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SEX-ROLE ORIENTATION AND THE FAILURE ATTRIBUTIONS
OF MALE AND FEMALE ATHLETES

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ABSTRACT

The purpose of this study was to determine whether a) the external failure attributions of females having a traditional sex-role orientation were different from those of females with a non-traditional orientation; and b) whether the external failure attributions of either group of females were different from those of a traditional group of male athletes. One hundred and eighty-seven male and female track and field athletes and swimmers competing at the NCAA Division I level were administered two questionnaires. The Modified Trent Attribution Profile (MTAP) (modified from Wong, Watters & Sproule, 1978) was administered to assess the factors to which athletes attribute the outcomes (success or failure) of their sports competitions. The Bem Sex-Role Inventory (BSRI) was used to classify the subjects into one of four sex-role categories: masculine, feminine, androgynous, or undifferentiated. Males with masculine BSRI scores (N=36) were classified as traditional males (TM); females with feminine BSRI scores (N=38) were classified as traditional females (TF); females with androgynous or masculine BSRI scores were classified as non-traditional females (NTF). External failure attribution scores were calculated for each athlete classified as TM, TF, or NTF. An ANOVA was calculated to determine whether significant differences existed among the three groups for external failure attributions. No significant differences were

found. A two-dimensional (sex-role orientation x stability) chi-square analysis was conducted to determine the relative frequencies of high ratings for external stable and unstable elements among the three groups. Again, no significant differences were found. It was concluded that the likelihood of external failure attributions for male and female athletes is not dependent on sex-role orientation (i.e. traditional vs. non-traditional).

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CHAPTER I

INTRODUCTION

The impact of sports in our society has increased dramatically in the past few decades. What used to be simply a means of recreation during leisure hours is now a multi-billion dollar industry. As the economic value of sports continues to increase, so does the importance of identifying the factors which contribute to an athlete's success or failure in competitive settings. Fans, coaches, and participants themselves often speculate as to why an athlete performs well or poorly in a given competition. However, these speculations usually have very little, if any, scientific basis (Bird & Brahme, 1978). Researchers in sport psychology seek to answer this question by examining the behavior/performance of athletes relative to the predictions of scientifically established theory.

Attribution theory examines the processes whereby people form causal interpretations for their behavior (Carron, 1980; Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971). In the past, a considerable amount of psychological research has been performed to evaluate gender differences in attribution processes (Gillis, 1979; Murray & Mednick, 1975; Roberts, 1975). Results of this research have offered relatively consistent support for the following gender trends in attributions: 1) In successful situations, the

attributions of both sexes are more "internal" than under conditions of failure, 2) under conditions of failure, women more often make internal attributions while men offer external attributions, and 3) the greatest differences in the attributions of males and females occur under conditions of failure.

Research in sport psychology has suggested that patterns of attributions in athletic contexts are similar to those given in everyday settings (Phares, 1976; Roberts, 1975; Schumaker, 1982). However, many researchers in sport psychology (eg., Roberts, 1975; Schumaker, 1982) have used general (rather than sports specific) attribution tests as a measure of sports related attributions. A problem with this, as Rejeski & Lowe (1980) point out is that it requires the "assumption that sport and intellectual achievement are identical in all aspects" (p. 234), when there is good reason to contend that attributions associated with these two achievement settings may be conceptually different. Subsequent research performed by Rejeski & Lowe (1980), revealed that subjects were less defensive in using low ability as an explanation for poor sports performances than for poor intellectual performances. The main reason for this difference in ability attribution, Rejeski hypothesized, is that sports ability may be perceived as "less stable" than intellectual ability.

Supporting Rejeski's position, Borg (1970) hypothesized that, since effort in sport behavior is more readily

observable than effort in intellectual behavior, individuals failing in sports would be less likely to attribute the failure to lack of effort than would individuals failing in an intellectual task.

Another factor that could lead to discrepancies between general attribution patterns and sports attributions is the consistent finding of women's fear of success in traditionally masculine competitive situations (Heilbrun, Piccola, & Kleemeier, 1973; Horner, 1968). This concept is rooted in the notion that women may perceive undesirable consequences (i.e. decreased femininity) as necessary by-products of success in masculine achievement settings (Horner, 1968).

Although previous research has been performed using sports-specific tests to measure sports-related attributions (Bird & Brahme, 1978; Iso-Ahola, 1977; Scanlan & Passer, 1979), these studies have typically focused on self vs. team attributions. Thus, findings regarding self attributions may carry with them the contaminant of transference of blame from self to team in losing situations (Bird & Brahme, 1978). It would appear that the attributions of individual sport performers would be less susceptible to the transference problem.

Another relevant concern for investigators of sports-related attributions is that simple comparisons of the attributions of males and females disregard personality traits common to both sexes that may affect attribution

patterns. Research in the area of sex-role orientation, which operates on the premise that people's behavior is influenced by their perceptions of societally-established sex-appropriate behavior (Bem, 1983), has been used to explain behavioral diversity within the female gender. Specifically, females described as less "traditional" in their sex-role orientations also appear to be more male-like in their manifestations of certain achievement-related traits (Heilbrun et al., 1975; Houts & Entwistle, 1968; Weigers & Freize, 1977). Conspicuously missing from the body of literature regarding gender comparisons of sports attributions is the concept of sex-role orientation which has the potential to surpass simple male/female comparisons and allow more sophisticated examination of the attribution patterns of athletes. Therefore, this study represented an attempt to examine the sports-related external failure attributions of female athletes having traditional or non-traditional sex-role orientations with those of males possessing a traditional orientation.

Purpose of the Study

The purpose of this study was to determine whether a) the external failure attributions of females having a traditional sex-role orientation were different from those of females with a non-traditional orientation; and b) whether the external failure attributions of either group of

females were different from those of a traditional group of male athletes.

Scope of the Study

Data collection occurred during October, November, and December of 1986. The subjects were male and female varsity athletes competing in either track and field or swimming at the NCAA Division I level. Questionnaires were administered to student-athletes attending the following institutions: Brigham Young University, Colorado State University, Georgetown University, Louisiana State University, University of Missouri, University of Tennessee, University of Texas, and Rutgers University.

Subjects were asked to complete a consent form (Appendix A) and two questionnaires: the Modified Trent Attribution Profile (MTAP) (modified from Wong, Watters & Sproule, 1978) (Appendix C) and the Bem Sex Role Inventory (BSRI) (Bem, 1974) (Appendix D).

Operational Definitions

1. Athlete: For the purpose of this study athletes were individuals competing at the NCAA Division I level in either track and field or swimming.

2. Modified Trent Attribution Profile (MTAP): The MTAP is a measure of sports-specific explanations for success and failure. Attribution elements are represented by the four categories of luck, task difficulty, effort, and

ability. In this study, a subject's attributions were determined by his/her composite external self-failure attribution score on the MTAP.

3. Composite External Self-Failure Attribution Score:

The sum of a subject's ratings assigned to the external elements (luck and task difficulty) on MTAP questions regarding self-failure situations; specifically, Question #3, choices "a" and "c"; Question #4, choices "b" and "d"; Question #12, choices "b" and "c."

4. Bem Sex-Role Inventory (BSRI): The BSRI is an inventory of personality traits associated with sex-role orientation (Bem, 1974). In this study, a subject's sex-role orientation was determined by the rank position of his/her mean masculine and feminine BSRI scores relative to the mean masculine and feminine scores for the combined group of male and female athletes. The median split procedure described by Bem (1977) was used to classify subjects as masculine, feminine, androgynous, or undifferentiated.

5. Traditional Male Athlete (TM): A male athlete whose mean masculine score on the BSRI fell above the median masculine score (for males and females combined), and whose mean feminine score fell below the group median feminine score. This category of athlete would be described by Bem as masculine in orientation.

6. Non-Traditional Female Athlete (NTF): A female athlete whose a) mean masculine and feminine scores both

fell above the group median masculine and feminine scores, respectively (i.e. androgynous orientation); or b) mean masculine score was above the median masculine score and mean feminine score was below the median feminine score (i.e. masculine orientation) on the BSRI.

7. Traditional Female Athlete (TF): A female athlete whose mean feminine score fell above the median feminine score on the BSRI and whose mean masculine score was below the median masculine score on the BSRI. This athlete would be defined by Bem as feminine in orientation.

Hypotheses

In this study, it was hypothesized that:

1. Non-traditional female athletes (NTF) would have significantly higher composite external self-failure attribution scores than traditional female athletes (TF).
2. Traditional male athletes would have significantly higher composite external self-failure attribution scores than traditional female (TF) and non-traditional female athletes (NTF).

Significance of the Study

Most attribution research has been conducted in one of two settings, the psychology laboratory or the classroom, and has usually involved the assessment of attributions related to performance outcomes on mental tasks (Gillis, 1979). The present study had as its focus the attributions

of athletes for performance outcomes that are sport specific. Gender comparisons of sports attributions have generally failed to consider the possibility of within-gender personality characteristics which may affect attributions. In this study a comparison of the attributions of traditional and non-traditional female athletes was made to investigate the possible differences in the attributions of females having differential sex orientation patterns. In addition, comparisons of attributions of both groups of females were made with those of a group of traditional males. Understanding the attribution patterns of athletes should be of interest to coaches who wish to provide appropriate feedback in order to positively influence future athletic performances (Rejeski & Lowe, 1980).

CHAPTER II

REVIEW OF THE LITERATURE

This chapter is divided into the following sections:

1) attribution theory, 2) locus of control, 3) gender differences in attribution, 4) general versus sports-specific attributions, 5) self- versus team attributions, and 6) sex-role orientation and achievement-related traits.

Attribution Theory

Attribution theory operates on the premise that people have a need to explain the causes of their behavior (Kelley, 1972). In achievement situations, such as sporting events, people attribute their performance to a variety of factors. Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1971) have determined four major attribution categories in achievement situations: ability, luck, effort, and task difficulty. These elements are further subdivided into four causal dimensions: internal control, external control, stability, and variability (Weiner et al., 1971). Ability is considered an internal, stable factor; effort is considered an internal, unstable factor; task difficulty is considered an external, stable factor; and luck is considered an external, unstable factor.

Studies (Bird & Brahme, 1978; Kelley, 1972; Weiner et al., 1972) have shown that the outcome of achievement situations greatly influences the causal elements to which people attribute their performance. In general, people tend to attribute success to internal factors and failure to external factors (Scanlan & Passer, 1980; Roberts, 1975; Phares, 1976). For example, Scanlan and Passer (1980) in a study examining the attributional responses of female soccer players, found that players attributed internal factors (ability and effort) to winning more than to losing.

Similarly, research performed by Roberts (1975) revealed that little league players attributed the causal element of effort (internal) more to a win than to a loss.

It has also been suggested that attributing failure to bad luck (an external factor) is a way for people to preserve their self-esteem in the face of failure (Bradley, 1978; Miller, 1976; Scanlan & Passer, 1980).

In summary, the literature indicates that in general, people tend to internalize success, (i.e., attribute success to internal factors) and dissociate themselves from unsuccessful events (i.e., failure) by attributing them to external factors.

Locus of Control

Locus of control deals with the issue of how people perceive the contingency of successes and failures of their actions (Brecher & Denmark, 1969; Rotter, 1966). Each of

the causal elements proposed by Weiner et al. (1971) can be classified into one of two types of locus of control, namely internal and external locus of control (Rotter, 1966). For example, a person who perceives that his/her achievement is contingent upon skill level or effort, factors he/she basically has control of, presumably maintains an internal locus of control. Conversely, if an athlete perceives his/her achievement to be contingent upon factors that he/she has no control of, such as luck or task difficulty, he/she adheres to an external locus of control (Brecher & Denmark, 1969; Rotter, 1966; Weiner et al., 1971).

Consistent with findings in attribution research, locus of control researchers (Bird & Brahme, 1978; Hall & Bunker, 1979; Phares, 1976) have found that under successful conditions, people tend to become more "internal" in their locus of control while under conditions of failure they tend to externalize their locus of control. Thus, the concept of locus of control is closely associated with that of attributional patterns.

Gender Differences in Attributions

In the past, a considerable amount of psychological research has been performed to evaluate gender differences in attribution processes (Gillis, 1979; Murray & Mednick, 1975; Weigers & Frieze, 1972; Weiner et al., 1971). Research conducted by Weiner et al. (1971) revealed the following commonalities in male and female attributions:

a) attributions differ under conditions of success and failure; b) under failure conditions, attributions to external elements (luck and task difficulty) increase; and c) under success conditions, attributions to internal elements (ability and effort) increase.

Although several common attributional patterns have been found to exist across the sexes, gender differences in self-expectancy seem to differentiate male and female attribution patterns (Crandall, 1969; Feather, 1969; Nicholls, 1975). Research (Feather, 1969; Nicholls, 1975) has been consistent in showing that males have higher expectations for success than do females. This difference led Feather (1969) to hypothesize that gender differences in attribution patterns might be expected. Research subsequently performed by Feather (1969) supported this notion when it revealed that females who were lower in success expectancy than males for a motor task, were more inclined to attribute success to good luck than were male subjects. In agreement with Feather's findings, Nicholls (1975) observed that males, after failing in an achievement task, were defensive, attributing the failure to bad luck. Conversely, females, under the same failure condition, were self-derogatory in their attributions.

Another factor that might contribute to gender differences in attribution patterns is the female's "fear of success" in achievement situations (Horner, 1968, 1972; Alper, 1973; Heilbrun, Piccola & Kleemeier, 1975). This

fear has been explained in terms of the negative consequences for success (i.e., decreased femininity and potential social rejection) perceived by females. Such a situation is magnified when success occurs in traditionally male achievement situations (Horner, 1968; Lefebvre, 1975).

Although research examining the relationship between fear of success and attribution patterns has not yet been performed, it seems reasonable to presume that this fear may have the potential to alter attributions (eg., a female fearing success might publicly attribute failure to lack of ability while privately, feeling that the real cause of failure was lack of effort).

In summary, gender comparisons of attribution patterns have offered relatively consistent support for the following trends: a) in successful situations the attributions of both sexes are more internal than under conditions of failure; b) under conditions of failure, females more often make internal attributions while males offer external attributions; and c) the greatest gender differences in attributions occur under failure conditions.

General Versus Sports-Specific Attributions

Research in sport psychology has indicated that patterns of attributions exist that are similar to those used in everyday settings (Phares, 1976; Roberts, 1975; Schumaker, 1982). However, many researchers in sport psychology (eg., Rotter, 1975; Schumaker, 1982) have used

general rather than sport-specific attribution tests as a measure of sport-related attributions. Such tests may not be an effective measure of sport-specific attributions because, as Rotter (1975) has argued, conceptual differences between sports achievement and intellectual achievement may result in unique attribution patterns for each of these achievement types, even when the outcome (success or failure) is the same.

Supporting Rotter's position, Rejeski & Lowe (1980), in a study examining the relative role of ability and effort in sport attributions, found that subjects who readily attributed failure in academic tasks to lack of effort were less likely to ascribe this causal element to sports failure. Rejeski and Lowe (1980) hypothesized that perceptual cues associated with effort in sports behavior are much more visible than those related to academic effort. Thus, a "hard effort" in a failing sport activity would be more difficult to deny than one exerted in a failing academic task.

Regarding the causal element of ability, Rejeski and Lowe (1980) found that subjects were more willing to attribute failure to low ability in sports than in academic situations. This occurred, the researchers believed, because sports ability is perceived to be less stable than academic ability. Thus, self-perceived low academic ability would have a greater detrimental effect on one's self-esteem than would self-perceived low sports ability.

Attainment value, the extent to which a person places value on achieving success in a particular activity, is another factor which may contribute to differences in general and sport-specific attributions. Research (Crandall, Katkovsky, & Preston, 1962; Nicholls, 1975) has shown that tasks which are high in attainment value (i.e., perceived to measure skills relevant to one's self-esteem) are more likely to elicit defensive attributions under conditions of failure and self-enhancing attributions under successful conditions than are low attainment-value tasks. If successful sports performance is viewed as a more important source of self-esteem by males than by females, then it might be expected that gender differences in attainment value would contribute to gender differences in sports-specific attributions.

In general, the available literature indicates that the apparent conceptual differences between sports achievement and general (non-sports) achievement warrant the need for sport-specific tests for sports attributions.

Self Versus Team Attributions

Although research using sport-specific tests to measure the attributions of athletes has been performed (Iso-Ahola & Roberts, 1977; Jones, 1974; Scanlan & Passer, 1979), these studies have typically focused on self versus team attributions. For the most part, findings regarding the influence of team outcome on self and team attributions have

been inconclusive. However, the following trends in internal (ability and effort) attributions have surfaced: a) after success, internal attributions for both self and team performance tend to increase (Iso-Ahola, 1977; Scanlan & Passer, 1979) and b) upon failing, internal attributions for team performance tend to be reduced while internal attributions for individual performance are maintained (Bird & Brahme, 1978). Regarding the latter trend it has been suggested that the athlete may deny personal responsibility for the team's failure and subsequently transfer blame for team performance from self to the team (Bird & Brahme, 1978; Scanlan & Passer, 1979).

In individual sports (eg., track and field, swimming) the elements of low team ability and/or effort do not exist as "causal scapegoats" for unsuccessful athletes. Thus, it might be expected that marked differences would exist between the attributions of individual sport athletes and team sport participants. Specifically, individual sport attributions may less likely be distorted by self/team performance interactions. It was therefore the intent of the present study to examine exclusively the self-attributions of athletes competing in individual sports.

Sex-Role Orientation and Achievement Related Traits

The concept of sex-role orientation revolves around the notion that people's behavior is to some extent influenced

by the perceptions of societally-established sex-appropriate roles (Abrahams, Fieldman, & Nash, 1978; Bem, 1983; Russo, 1985; Sargent, 1984). For example, a female exhibiting behaviors which are typically described as "masculine" by society would be assigned a masculine sex-role orientation.

Theories regarding how a person develops his/her particular sex-role orientation range from Freud's (1939) biologically-based psychoanalytic theory to environmentally-based social learning theories (Bandura & Walters, 1963; Mischel, 1970) and cognitive theories (Kohlberg, 1966). More than likely, however, the development of sex-role orientation is a combination of biological, sociological, and psychological factors (Goodstein & Sargent, 1984).

Sex-role orientation research performed on females (Heilbrun et al., 1975; Houts & Entwistle, 1968; Weigers & Freize, 1977) has indicated that "traditionality" (i.e., the degree to which a female adheres to the traditional female sex role) is a factor which may explain diversity among females in a variety of achievement-related traits. Heilbrun et al. (1975) found that females who described themselves as more similar to their opposite-sex parent were more vicariously responsive to the outcomes of male peer-group achievement tasks than were same-sex parent-similar females. Similarly, Weigers and Frieze (1977) observed that females described as non-traditional in their choice of careers

had higher success expectancies and greater perceived math abilities than traditional females.

In further support of the notion that sex-role orientation influences achievement-related traits, Houts and Entwistle (1968) found that females who were non-traditional in their ideas concerning "what women should be like" had higher achievement attitudes than traditional females. Thus, it is apparent that sex-role orientation influences the manner in which females view achievement situations. More specifically, females described as "male-like" in one or more attitudes or self-perceptions seem to be less-traditionally female in the way they approach achievement tasks.

Conclusions

Attribution theory provides a framework for the observation and interpretation of elements to which people ascribe outcomes on achievement-related tasks (Rotter, 1966; Weiner, et al., 1971). Although attribution research has been extensive, most studies have been performed in non-athletic settings (e.g., Gillis, 1975). Moreover, differences in the nature of sports tasks and other tasks raise questions regarding the similarity of non-athletic and sport-specific attribution patterns (Rotter, 1975). Research investigating sports attributions have generally examined self-attributions in team-sport settings.

Inconclusive findings regarding the relationship between self and team attributions (Bird & Brahme, 1978) suggest a need to examine athletes' self-attributions in individual sports settings. Finally, research investigating the effects of sex-role orientation on attributions has been limited to non-sports settings. Thus, there exists a need to investigate the impact of both gender and sex-role orientation on attribution patterns in sport-specific situations.

CHAPTER III

METHODOLOGY

In the present study, external failure attributions for sport outcomes were examined. It was hypothesized that traditional male athletes would record the highest composite external failure scores, followed by non-traditional female athletes and finally by traditional female athletes. Sex-role orientation was assessed through the administration of the Bem Sex-Role Inventory (Bem, 1974), and sports failure attributions were determined using a modified version of the Trent Attribution Profile (Wong et al., 1978). In this chapter, the following components of the present study are discussed: subject selection, testing instruments, test administration procedures, and data analysis procedures.

Subject Selection

The subjects in the present study were male and female athletes participating in individual sports, i.e., either swimming or track and field, at the NCAA Division I level. Nine universities were represented; these institutions were selected primarily because the project director was acquainted with individuals at each school who were capable of administering the tests according to the specific instructions (Appendix E).

Testing Instruments

Athletes participating in the present study were administered two questionnaires: the modified Trent Attribution Profile (MTAP) and the Bem Sex-Role Inventory (BSRI).

The Trent Attribution Profile (TAP) was developed by Wong, Watters and Sproule (1978) at Trent University in Petersborough, Ontario. This test consists of a twelve-item questionnaire which considers various achievement tasks. Subjects are asked to use a five-point semantic differential scale to rate the contingency of achievement upon the four causal elements: effort, ability, luck, and task difficulty. These elements are considered under four conditions: self-success, self-failure, other-success, and other-failure (Appendix B). The criteria used to generate TAP questionnaire items were: 1) both success and failure outcomes should be related to common life situations; 2) these situations should be achievement related but not limited to academic situations; and 3) "other" orientation should be presented in general terms, eg., "others," "a person," or "an individual" (Wong et al., 1978, p.131).

Since it was the intent of the present study to investigate sports-specific attributions, an attempt was made to modify the TAP in order to make it a more valid measure of sport-related attributions. First, each of the twelve TAP items were reworded to represent sports situations. For example, TAP Item #4 originally read:

When I do not do well in a class in school, it is because:

- | | | | | | |
|---|---|---|---|---|---|
| a) I didn't try hard enough | 1 | 2 | 3 | 4 | 5 |
| b) the teacher was very demanding | 1 | 2 | 3 | 4 | 5 |
| c) of my lack of skills in that subject | 1 | 2 | 3 | 4 | 5 |
| d) of unlucky breaks | 1 | 2 | 3 | 4 | 5 |

For the purpose of the present study, item #4 was reworded to read:

When I have a poor athletic performance, it is because:

- | | | | | | |
|-----------------------------------|---|---|---|---|---|
| a) I didn't try hard enough | 1 | 2 | 3 | 4 | 5 |
| b) the competition was very tough | 1 | 2 | 3 | 4 | 5 |
| c) of my lack of athletic ability | 1 | 2 | 3 | 4 | 5 |
| d) of unlucky breaks | 1 | 2 | 3 | 4 | 5 |

Each of the remaining eleven TAP items was modified in this manner.

The modified instrument (Appendix C) was presented to a committee consisting of four university faculty (including three thesis committee members), four university varsity coaches, and four university varsity athletes. These twelve committee members were asked to assign one of the following scores to each of three criteria for each MTAP item:

1=excellent; 2=good; 3=average; 4=below average; 5=poor.

The three criteria being scored were: a) extent to which the question is free of sex bias; b) extent to which the question depicts a sports situation; and c) extent to which there is equal representation of the four causal elements

(effort, ability, luck, and task difficulty). All committee members returned scores of at least "3" (average) for each of the criteria for each question, with 99% of the scores falling in the "1" (excellent) and "2" (good) categories.

The Bem Sex-Role Inventory (BSRI) (Bem, 1974) was used to classify athletes in the following categories: traditional males (TM), traditional females (TF), and non-traditional females (NTF). The BSRI was developed by Bem (1974) at Stanford University, California. The BSRI consists of sixty items, either single words or short phrases, that describe personality traits. These sixty items have been categorized into three groups of twenty items each, based on the type of sex-role orientation that they describe: masculine, feminine, or neutral (no sex preference). The subject uses a seven-point semantic differential scale to rate the extent to which each item describes their personality (Appendix D). Based on these scores, each subject is assigned a mean masculine score (ie., average rating score for masculine items) and a mean feminine score (ie., average rating score for feminine items). Separate group medians of the mean masculine scores and of the mean feminine scores are then calculated (Bem, 1977). Each athlete is then classified in one of four sex role orientations depending on the location of his/her mean feminine score relative to the group median feminine score and his/her mean masculine score relative to the group median masculine score. Athletes whose mean masculine

score is above the group median masculine score and whose mean feminine score is below the group median feminine score are classified as masculine; athletes whose mean feminine score is above the group median feminine score and whose mean masculine score is below the group median masculine score are classified as feminine; athletes whose mean masculine and feminine scores both are above the group median masculine and feminine scores, respectively, are classified as androgynous; and athletes whose mean masculine and mean feminine scores both are below the group median masculine and feminine scores respectively, are classified as undifferentiated.

Testing Procedure

The subjects were administered the MTAP and the BSRI by the project director or a member of the Athletic Department staff at the athlete's university. The nature of the study was explained to the subjects by the test administrator. The importance of submitting honest answers was stressed and subjects were required to sign consent forms (see Appendix A). Subjects were told that their individual data would remain confidential and that their scores would be analyzed only as group data. The subjects then responded to questions regarding their sex role orientations and attributions for sport performance outcomes (Appendices C and D). Subjects were given as much time as they needed to carefully read and answer each question. All data not

collected by the principal investigator were returned in a stamped envelope provided by the project director.

Analysis Procedure

The test questionnaires were analyzed in the following manner:

- 1) Each test (MTAP and BSRI) was scored and analyzed separately.
- 2) For the BSRI, responses in each category (masculine and feminine) were totaled and each subject was assigned a mean masculine and feminine score. Median masculine and feminine scores for the entire group (males and females combined) were calculated. Each subject was assigned one of four sex-role orientation types: masculine, feminine, androgynous, or undifferentiated, contingent on the location of his/her mean masculine score to the group median masculine score and of his/her mean feminine score to the group median feminine score (Bem, 1977). Of the 250 questionnaires circulated to the test administrators, 206 were returned (82%). Of these 206 questionnaires, the data from 187 of the subjects (91%) were found to be complete; 96 from male subjects and 91 from female subjects. Of the total male sample, 36 subjects were classified as traditional males (TM) (i.e., males with a masculine sex-role orientation as defined by Bem). Of the total female sample, 38 subjects were classified as traditional females (TF) (i.e., females with a feminine sex-role

orientation as defined by Bem). Finally, of the total female sample, 37 subjects were classified as non-traditional females (NTF) (i.e., females with either masculine or androgynous sex-role orientations as defined by Bem).

3) For the MTAP, external self-failure attribution responses for each subject in each of the three groups (TM, TF, and NTF) were totaled to derive a composite external self-failure attribution score.

4) A one-way ANOVA was calculated to determine whether or not significant differences existed among the mean composite external self-failure attribution scores of the three groups. The level of significance used was .05.

CHAPTER IV

RESULTS

The purpose of this study was to determine the relative role of gender and sex role orientation on the attributions of athletes for failure in sports competition. It was hypothesized that traditional male athletes would record significantly higher composite external self-failure attribution scores than either group of female athletes and that non-traditional female athletes would have significantly higher composite external failure attribution scores than traditional female athletes.

Contrary to expectations, the traditional male group recorded the lowest mean composite external failure attribution scores ($M=14.89$), followed by traditional females ($M=15.08$) and finally non-traditional females ($M=15.15$) (see Table 1).

The one-way ANOVA conducted to determine whether significant differences existed among the external failure attribution scores of the three groups revealed no significant difference $F(2, 111) = .256, p > .05$. Thus, the results of the ANOVA suggested no support for either hypothesis (see Table 2).

Experimental power of the present study was calculated (Sokal and Rohlf 1969) utilizing a coefficient of variation from a previous study conducted by Feather (1971). The

Table 1. Descriptive Statistics for External Failure Attribution Scores

Group	N	Mean	SD
Traditional Males	36	14.89	4.02
Non-Traditional Females	37	15.51	3.74
Traditional Females	38	15.08	3.79

Table 2. ANOVA Summary Table

Source	SS	DF	MS	F	P
Failure Attributions	7.583	2	3.791	.256	.78
Error	1061.562	108	14.829		
Total	1609.081	110			

results of this calculation indicated that a minimum of 24 subjects would be needed to be 80% certain of detecting a 20% difference among the failure attribution means of the three groups involved in the present study at the .05 level of significance. Thus, the sample sizes in the three groups in the present study (TM, N=36; TF, N=38; and NTF, N=37) were presumably large enough to detect a "true" significant difference at the .05 level.

CHAPTER V

DISCUSSION

This chapter includes a discussion of the results of the present study and some possible explanations for the findings. The purpose of this study was to determine the relative role of gender and sex role orientation on the attributions of athletes for failure in sports competition. It was hypothesized that a) traditional male athletes would have significantly higher composite external self-failure attribution scores, followed by non-traditional female athletes and, finally, by traditional female athletes and b) non-traditional female athletes would have significantly higher composite external self-failure attribution scores than traditional female athletes.

Analysis of the MTAP scores of the three groups suggested no support for the hypothesis that traditional males, non-traditional females, and traditional females have different levels of external failure attributions for sports situations.

This finding is inconsistent with research conducted by Nicholls (1975) in which males who failed in an achievement related task were found to have external attributions while failure attributions of females were found to be internal and self-derogatory.

The findings of the present study are also incongruent with those of research conducted by Heilbrun et al., (1975), Houts & Entwistle, (1968), Weigers & Frieze, (1977), which revealed that the degree to which female subjects adhered to traditional sex roles influenced achievement-related traits in women (i.e., performance level, perceived math ability, and achievement attitudes).

It should be noted, however, that in all of these studies the behaviors of males and females were assessed in general settings (i.e., scholastic expectations, simple motor tasks) rather than in sport-specific settings. Thus, one possible explanation for the incongruity between previous findings and the results of the present study is that socialization influences in competitive sport are more inherently masculine for females, while those in everyday achievement settings represent more of a balance between masculine and feminine norms. Females, regardless of sex role orientation, who choose to participate in sports undergo a socialization process influenced almost exclusively by male role models (Williams, 1980). Thus, female athletes might be expected to emulate more closely the behaviors (i.e., attributional patterns) of male athletes than females in everyday settings would emulate the behaviors of males. This interpretation is in line with Bem's (1974) contention that traditional sex-typed behaviors may vary "depending on the situational appropriateness of these behaviors" (p. 155).

A prevalent sex-role stereotype in our society suggests that males should achieve success in masculine activities (i.e., sports) while females are expected to excel in feminine tasks (Iso-Ahola, 1979). Thus, the possibility exists that males may perceive success in sports as more necessary for preservation/enhancement of their self esteem than do females (Coopersmith, 1968; Sargent, 1984). If this is indeed the case, it would be expected that males would be less likely than females to attribute failure in sports to opponent superiority (an external stable element) and more inclined than females to attribute sports failures to bad luck (an external unstable element). In order to test this hypothesis a two dimensional (sex role orientation x stability) chi-square analysis was conducted to determine the relative frequencies of high ratings (4's and 5's) of the three groups of athletes for external stable (task difficulty) and external unstable (luck) elements in the MTAP dealing with sports failure (#3, 4, 12). The resulting value, $\chi^2 (2, N=180) = .966, p > .05$, indicated no significant difference among the three groups in frequencies of high ratings for external stable and unstable factors. Although the difference was not statistically significant, traditional males recorded the lowest frequency of high ratings for external stable factors (42), followed by traditional females (54) and finally non-traditional females (62). All three groups had however, much lower frequencies

of high ratings for external unstable (luck) factors with virtually no difference among the groups (see Table 3).

A possible explanation for the non-significant differences among the three groups for high ratings for external stable and unstable factors is that, even though athletes may feel threatened by a sports failure, certain qualities of sports (i.e. high visibility) may prevent them from being overly "externally unstable" in their failure attributions. For example, a track athlete who has been defeated in the presence of an audience by a competitor who is obviously superior in ability would have difficulty convincing the spectators that his/her failure was due to bad luck. Thus, male athletes may be forced to make ego-bruising failure attributions (similar to those made by females in general achievement settings) because their performance is being witnessed by audiences capable of determining the difference between outcomes (wins or losses) resulting from bad luck and those due to more or less skillful opponents.

This interpretation is congruent with Scanlan and Passer's (1980) finding of more similarities than differences in the failure attributions of male and female soccer players. These researchers attributed this similarity to "the possibility that strong situational influences inherent to competitive sport can inhibit the manifestation of self-protective responses even though players are experiencing threat to self esteem" (p. 638).

Table 3. Frequencies of Stable and Unstable External Failure Attributions

Group	Stable External Failure Attributions	Unstable External Failure Attributions
Traditional Males	42	8
Non-Traditional Females	62	7
Traditional Females	54	7

CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to determine the relative role of gender and sex role orientation on the attributions of athletes for failure in sports competition. Subjects included males and females from eight universities competing in track and field or swimming at the NCAA Division I level. Two questionnaires were administered to each subject: The Modified Trent Attribution Profile (MTAP) (modified from Wong et al., 1978) and the Bem Sex-Role Inventory (BSRI) (Bem, 1983). The MTAP was used to assess the factors to which athletes attribute the outcomes of their sports competitions and the BSRI was used to classify each athlete into one of four sex role categories: masculine, feminine, androgynous and undifferentiated.

It was hypothesized that a) traditional male athletes would have significantly higher composite external failure attribution scores than traditional female and non-traditional female athletes and b) non-traditional female athletes would have significantly higher composite external self-failure attribution scores than traditional female athletes. Analysis of the test results indicated no differences among the external failure attributions of the three groups. An additional analysis indicated that external

stable factors (i.e., task difficulty) predominated over external unstable factors (i.e., luck) in the failure attributions of all three groups of athletes.

Conclusions

Based on the results of this study, it was concluded that traditional males, traditional females and non-traditional females do not differ significantly in their external attributions for failure in sports. It was further concluded that NCAA Division I swimmers and track and field athletes more often give external stable attributions for failure in sports than external unstable attributions.

Recommendations

The following recommendations are suggested for consideration by future investigators of sports attributions:

1. Variables influencing the attainment value of success in sports should be included. These variables might include ego involvement and level of participation (eg., starter vs. non-starter).
2. Situational variables affecting attributions should be included. These variables might include success expectancy and win/loss record.
3. More intricate sex role orientation /attribution interactions should be examined (i.e., inclusion of undifferentiated athletes and non-traditional males).

4. More direct investigation of possible reasons for different attributional patterns of males and females in sports competition versus everyday achievement settings.

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APPENDICES

APPENDIX A

EVERETT (1986) CONSENT FORM

I, _____, hereby volunteer to participate in a research study examining the effects of sex-role orientation on sports attributions.

I understand that I will be administered two questionnaires; one that focuses on my beliefs regarding the causal elements contributing to the outcomes (both successful and unsuccessful) of my athletic endeavors; and a second that will look at personality traits associated with sex-role orientation.

I have had the opportunity to ask questions and I have been informed that I may ask further questions at any time.

I have been told that I may withdraw from the study at any time without penalty and that my personal scores will remain confidential.

Date: _____ Participant: _____
Signature

Experimenter: John Everett
Box 47
Knoxville, TN 37901
(615) 524-0224

APPENDIX B

TRENT ATTRIBUTION PROFILE

PART A

Instructions: For each of the following statements, please rate the importance of each of the four reasons according to your judgement. Please circle the appropriate number.

Note that: 5 means very important
 4 means somewhat important
 3 means undecided
 2 means somewhat unimportant
 1 means not at all important

For example, consider the following item:

One's height is the result of:

Nutrition-----	1	2	3	4	5
Exercise-----	1	2	3	4	5
Parents' height-----	1	2	3	4	5
Climate-----	1	2	3	4	5

Thus, if you believe that parents' height is very important you would circle number 5; if you believe that exercise is somewhat important you would circle number 4; and so on.

1. Most scientific inventions are the result of:

a) chance happenings-----	1	2	3	4	5
b) the inventor's intelligence-----	1	2	3	4	5
c) easy, routine scientific research-----	1	2	3	4	5
d) much time and effort by the inventor--	1	2	3	4	5

2. My good marks in school were due to:

a) easy marking by the teacher-----	1	2	3	4	5
b) hard work on my part-----	1	2	3	4	5
c) good luck-----	1	2	3	4	5
d) my academic skills-----	1	2	3	4	5

3. When a person is popular, it is because

a) of lucky breaks-----	1	2	3	4	5
b) he or she tries hard-----	1	2	3	4	5
c) of their social skills-----	1	2	3	4	5
d) it's easy to be popular-----	1	2	3	4	5

4. When I did not do well in a class in school it was because:

- a) I didn't try hard enough-----1 2 3 4 5
- b) the teacher was very demanding-----1 2 3 4 5
- c) of my lack of skills in that subject area-----1 2 3 4 5
- d) of unlucky breaks-----1 2 3 4 5

5. If my financial situation were to get worse, it would probably be due to:

- a) difficult circumstances-----1 2 3 4 5
- b) my poor judgement-----1 2 3 4 5
- c) unlucky breaks-----1 2 3 4 5
- d) my lack of effort-----1 2 3 4 5

6. When people fail school, it is because of:

- a) lack of academic skills-----1 2 3 4 5
- b) bad breaks-----1 2 3 4 5
- c) lack of effort-----1 2 3 4 5
- d) harsh judgement by the teacher-----1 2 3 4 5

7. Most wealthy people are rich because:

- a) of their skill at making money-----1 2 3 4 5
- b) they worked very hard-----1 2 3 4 5
- c) of lucky breaks-----1 2 3 4 5
- d) it's easy to make money-----1 2 3 4 5

8. When I have a good time at a party, it is because:

- a) it was a good party-----1 2 3 4 5
- b) I'm a good mixer-----1 2 3 4 5
- c) it was a lucky day-----1 2 3 4 5
- d) I make an effort to have fun-----1 2 3 4 5

9. My future financial successes will be because:

- a) of hard work on my part-----1 2 3 4 5
- b) of lucky breaks-----1 2 3 4 5
- c) of my skill to make money-----1 2 3 4 5
- d) it's not hard to make money-----1 2 3 4 5

10. When people dislike me, it is usually because:

- a) I don't try hard enough to be friendly-----1 2 3 4 5
- b) luck isn't on my side-----1 2 3 4 5
- c) it's hard to be liked by everyone-----1 2 3 4 5
- d) I lack the social skills-----1 2 3 4 5

11. Most poor people have little because:

- a) of bad breaks-----1 2 3 4 5
- b) it's difficult to get ahead in the world-----1 2 3 4 5
- c) they don't work hard enough-----1 2 3 4 5
- d) of lack of financial skills-----1 2 3 4 5

12. The fact that some people are not well-liked is because:

- a) they don't know how to get along with others-----1 2 3 4 5
- b) it's hard to be popular-----1 2 3 4 5
- c) they don't try to be friendly-----1 2 3 4 5
- d) they have had bad breaks-----1 2 3 4 5

APPENDIX C

MODIFIED TRENT ATTRIBUTION PROFILE

Sex _____
 Sport _____

Instructions: For each of the following statements, please rate the importance of each of the reasons according to your judgement. Please circle the appropriate number.

Note that:

5 means very important
4 means somewhat important
3 means undecided
2 means somewhat unimportant
1 means not important at all

For example, consider the following item:

One's intelligence is the result of:

Heredity-----	1	2	3	4	5
Nutrition-----	1	2	3	4	5
Reading books-----	1	2	3	4	5
Climate-----	1	2	3	4	5

Thus, if you believe that nutrition is very important, you would circle number 5; if you believe that reading books is somewhat important, you would circle number 4; and so on.

1. My successful athletic performances are due to:

a) easy competition-----	1	2	3	4	5
b) hard work on my part-----	1	2	3	4	5
c) good luck-----	1	2	3	4	5
d) my athletic ability-----	1	2	3	4	5

2. When a person is a good athlete, it is because:

a) of lucky breaks-----	1	2	3	4	5
b) he/she tries hard-----	1	2	3	4	5
c) of their athletic ability-----	1	2	3	4	5
d) it's easy to be a good athlete-----	1	2	3	4	5

3. If my athletic status (ranking) were to decline, it would probably be due to:

- | | | | | | |
|-------------------------------------|---|---|---|---|---|
| a) difficult competition----- | 1 | 2 | 3 | 4 | 5 |
| b) my lack of athletic ability----- | 1 | 2 | 3 | 4 | 5 |
| c) unlucky breaks----- | 1 | 2 | 3 | 4 | 5 |
| d) my lack of effort----- | 1 | 2 | 3 | 4 | 5 |

4. When I have a poor athletic performance, it is because:

- | | | | | | |
|--|---|---|---|---|---|
| a) I didn't try hard enough----- | 1 | 2 | 3 | 4 | 5 |
| b) the competition was very tough----- | 1 | 2 | 3 | 4 | 5 |
| c) of my lack of athletic ability----- | 1 | 2 | 3 | 4 | 5 |
| d) of unlucky breaks----- | 1 | 2 | 3 | 4 | 5 |

5. Most people's successful athletic performances are the result of:

- | | | | | | |
|------------------------------|---|---|---|---|---|
| a) chance happenings----- | 1 | 2 | 3 | 4 | 5 |
| b) their ability----- | 1 | 2 | 3 | 4 | 5 |
| c) easy competition----- | 1 | 2 | 3 | 4 | 5 |
| d) much time and effort----- | 1 | 2 | 3 | 4 | 5 |

6. Most good athletes are successful because:

- | | | | | | |
|--|---|---|---|---|---|
| a) of their athletic ability----- | 1 | 2 | 3 | 4 | 5 |
| b) they work very hard----- | 1 | 2 | 3 | 4 | 5 |
| c) of lucky breaks----- | 1 | 2 | 3 | 4 | 5 |
| d) it's easy to be a good athlete----- | 1 | 2 | 3 | 4 | 5 |

7. When people lose in an athletic competition, it is because:

- | | | | | | |
|---|---|---|---|---|---|
| a) of unlucky breaks----- | 1 | 2 | 3 | 4 | 5 |
| b) it's difficult to be a successful athlete----- | 1 | 2 | 3 | 4 | 5 |
| c) they didn't work hard enough----- | 1 | 2 | 3 | 4 | 5 |
| d) of their lack of athletic ability----- | 1 | 2 | 3 | 4 | 5 |

8. My future athletic successes will be because:

- | | | | | | |
|---|---|---|---|---|---|
| a) of hard work on my part----- | 1 | 2 | 3 | 4 | 5 |
| b) of lucky breaks----- | 1 | 2 | 3 | 4 | 5 |
| c) of my athletic ability----- | 1 | 2 | 3 | 4 | 5 |
| d) it's easy to be a successful athlete-- | 1 | 2 | 3 | 4 | 5 |

9. Most successful athletes perform poorly because:

- a) they don't work hard enough-----1 2 3 4 5
- b) they lack athletic ability-----1 2 3 4 5
- c) it's difficult to be a successful
athlete-----1 2 3 4 5
- d) of bad breaks-----1 2 3 4 5

10. When I am respected as an athlete, it is because:

- a) other athletes are inferior to me in
ability-----1 2 3 4 5
- b) I try hard to be respected-----1 2 3 4 5
- c) I am a good athlete-----1 2 3 4 5
- d) It is my lucky day-----1 2 3 4 5

11. The fact that some people are not good athletes is because:

- a) they don't know how to compete-----1 2 3 4 5
- b) it's hard to be a good athlete-----1 2 3 4 5
- c) they don't try hard enough-----1 2 3 4 5
- d) they are unlucky-----1 2 3 4 5

12. When I am not respected as an athlete, it is usually because:

- a) I don't try hard enough-----1 2 3 4 5
- b) luck isn't on my side-----1 2 3 4 5
- c) it's hard to be respected as an
athlete-----1 2 3 4 5
- d) I lack athletic ability-----1 2 3 4 5

APPENDIX D

BEM SEX ROLE INVENTORY

Test II

On the following page, you will be shown a large number of personality characteristics. I would like you to use those characteristics in order to describe yourself. That is, I would like you to indicate, on a scale from 1 to 7, how true of you these various characteristics are. Please do not leave any characteristic unmarked.

Example: Sly

Mark a 1 if it is NEVER OR ALMOST NEVER TRUE that you are sly.
 Mark a 2 if it is USUALLY NOT TRUE that you are sly.
 Mark a 3 if it is SOMETIMES BUT INFREQUENTLY TRUE that you are sly.
 Mark a 4 if it is OCCASIONALLY TRUE that you are sly.
 Mark a 5 if it is OFTEN TRUE that you are sly.
 Mark a 6 if it is USUALLY TRUE that you are sly.
 Mark a 7 if it is ALWAYS OR ALMOST ALWAYS TRUE that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly," never or almost never true that you are "malicious," always or almost always true that you are "irresponsible," and often true that you are "carefree," then you would rate these characteristics as follows:

<u>Sly</u>	<u>3</u>	<u>Irresponsible</u>	<u>7</u>
<u>Malicious</u>	<u>1</u>	<u>Carefree</u>	<u>5</u>

Self-reliant	—	Reliable	—	Warm	—
Yielding	—	Analytical	—	Solemn	—
Helpful	—	Sympathetic	—	Willing to take a stand	—
Defends own beliefs	—	Jealous	—	Tender	—
Cheerful	—	Has leadership abilities	—	Friendly	—
Moody	—	Sensitive to the needs of others	—	Aggressive	—
Independent	—	Truthful	—	Gullible	—
Shy	—	Willing to take risks	—	Inefficient	—
Conscientious	—	Understanding	—	Acts as a leader	—
Athletic	—	Secretive	—	Childlike	—
Affectionate	—	Makes decisions easily	—	Adaptable	—
Theatrical	—	Compassionate	—	Individualistic	—
Assertive	—	Sincere	—	Does not use harsh language	—
Flatterable	—	Self-sufficient	—	Unsystematic	—
Happy	—	Eager to soothe hurt feelings	—	Competitive	—
Strong personality	—	Conceited	—	Loves children	—
Loyal	—	Dominant	—	Tactful	—
Unpredictable	—	Soft-spoken	—	Ambitious	—
Forceful	—	Likeable	—	Gentle	—
Feminine	—	Masculine	—	Conventional	—

APPENDIX E

TEST INSTRUCTIONS

TO THE TEST ADMINISTRATOR

1. Distribute a test packet to each athlete.

PLEASE READ THE FOLLOWING INSTRUCTIONS TO EACH ATHLETE.

2. The purpose of this research study is to examine the influence of sex-role orientation on sports attributions. You will be administered two questionnaires; one that focuses on your beliefs regarding the causal elements contributing to the outcomes (both successful and unsuccessful) of your athletic endeavors; and a second that will look at personality traits associated with sex-role orientation.
3. You may withdraw from the study at any time. Your personal scores will remain confidential; they will only be analyzed as group data.
4. Read the consent form. If you have no questions, sign and date the consent form. Once you have done this, remove the consent form from the test packet and hand it in to me. (Allow time for this.)
5. Turn to Test I.
 - a. In the space marked "sex," designate male (M) or female (F).
 - b. In the space marked "sport," put the sport that you are involved in.
6. Read the test instructions for Test I and complete the 12 questions in Test I. When you have finished Test I turn to Test II, read the directions and complete the 60 items in Test II. It is very important that you provide honest answers for both of these questionnaires. Take as much time as you need and remember, if you have questions at any time, please ask.

WHEN ALL THE ATHLETES HAVE COMPLETED THE TESTS, PLEASE COLLECT AND MAIL THE QUESTIONNAIRES AND CONSENT FORMS IN THE ENCLOSED STAMPED ENVELOPE. THANK YOU FOR YOUR ASSISTANCE.

VITA

John Jay Everett was born in Cleveland, Ohio on September 7, 1962. He graduated from Mount Baker High School in 1980. The following September he entered Bellevue Community College, and in June 1983 he received an Associate Arts degree in General Studies. In September 1983 he accepted a track scholarship to attend The University of Tennessee, Knoxville, and in June 1985 he received a Bachelor of Science degree in Science Education.

In the fall of 1985 he began study toward a Master's degree in Physical Education at the University of Tennessee, Knoxville. He received the Master of Science degree in June 1987.