areas impact perception of position power: (a) staff supervision, public relations, and policy and procedure development and implementation, and (b) evaluation and promotion of staff.

3. The position (athletic director for a women's program versus athletic director for a combined program) held within an athletic program significantly impacts perception of position power that an individual may have.

4. Size of an institution in which an athletic director is employed does not have a significant impact on perception of position power within that institution.

5. Female athletic directors for women's programs and female athletic directors for combined programs do not perceive position power similarly.

#### Recommendations

The following recommendations have been made after analysis of data in this study:

1. When determining construct validity of the Perception of Position Power survey instrument, several series of tests should be conducted. After the initial mailing of the survey instrument to pilot study participants, to determine reliability and construct validity, no further mailings were conducted. In the future it is recommended that, following initial factor analyses, insignificant items be removed from the instrument and further mailing occur until all insignificant items have been removed.

2. In order to adequately determine female athletic director perceptions of position power, further analyses need to be conducted. Demographic variables such as education level and years of experience as an athletic director were not considered in this study. Further analyses of this order should be conducted to adequately determine those variables which might have a bearing on female athletic directors' perceptions of position power.

3. Studies should be conducted that investigate and compare associate and assistant athletic director, with athletic director, perceptions of position power.

4. Studies should be conducted that investigate subordinate perceptions of supervisor (athletic director) position power, as compared with athletic director perceptions of position power.

5. Studies comparing male and female athletic director perceptions of position power would be helpful to better understanding the different perceptions related to demographic variables.

6. It is recommended that the initial mailing of the Perception of Position Power instrument be conducted during the middle of a semester, rather than prior to two major holidays. Due to time constraints, this researcher was unable to do so and, fortunately, return rates were good. However, it might be more helpful to those participating in

the survey to conduct the study during a less hectic time of the semester or year.

7. Due to a lack of athletic director for men's program subjects, it might be more beneficial to utilize a T-Test analysis procedure for the two groups (athletic directors for women's programs and athletic directors for combined programs).

8. A further review of related literature needs to occur related to size of an institution or organization and its impact on perception of position power.

9. Further review of athletic director position job responsibilities needs to occur to include items relevant to marketing, event scheduling, athlete recruitment and eligibility, and compliance activities in the Perception of Position Power instrument. In addition, in order to adequately determine perception of position power, additional items should be added to the Perception of Position Power survey instrument related to the athletic director position. An inclusion of more items would provide more variability in the survey instrument and in participant responses, as well as provide additional factor areas relevant to the position.

APPENDIX A  
FEMALE ATHLETIC DIRECTOR PERCEPTION  
OF POSITION POWER  
SURVEY INSTRUMENT



### PERCEPTION OF POSITION POWER INSTRUMENT

Indicate your level of power related to the following job-related items utilizing the following scale. Place the appropriate number in the space provided to the left of each statement.

		1	2	3	4	5	6	7	
	Very Powerful								Not Powerful
_____ 1.	Select/hire coaching staff and personnel								
_____ 2.	Terminate coaching staff and personnel								
_____ 3.	Assign and delegate responsibilities to personnel								
_____ 4.	Establish communication channels with personnel								
_____ 5.	Evaluate personnel work performance								
_____ 6.	Make promotional decisions regarding personnel								
_____ 7.	Establish policies and procedures related to program goals								
_____ 8.	Formulate and justify the department budget								
_____ 9.	Determine coaching staff and personnel salaries								
_____ 10.	Determine the allocation of funds for scholarships								
_____ 11.	Determine fund-raising methods for the department								
_____ 12.	Establish and maintain community public relations								
_____ 13.	Establish and maintain public relations with campus administration, faculty, staff and students								
_____ 14.	Facility operation and maintenance								
_____ 15.	Adherence to NCAA/NAIA or conference rules and regulations								
_____ 16.	Personal leadership development (i.e., conferences and workshops)								
_____ 17.	Maintain in-service training opportunities for personnel								
_____ 18.	Conduct staff meetings								
_____ 19.	Manage daily conflicts								

Please provide additional comments and feedback in the space below and on the back of this form.

APPENDIX B  
FEMALE ATHLETIC DIRECTOR PERCEPTION  
OF POSITION POWER  
DEMOGRAPHIC SURVEY

**Female Athletic Director Perception of Position Power  
Demographic Sheet**

**Position:**

- \_\_\_\_\_ **Athletic Director for Women's Program**
- \_\_\_\_\_ **Athletic Director for Men's Program**
- \_\_\_\_\_ **Athletic Director for a combined athletic program**

**Years of experience as an athletic director** \_\_\_\_\_

**Years of experience in athletic administration** \_\_\_\_\_

**Years of experience as a head coach** \_\_\_\_\_

**Educational level:**

- \_\_\_\_\_ **BS/BA**
- \_\_\_\_\_ **MS/MA**
- \_\_\_\_\_ **Specialist degree**
- \_\_\_\_\_ **Ed.D/Ph.D**

**Institutional level:**

- \_\_\_\_\_ **Division I**
- \_\_\_\_\_ **Division II**
- \_\_\_\_\_ **Division III**
- \_\_\_\_\_ **NAIA**
- \_\_\_\_\_ **Junior College/Community College**
- \_\_\_\_\_ **Independent**

APPENDIX C  
PANEL MEMBER LETTER

October 1, 1991

Dear ^F2^;

I am a doctoral candidate at the University of North Texas in Denton, Texas, and I am writing to request your assistance with my dissertation research. I am in the process of having the validity determined for my survey instrument and you were suggested, by Dr. Irma Caton, as a possible "expert" and willing participant in this process.

My dissertation is: Female Athletic Director Perceptions of Position Power. Position power is best defined as the access and control of people, information, and resources as a result of the position held within an organization. Through the use of various demographic variables I wish to determine possible factors that influence female college and university athletic director perceptions of their power as it relates to their position.

Please take the time to complete the enclosed survey instrument and demographic information sheet. Your feedback is greatly appreciated regarding all aspects of the study, survey instrument, and demographic sheet. I am most interested in your comments regarding the validity of the survey items and the use of the demographic items as variables. The validity of the instrument will be determined by your assessment of the items. Does each item help to adequately assess perceptions of position power? Are there items that need to be included or excluded? Will such a format adequately assess position power?

Your participation in this matter is strictly voluntary and I will be calling you on October 10 to see if you are willing to assist me. I will also address any questions or concerns that you might have regarding the survey instrument and demographic information sheet.

Your assistance is greatly appreciated. I look forward to speaking with you soon.

Sincerely,

Leigh G. Lewis

APPENDIX D  
PILOT STUDY MEMBER LETTER

October 29, 1991

Dear ;

You have been selected as a possible participant in a pilot study of female athletic director perceptions of position power. This study is of significance to the field of athletic administration as it pertains to female athletic director perceptions of their power within the position, as determined by several demographic variables.

The survey instrument includes a 19 item questionnaire and a 16 item demographic sheet. It will take approximately 10 minutes to complete. The information that you provide will remain confidential and will appear in print as aggregate data.

In addition, please indicate any questions or concerns that you might have regarding survey items or demographic items. Your responses will also be helpful in determining the construct validity of the survey tool, as well as it's reliability.

Please complete the enclosed survey and return it in the self-addressed, stamped envelope by Friday, November 15, 1991.

Sincerely,

Leigh G. Lewis  
Doctoral Candidate  
The University of North Texas

APPENDIX E  
POPULATION SURVEY  
FIRST LETTER



November 22, 1991

Dear ;

You have been selected as a possible participant in a study of female athletic director perceptions of position power. This study is of significance to the field of athletic administration as it pertains to female athletic director perceptions of their power within the position, as determined by several demographic variables.

The survey instrument includes a 19 item questionnaire and a 16 item demographic sheet. It will take approximately 10 minutes to complete. The information that you provide will remain confidential and will appear in print as aggregate data.

Please complete the enclosed survey and return it in the self-addressed, stamped envelope, by Friday, December 13, 1991. Thank you for your time and assistance. Best wishes for an enjoyable and relaxing holiday season.

Sincerely,

Leigh G. Lewis  
Doctoral Candidate  
University of North Texas

APPENDIX F  
POPULATION SURVEY  
SECOND LETTER

January 2, 1992

Dear ;

I recently sent you a survey to be completed regarding Female Athletic Director Perceptions of Position Power. You were identified as a female athletic director in the National Collegiate Athletic Directory. However, I have not received your completed survey, as of the date listed above.

In order for my research to be reliable and valid, as well as generalizable to the population of female athletic directors, I must receive at least 70% of the surveys that were mailed out. Your assistance in helping me to attain this return rate is greatly appreciated, and your input into the perceptions of female athletic directors is vitally important.

The survey takes approximately 5 minutes to complete. Please return it in the self-addressed, stamped enveloped as soon as you complete it, by January 17, 1992.

Thank you for your time and assistance. I look forward to receiving your completed survey soon.

Sincerely,

Leigh G. Lewis  
Doctoral Candidate  
University of North Texas

APPENDIX G  
FACTOR ANALYSIS OF SURVEY INSTRUMENT  
ITEMS PRIOR TO VARIMAX ROTATION

Factor Analysis of Survey Instrument Items Prior to Varimax Rotation

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<u>Items</u>	<u>I</u>	<u>II</u>	<u>Factors</u> <u>III</u>	<u>IV</u>	<u>V</u>
1	<b>.56563</b>	<b>.64490</b>	-.44297	.08560	.19700
2	<b>.45144</b>	<b>.66116</b>	-.50349	.06852	.22803
3	<b>.89508</b>	.00674	-.23387	-.11694	-.02993
4	<b>.90826</b>	.03179	.04606	-.13904	-.25374
5	.11581	<b>.46599</b>	<b>.38417</b>	<b>.61930</b>	-.23121
6	.21176	<b>.49832</b>	<b>.52739</b>	<b>.52907</b>	<b>.33300</b>
7	<b>.69021</b>	<b>.38824</b>	<b>.38427</b>	.10047	.14073
8	<b>.51157</b>	-.71383	-.05720	<b>.37838</b>	.14653
9	<b>.73313</b>	-.02502	-.38512	<b>.49425</b>	.01001
10	<b>.41120</b>	-.65921	-.07531	-.37485	.21557
11	<b>.40722</b>	-.65921	-.07531	-.11568	<b>.35221</b>
12	<b>.87186</b>	-.04589	<b>.33005</b>	-.26636	.10143
13	<b>.92705</b>	-.07594	-.02950	-.18019	-.11784
14	<b>.60445</b>	-.65638	.10095	.20120	-.25905
15	<b>.54632</b>	<b>.58387</b>	-.41161	-.06061	-.23607
16	<b>.83876</b>	.11061	.29771	-.13339	-.19296
17	<b>.59928</b>	.13748	.27293	-.42302	<b>.51393</b>
18	<b>.89095</b>	-.02620	-.02640	.00095	-.11737
19	<b>.89235</b>	-.02620	-.02640	-.09988	-.16536

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\* Items with a correlation coefficient > .30 are considered significant and are highlighted.

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