

THE RELATIONSHIP BETWEEN ACHIEVEMENT
MOTIVATION AND SOCIOECONOMIC STATUS
AMONG FEMALE ATHLETES AND
NON-ATHLETES

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CHAPTER I

INTRODUCTION

Problem Definition

Human achievement has long been studied with great interest by both psychologists and educators. The theory of achievement motivation explains an individual's course of action when confronted with both the challenge to achieve and the threat of failure. The theory asserts that:

A person's motive to achieve, his motive to avoid failure, and his expectation of success in some venture strongly influences the character of his motivation as it is expressed in level of aspiration, preference for risk, willingness to put forth effort and to persist in an activity (Atkinson and Feather, 1966, p. v).

As early as 1953, McClelland (1953) investigated the concept of achievement motivation in an attempt to find possible answers to the following questions:

How is it that some students score high and some low? Are they simply born that way? Or are the differences in score simply temporary, reflecting momentary differences in the life situation of the individuals concerned? (p. 275)

Since athletes are usually viewed as being highly motivated people, it seems appropriate to investigate achievement motivation within the realm of athletics. A study by Henschen, Edwards and Mathinos in 1981, revealed

that significant differences in achievement motivation existed between athletes and non-athletes. In their study it was the only discriminating difference between athletes and non-athletes.

Some researchers have also studied the relationship between achievement motivation and socioeconomic status and conflicting results have appeared. In early studies Rosen (1959) and Shrivastava and Tivari (1967) among others, provided data which indicated that achievement motivation is related to socioeconomic status. Each study indicated that middle class subjects tend to score higher on scores of need for achievement than lower class subjects. Later replication of these studies failed to confirm these results (Elman, 1967). Thus, the literature reveals conflicting results regarding achievement motivation and socioeconomic status. There is a need to explore how achievement motivation and socioeconomic status might interact within the realm of athletics.

Need for the Study

It is worthwhile that the professionals working with athletes understand as much as possible regarding the motivation of those particular athletes. As can be seen in the introduction, much confusion exists in the literature concerning achievement motivation and socioeconomic status. In addition, few studies have investigated achievement motivation within the realm of athletics. It is believed

that this information will be an asset to those in the coaching and teaching profession.

Statement of the Problem

The primary purpose of this study was to determine if a significant difference in achievement motivation existed between female athletes and non-athletes. Two secondary purposes were to compare athletes and non-athletes of low, middle and upper socioeconomic status as well as athletes and non-athletes in racial group comparisons.

Hypotheses

The following hypotheses were tested at the .05 level of significance:

1. There is no significant difference in achievement motivation between female athletes and non-athletes.
2. There is no significant difference in achievement motivation among female athletes with regard to socioeconomic status.
3. There is no significant difference in achievement motivation among female non-athletes with regard to socioeconomic status.
4. There is no significant difference in achievement motivation among female athletes with regard to sport.
5. There is no significant difference in achievement motivation among female athletes with regard to race.

6. There is no significant difference in achievement motivation among female non-athletes with regard to race.

Delimitations

1. This study was delimited to the investigation of achievement motivation as measured by the subscale of the Edwards Personal Preference Schedule (Edwards, 1953) and its relationship to socioeconomic status as measured by the Hollingshead Two-Factor Index (Hollingshead and Redlich, 1953).

2. This study was delimited to females participating in interscholastic volleyball, basketball, track or golf within the Amarillo Independent School District during the 1985-86 academic school year and to females who did not participate in interscholastic athletics within the Amarillo Independent School District during the 1985-86 school year.

Limitations

The limitations of this study were:

1. Female non-athletes chosen for this study were deliberately selected from physical education classes within the Amarillo Independent School District.

2. There was no attempt to determine whether the females who were not currently participating in interscholastic athletics had been previously involved in an athletic program prior to their sophomore year.

Assumptions

This study was based on the following underlying assumptions:

1. Subjects who did not participate in interscholastic athletics had not previously been involved in interscholastic athletics for an extended period of time.

2. All responses from the participants during the testing procedures were given as accurately and as honestly as possible.

Conceptual Definitions

Achievement motivation - A person's motive to achieve, his motive to avoid failure, and his expectation of success in some venture which strongly influences the character of his motivation as it is expressed in level of aspiration, preference for risk, willingness to put forth effort and to persist in an activity (McClelland, 1953).

Socioeconomic status - Relating to, or involving a combination of social and economic factors (Webster, 1979).

Functional Definitions

Athlete - One who participates in a school sponsored interscholastic athletic activity.

Non-Athlete - One who does not participate in a school sponsored interscholastic athletic activity.

CHAPTER II

LITERATURE REVIEW

Achievement Motivation

The purpose of this chapter is to offer a review of the literature which appears relevant to the present study. The review will cover achievement motivation with regard to four key areas. These areas are: achievement motivation and socioeconomic status, achievement motivation and race, achievement motivation and women, and achievement motivation and athletics.

In the literature regarding achievement motivation, much has been hypothesized, theorized, researched, reinvestigated and rejected during the past 25 years. Achievement motivation is conceived of as the overall tendency to evaluate one's own performance against standards of excellence, to strive for successful performance, and to experience pleasure contingent on successful performance. In addition, persons with strong achievement motives are assumed to be more likely to define situations as relevant to achievement satisfactions, to expend greater effort, and to be more persistent at activities yielding achievement satisfaction than individuals who are low in achievement motivation (Field, Ruhland, and Gold, 1979).

For achievement motivation, the situation should involve standards of excellence, presumably imposed upon children by their culture, or more particularly by the parents as representatives of that culture. The behavior should involve either competition with those standards of excellence or attempts to meet them which, if successful, produce positive effects. It follows that those cultures or families which stress competition with standards of excellence or insist children be able to perform certain tasks well by themselves, should produce children with high achievement motivation. Conversely, if a family does not set high standards of excellence, or if the family does not permit their children to compete or strive to meet them on their own, then they could not be expected to have had the affective experiences associated with meeting or failing to meet achievement standards which cumulatively produce an achievement motive (McClelland, 1953). All achievement behavior is goal-directed. The basic goal of achievement behavior is the attainment of approval (success) and the avoidance of disapproval (failure). In addition, competence of performance must always be judged by some standard of excellence (Crandall, Katkovsky, and Preston, 1960).

To develop an achievement approach motive, a child's experiences must provide opportunities for mastery which, because they are presently beyond the child's capabilities, will provide continuing pleasure. If, on the other hand,

the opportunities are too limited, boredom may result and children may not develop an interest or desire for achievement. If the opportunities are too far beyond their capabilities, negative affect may result. Should this occur, children may develop an avoidance motive as far as achievement is concerned (Atkinson and Feather, 1966).

As a result of his studies, McClelland (1953) concludes that the data strongly supports the hypotheses that achievement motives develop in cultures and in families where there is an emphasis on the independent development of the individual. In contrast, low achievement motivation is associated with families in which the child is more dependent on his or her parents and is subordinate in importance to them. In another study conducted by Kowatrakul (1975), the results indicated that regardless of socioeconomic level, mothers whose children showed a high need for achievement were more involved in their children's on-going achievement than other mothers.

Achievement Motivation and Socioeconomic Status

Studies of the relationship between achievement motivation and socioeconomic status have shown equivocal results. Rosen (1956) was among the first to investigate the relationship between socioeconomic status and need for achievement. He postulated that social strata differ from

one another in the degree to which the achievement motive is characteristic of their members. Furthermore, this data indicated that members of the middle class tend to have considerably higher need achievement scores than individuals in the lower social strata.

A 1955 study by McClelland which was later replicated by Rosen (1959), demonstrated that the middle class placed greater stress on independence training than did lower class parents. Rosen also found that, on the average, scores in need for achievement were significantly higher for middle class adolescents than for their lower class counterparts (Rosen and D'Andreade, 1959). Shrivastava and Tavori (1967) investigated the relationship between need for achievement and socioeconomic status. Need for achievement was measured by the Thematic Apperception Test and socioeconomic status was measured by Verma's socioeconomic scale. A sample of 120 subjects showed that middle class subjects scored higher on need achievement than upper class students, who in turn, exceeded lower class subjects. Only the differences between the middle and lower classes were statistically significant.

A study conducted by Elman (1969) revealed that low socioeconomic groups demonstrated a lower need for achievement than did middle class groups as measured by Grade Point Averages and Fantasy measures (Thematic Apperception Test). On the basis of their G.P.A.'s two groups of college students were pre-selected as either achievers or non-

achievers. Each group consisted of 17 subjects matched in pairs on I.Q., ethnic background, age and sex. Findings revealed significant differences in the strength of parental influence, student's attitudes, and alternate influences with the achievers scoring higher on these categories than non-achievers. There was also a positive correlation between G.P.A.'s and these three categories. The TAT findings revealed no statistically significant differences between groups for achievement motivation.

In a study that same year, Klinger and McNelly (1969) indicated that social status affects achievement motivation and performance. Their hypothesis stated that social status may underlie their joint relationship and thus be shaped and maintained by social control mechanisms, role conflict and resultant anxiety. Subjects high in need for achievement perceive themselves as normally and appropriately overcoming challenging odds in achievement situations, while subjects low in need for achievement view themselves as undertaking unchallenging work.

Turner (1970) traced high need for achievement among adolescent males to certain socialization experiences within the family and demonstrated that adolescents with a high need to achieve are over-represented in the middle classes. Among the many variables associated with social class, the father's occupation is considered most likely to have this effect on family socialization. In this study the subjects

completed an extensive questionnaire on their father's occupation and were given the Thematic Apperception Test. Results indicated that those subjects high in need for achievement came from homes where fathers engaged in entrepreneurial role behavior in their occupational status. This was true regardless of whether or not such an occupation was middle or working class, or whether the community in which the subjects lived was highly modern or traditional.

That same year Frankel (1972) explored the relationship between socioeconomic status and achievement motivation. The major hypothesis tested was that middle class subjects would show a higher need for achievement than lower class subjects. The subjects consisted of 146 white boys in ninth and tenth grades in seven public and private schools in New York City. The subjects' socioeconomic status was determined by the use of the Hamberger scale and achievement motivation was tested by a projective measure. Analysis of data resulted in confirmation of the hypothesis.

An interesting study by Guy and Allen (1975) examined the idea of tolerance for defeat as an indicator of the need to achieve. The results of this study indicated that the relationship between tolerance for defeat and social class level was positive. Middle class subjects spent more time attempting to accomplish a difficult task than working class subjects. Tolerance levels did not appear to be

affected by age or residence of subjects, ordering of tasks, or addition of tasks.

In another unique study conducted by Harvey and Kerin (1978), achievement motivation was examined by children's awareness of socially prominent occupations and educational motivation to enter those occupations successfully. Subjects from higher socioeconomic strata had higher educational goals and the desire to obtain prestigious occupations while lower socioeconomic subjects had resigned themselves to less education and lower job status.

Achievement Motivation and Race

Rosen (1959) was among the first to examine the relationship between achievement motivation, race and ethnicity. He hypothesized that many racial and ethnic groups are not alike in their orientation toward achievement. The data obtained through Rosen's work indicated that the different racial groups place different emphasis upon independence and achievement training in the rearing of children.

In a later study by Mingione (1965), the need for achievement in black and white children was investigated. This study showed that white children had statistically significantly higher scores in need for achievement than black children. Mingione hypothesized that different demands placed on the two races as well as the resultant

differences in child rearing practices were the most important reasons for low achievement concern in black children. A later study by Mingione (1968) produced contrary results indicating no significant differences with regard to achievement motivation between black and white subjects.

In a similar study by Ramirez and Price-Williams (1976), differences in achievement motivation between three ethnic groups was studied. The findings showed that Anglo children scored higher than Mexican-Americans or Blacks with regard to need for achievement.

The following year a study conducted by Ruhland and Todd (1977) compared 125 black and 72 white children on achievement motivation and it yielded conflicting results. The results of this study did not support previous findings indicating lower achievement motivation for blacks than for whites.

McAdoo (1979) investigated the relationship between achievement motivation, subjects' race, and subjects' socioeconomic status. Achievement motivation was measured by the Thematic Apperception Test to determine the relationship between subjects' race, social class, and stimulus content on achievement motivation. The test was administered to middle and low socioeconomic black and white subjects to determine whether high need for achievement is a function of social class, subject race, and stimulus con-

tent. The study revealed a correlation between subject race and need for achievement as well as a correlation between social class and need for achievement.

As can be seen through this review of relevant literature, the results regarding achievement motivation and race are inconsistent.

Achievement Motivation and Women

Recently there has been increasing interest in women's motive to achieve. Most previous investigations have used male subjects. Although the interest in women's motive to achieve is becoming more prominent in research circles, more research is needed.

Among the first to investigate the achievement motive in high school and college age women were Veroff, Wilcox, and Atkinson in 1953. The purpose of this study was to determine whether or not the kinds of imaginative responses indicative of achievement motivation in men can also be used as a basis for inference concerning strength of the motive when they occur in thematic stories written by women. The results indicated that the experimental procedure for producing an increase in achievement motivation and a measurable difference in the mean need for achievement scores in men did not in fact produce an increase in the mean need for achievement score of female subjects. The mean need for achievement score in females proved to be high under both relaxed and achievement orientation conditions.

More than a decade later, French and Lesser (1964) attempted to identify some characteristics of the achievement motive in women. They attempted to relate such factors as individual value orientation, achievement relevance of goals, sex of the TAT stimulus figure, nature of arousal conditions and sex-role orientation to scores of achievement motivation and to performance. Their results were inconsistent with previous research findings. French and Lesser hypothesized that female subjects would respond to arousal cues with heightened achievement motivation scores and high motivation performance relationships when the cues were related to a goal that was achievement-relevant to the subjects. They also felt that these effects would be greater when female figures were used in the projective measure of motivation. The goals used as arousal cues were the intellectual's role and the woman's role. Results confirmed that motivation scores were always higher under intellectual arousal when male figures were used and under woman's role arousal when female figures were used.

After a thorough review of the research with regard to achievement motivation and women, Horner (1970) proposed an alternative hypothesis. Horner stated,

Assuming that, for most men, active striving for success in competitive achievement activity is consistent with masculinity and self-esteem and does not give rise to the expectancy of negative consequences, it may be that the motive to avoid success is one of the major factors underlying sex differences detected in research on achievement related motivation and performance (p. 57).

Her major premise was that women may in fact be more anxious than men in achievement oriented situations because they face negative consequences and hence, anxiety not only in failing, but also in succeeding. This hypothesis was confirmed in a later study. A high and increasing incidence of the motive to avoid success among women in our society was indicated. The study also showed that most highly competent and otherwise achievement motivated young women, when faced with a conflict between their femininity and expressing their competencies or developing their competencies and interests, adjust their behaviors to their internalized sex-role stereotypes. In other words, the anticipation of success is anxiety provoking and as such inhibits otherwise positive achievement directed motivation and behavior (Horner, 1972).

Stein and Bailey (1973) also looked at the impact of sex-role definitions on achievement striving. They also hypothesized that females' primary goal in striving for achievement is affiliation. In addition, females' achievement orientations are likely to be manifested in areas which represent culturally defined sex appropriate activities. Stein and Bailey also noted that females who are considered to be high in achievement motivation defined achievement as being more feminine than those with low motivation.

An earlier article also supported the hypothesis of Stein and Bailey with regard to the affiliative needs of

women. Hoffman (1972, p. 129) suggested that females have high needs for affiliation which, "influence their achievement motives and behavior, sometimes enhancing and blocking them." Hoffman also proposed that if achievement threatens affiliation, performance may be sacrificed or anxiety may result. This anxiety appears to tie in with early research reported by Horner (1970), who hypothesized that women have a fear of success.

In summary, previous research indicates that women's need to achieve is probably related to several variables which interact to influence both performance and achievement. The foremost of these variables are recounted in an article by Gilmore. Gilmore (1975, p. 4) summarized by saying that, "these variables appear to be those related to psychosocial issues in development, attitudes towards women's role, and motive to avoid success."

Possible directions for future research are almost limitless, but a few of the areas mentioned above show obvious gaps in the literature. There is relatively little information on achievement related behavior with regard to women.

Achievement Motivation and Athletics

Relatively few studies have been done with regard to achievement motivation and athletics particularly studies

involving women. One such study reported by Butler (1976) addressed the athletic behavior and achievement orientation of female adolescents. In the study, data derived via questionnaire from a black and white female subsample of Louisiana high school seniors (N = 1,670) was utilized to test eight hypotheses which addressed the relationship between athletic participation and female achievement orientations. Results indicated that interscholastic athletic participation was not strongly related to achievement orientations of either black or white females. All variables evaluated indicated relatively weak relationships and no major associations between achievement orientation and athletic participation were found.

Conflicting results with regard to achievement motivation and athletics have been reported by Dayries and Grimm (1970), Balazs (1974), and Henschen, Edwards and Mathinos (1981). From data gathered by the Edwards Personal Preference Schedule (EPPS), Dayries and Grimm found that women athletes were significantly different on 2 of the 15 variables measured by the EPPS. An analysis of profile scores indicated that women athletes scored significantly higher than non-athletes on the personality factors of achievement motivation and intraception. In a similiar study using data gathered by the Edwards Personal Preference Schedule, Balazs discovered two pronounced psychological variables among outstanding female athletes. They were, a

high need for achievement and a high need for autonomy. Similar results were reported by Henschen, Edwards and Mathinos in 1981. The purpose of the study was to examine achievement motivation and sex-role orientation of high school female track and field athletes versus non-athletes. The relationship between level of achievement motivation and sex-role orientation was measured in 67 female high school non-athletes and 67 athletes. Analysis revealed significant differences in motivation between athletes and non-athletes and that achievement motivation was the only discriminating difference between athletes and non-athletes. In addition, high levels of achievement motivation were related to masculine and androgynous sex-role orientation (Henschen, Edwards, and Mathinos, 1981).

A unique study by Balazs (1974) investigated the psychosocial orientations of female athletes. Twenty-four female subjects who represented the U.S. in the 1972 Olympic games as members of the swimming, gymnastics, track and field, and ski teams volunteered for the study. Analysis of data gathered by the Edwards Personal Preference Schedule revealed two pronounced psychological variables: a high need for achievement and a high need for autonomy. This study is in agreement with the study conducted by Henschen et al. (1981), which also showed female athletes to have a high need for achievement.

An article by Weiner and Kukla (1970) described individuals high in achievement motivation as more likely to approach achievement related activities, such as athletics, than those low in achievement motivation. This may be attributed to the fact that they tend to ascribe success to themselves, and hence experience greater reward for goal attainment. They also reported that individuals high in achievement motivation persist longer given failure than those low in achievement motivation because they are likely to ascribe failure to lack of effort, and less likely to attribute failure to a deficiency in ability. This can especially be seen within the realm of competitive athletics. Finally, Weiner and Kukla reported that individuals high in achievement motivation choose tasks of intermediate difficulty with greater frequency than individuals low in achievement motivation. As a result, performance at those tasks is more likely to yield information about one's capabilities than selection of tasks which are very easy or extremely difficult.

A more recent article by Rotella (1980) addressed psychological processes for achieving and coping with stress in sport. According to Rotella, the achievement motivation model describes high achievement motivated individuals as having a stronger motive to achieve success than a motive to avoid failure. Lower achievement motivated individuals are believed to have a stronger motive to avoid failure than to

achieve success. In addition, Rotella's findings are in agreement with previous findings discussed in this review which indicate that individuals with high achievement motives are characterized as having a realistic appreciation level, preferring intermediate risk situations, being better able to delay gratifications, and attempting to finish tasks they undertake. High achievers also appear more likely to persevere at a task and have better recall of their mistakes or weaknesses following a competitive test situation.

In reviewing the literature related to various aspects of achievement motivation, it became apparent that much of the pertinent research was concentrated in several key areas: achievement motivation as a model; achievement motivation as related to socioeconomic status; race; and more recently women and athletics. There are, however, very few studies regarding the achievement motive as it relates to women athletes.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine if significant differences in achievement motivation existed between female athletes and non-athletes. It was also the purpose of this study to determine if a significant difference in achievement motivation existed between female athletes of lower, middle, and upper socioeconomic status as well as between female non-athletes of lower, middle, and upper socioeconomic status.

Selection of the Subjects

The subjects for this study were sophomore, junior, and senior female athletes and non-athletes from the four high schools in the Amarillo Independent School District Amarillo, Texas. The four high schools included: Amarillo High School; Caprock High School; Palo Duro High School and Tascosa High School. Athletes were deliberately selected from among those participating in interscholastic volleyball, basketball, track and field, and golf. Non-athletes were selected from physical education classes. Availability of athletic teams and classes was contingent upon the schedule made available to the author by the assistant

athletic director and the coordinator of physical education for the Amarillo Independent School District. Permission to conduct the study was granted by the Assistant Superintendent of the school district.

A total of 496 subjects participated in the study. This included 302 non-athletes and 194 athletes. Of the 194 athletes, 59 athletes participated in basketball, 39 participated in volleyball, 74 participated in track and field, and 22 participated in golf.

Testing dates, sites, and times were provided by the assistant athletic director and the coordinator of physical education. The nature of the study was not revealed to the subjects.

Selection of the Instrument

Two instruments were used in the study. The Hollingshead Two-Factor Index was used in order to determine the socioeconomic status of each subject (Hollingshead and Redlich, 1953). As can be seen in the Appendix, the Hollingshead Two-Factor Index consisted of a questionnaire which was completed by each subject. The information obtained described the occupation and educational background of the subjects' parent or guardian.

In addition to the Hollingshead Two-Factor Index, a subscale of the Edwards Personal Preference Schedule (EPPS) was used to measure the subjects' achievement motivation or

need for achievement (see Appendix). The EPPS subscale consisted of 28 items each of which contained two self-descriptive phrases which the subject used to portray her own picture of herself. The subject responded by identifying the phrase that she felt was most descriptive of her (Edwards, 1953).

Conditions and Procedures for Administering the Measuring Instruments

The Hollingshead Two-Factor Index and the Edwards Personal Preference Schedule were administered according to the directions to 302 non-athletes and 194 athletes at the four high schools. The administration of the instruments was conducted by the author at the four high schools during the week of November 18-22, 1985. Each subject was shown the correct use of the test booklet and answer sheet along with instructions on how to complete the parent information questionnaire. Each subject then read the test instructions and completed the test. During the testing procedure, there was no verbal interaction among subjects. No time limit was imposed for test completion.

Methods and Procedures of Statistical Analysis

A 2 X 3 analysis of variance was used to determine if significant differences existed in achievement motivation

between athletes and non-athletes and if significant differences existed among achievement motivation scores of athletes and non-athletes of high, middle, and low socioeconomic status. A one-way analysis of variance was conducted to determine if significant differences existed among athletes of the various sport groups. The .05 level of significance for both analytical procedures was established as the level of acceptance or rejection of the hypotheses. The statistical computations were carried out using the IBM 3081D computer and the SPSSX statistical computing programs at Oklahoma State University.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter has been organized to better facilitate the discussion of the statistical data relative to the previously stated hypotheses. This chapter contains the following sections: (a) statement of results, (b) analysis of data according to socioeconomic status, athlete vs. non-athlete, and by sport, and (c) discussion of results.

Socioeconomic Status

The socioeconomic status for each subject was determined by the Hollingshead Two-Factor Index. As can be seen in Table I, the values obtained ranged from 11 to 77. For the purpose of this study, the values were divided into three (3) distinct socioeconomic groups. Group one (1) ranged from 11 to 27 and constituted Level I, or the high socioeconomic level. Group two (2) ranged from 28-44 and constituted Level II, or the middle socioeconomic level. Group three (3) ranged from 45-77 and constituted Level III, or the low socioeconomic level. Two criteria were used in determining how the groups were divided. First of all, it was necessary for the subjects to be divided equally into the socioeconomic levels. In addition, Hollingshead's

recommendations for dividing the subjects into socioeconomic levels was followed as closely as possible. A one-way analysis of variance followed by the Newman-Keuls post hoc analysis was used to determine that these three groups were significantly different from each other at the .05 level of significance. Table II shows the distribution of athletes and non-athletes for each of the three (3) socioeconomic levels.

TABLE I
FREQUENCY DISTRIBUTION OF VALUES OBTAINED ON
THE HOLLINGSHEAD TWO-FACTOR INDEX*

| Value | Frequency | Value | Frequency | Value | Frequency |
|-------|-----------|-------|-----------|-------|-----------|
| 11 | 22 | 36 | 40 | 55 | 11 |
| 14 | 1 | 37 | 9 | 57 | 2 |
| 15 | 1 | 40 | 69 | 58 | 16 |
| 18 | 9 | 41 | 1 | 59 | 3 |
| 22 | 77 | 42 | 1 | 61 | 2 |
| 24 | 1 | 43 | 8 | 62 | 12 |
| 25 | 4 | 44 | 45 | 63 | 4 |
| 26 | 3 | 45 | 1 | 64 | 1 |
| 28 | 2 | 46 | 1 | 65 | 15 |
| 29 | 23 | 47 | 12 | 66 | 6 |
| 30 | 4 | 48 | 11 | 69 | 12 |
| 32 | 3 | 49 | 1 | 70 | 3 |
| 33 | 8 | 50 | 3 | 73 | 7 |
| 34 | 1 | 51 | 27 | 77 | 7 |

* INDEX = (Occupation)(7) + (Education)(4)

TABLE II
 DISTRIBUTION FOR ATHLETES AND NON-ATHLETES
 BY SOCIOECONOMIC LEVELS

| | HIGH | MEDIUM | LOW |
|-------------|------|--------|-----|
| ATHLETE | 43 | 98 | 53 |
| NON-ATHLETE | 75 | 117 | 110 |

Achievement Motivation

The achievement motivation scores were determined by the need for achievement subscale of the Edwards Personal Preference Schedule. The scores ranged from zero to twenty-eight with zero being a low score in achievement motivation. Table III shows the frequency distribution of these scores and Table IV shows the mean scores and standard deviations of athletes and non-athletes with regard to socioeconomic status.

TABLE III
FREQUENCY DISTRIBUTION FOR SCORES OF ACHIEVEMENT
MOTIVATION FOR ATHLETES AND NON-ATHLETES

| Value | Frequency | Value | Frequency |
|-------|-----------|-------|-----------|
| 2 | 3 | 12 | 44 |
| 3 | 4 | 13 | 35 |
| 4 | 10 | 14 | 27 |
| 5 | 15 | 15 | 20 |
| 6 | 30 | 16 | 30 |
| 7 | 32 | 17 | 15 |
| 8 | 56 | 18 | 16 |
| 9 | 59 | 19 | 5 |
| 10 | 62 | 20 | 3 |
| 11 | 48 | 26 | 1 |

TABLE IV
 MEAN SCORES AND STANDARD DEVIATIONS OF
 ATHLETES AND NON-ATHLETES WITH REGARD
 TO SOCIOECONOMIC STATUS

| | HIGH | MIDDLE | LOW | MARGINAL |
|-------------|---------------------------------|---------------------------------|---------------------------------|----------------|
| ATHLETE | \bar{X} 12.0 \pm SD 3.91 | \bar{X} 11.1 \pm SD 3.52 | \bar{X} 11.3 \pm SD 3.57 | \bar{X} 11.3 |
| NON-ATHLETE | \bar{X} 10.5 \pm SD 3.91 | \bar{X} 10.0 \pm SD 3.69 | \bar{X} 9.8 \pm SD 3.40 | \bar{X} 10.0 |
| MARGINAL | \bar{X} 11.1 | 10.5 | 10.3 | |

Achievement Motivation and Group

A 2 X 3 analysis of variance was used to determine if significant differences existed in scores of achievement motivation between athletes and non-athletes as well as within the three socioeconomic levels. As can be seen in Table V, only the main effect of athletic group was significant. No significant difference was obtained with regard to achievement motivation and socioeconomic level.

TABLE V
2 X 3 ANALYSIS OF VARIANCE FOR
ACHIEVEMENT MOTIVATION

| SOURCE | SS | df | MS | F |
|---------------------------------|----------|-----|---------|---------|
| GROUP (Athlete vs. Non-athlete) | 205.317 | 1 | 205.317 | 15.669* |
| SES (High, Middle, Low) | 44.802 | 2 | 22.401 | 1.710 |
| GROUP BY SES | 3.061 | 2 | 1.530 | .117 |
| ERROR | 6420.504 | 490 | 13.103 | |

* $p < .05$

Sport and Achievement Motivation

The athletes who participated in this study were involved in four different sports. Of the 194 total athletes, 59 participated in basketball, 39 participated in volleyball, 74 participated in track and field, and 22 participated in golf. Table VI reveals group means and standard deviations of achievement motivation scores for the athletes by sport.

TABLE VI
 GROUP MEANS AND STANDARD DEVIATIONS OF
 ACHIEVEMENT MOTIVATION SCORES FOR
 ATHLETES BY SPORT

| SPORT | N | \bar{X} | S.D. |
|------------|----|-----------|------|
| VOLLEYBALL | 39 | 12.3 | 3.84 |
| TRACK | 74 | 11.5 | 3.48 |
| BASKETBALL | 59 | 11.2 | 3.57 |
| GOLF | 22 | 9.5 | 3.27 |

As can be seen in Table VII, an analysis of variance was used to determine if significant differences in achievement motivation existed for athletes with regard to sport. Analysis revealed a significant difference for those athletes participating in volleyball and golf according to the Newman-Keuls procedure. Those athletes participating in volleyball had significantly higher scores of achievement motivation than those athletes who participated in golf.

TABLE VII
ANALYSIS OF VARIANCE OF ACHIEVEMENT
MOTIVATION FOR ATHLETES BY SPORT

| SOURCE | SS | df | MS | F |
|----------------|-----------|-----|---------|---------|
| BETWEEN GROUPS | 115.1915 | 3 | 38.3972 | 3.0199* |
| WITHIN GROUPS | 2415.8240 | 190 | 12.7149 | |
| TOTAL | 2531.0155 | 193 | | |

* $p < .05$

Race and Achievement Motivation

As previously indicated the subjects for this study were made available to the author by the Amarillo Independent School District. Although the sample was large, there was an unequal distribution of subjects with regard to race. The breakdown by race included 68 Blacks, 41 Mexican-Americans, 10 Asian or Pacific-Islanders, 372 Whites, and 5 Others. Because of marked differences among the group sizes, no analysis was made with regard to race.

Discussion

The data from the study revealed significant differences in achievement motivation between athletes and non-athletes, with athletes having a higher need for achievement than non-athletes. This finding concurred with findings of previous research by Balazs, 1973; Butler, 1976; and Henschen, Edwards and Mathinos, 1981, all of which reported athletes as having a higher need for achievement than non-athletes. This finding is not surprising inasmuch as athletes are generally regarded as being highly motivated individuals. The fact that these individuals aspire to participate in athletic competition indicates this as well. One question of concern is, are these individuals participating in athletics because they have a higher need for achievement, or does participation in athletic competition enhance one's need to achieve? If individuals do indeed differ with regard to achievement motivation, can those individuals' need for achievement be enhanced? Research in the psychology of motivation clearly indicates that achievement motivation can indeed be learned and enhanced (McClelland, 1965; 1972; and Alschuler, Tabor, and McIntyre, 1971). This concept may be of particular importance to coaches of athletic teams who want their players to be highly motivated toward achievement and success. As has been previously mentioned, Balazs' work with highly

successful Olympic athletes revealed that these individuals showed a significantly higher need for achievement. This would appear to indicate that if athletes aspire to be successful, they need a high motive to achieve in order to obtain success.

A significant difference was also found in achievement motivation of athletes according to the sport in which they participate. The athletes chosen for this study participated in basketball, volleyball, track and field, and golf. Analysis revealed that the athletes participating in volleyball had significantly higher scores of achievement motivation than did those athletes participating in golf. These findings may be explained with regard to the season during which the testing took place. The testing occurred during the 1985-86 basketball and volleyball seasons and immediately following the 1985 cross-country track season. In addition, two of the four volleyball teams tested had recently been involved in the Class 5-A Volleyball State playoffs in Austin, Texas. One of the teams finished second in the state and another team finished their season sixth in the state. Perhaps the recency of the volleyball playoff championship games contributed to a higher achievement motive in these particular athletes. On the other hand, the golf season still being several months away, may have resulted in a lower achievement motive for these particular athletes. Another possible explanation for these findings

may be that sports with a "team" orientation create an atmosphere more conducive to a high achievement motive. It is interesting to note that the mean scores of achievement motivation were also higher for athletes who participated in basketball and track and field as compared to those athletes who participated in golf. These differences were not, however, significant.

The analysis of data with regard to achievement motivation and socioeconomic status did not prove to be significant. Although the mean scores of achievement motivation for athletes and non-athletes were not significantly different with regard to socioeconomic status, a definite trend may be observed. The overall group mean for athletes and non-athletes in Level I was 11.06, while the group mean for Level II was 10.53 and the group mean for Level III was 10.25. This trend was in accordance with previous research which indicated significant differences in achievement motivation with regard to socioeconomic status. Rosen (1956), Shrivastava (1957), McClelland (1959), and Frankel (1972), all provided evidence that significant differences existed between middle-class and lower-class subjects with regard to achievement motivation. It is interesting to note however, that although there may not be a relationship between achievement motivation and socioeconomic status, achievement motivation may be related to other characteristics which athletes may possess. Klinger and

McNelly (1969) indicated that socioeconomic status affects achievement motivation and performance. In addition subjects high in achievement motivation perceive themselves as normally and appropriately overcoming challenging odds in achievement situations. Competition within the area of athletics would most definitely offer an individual the opportunity to overcome challenging odds in an achievement situation.

The present study failed to confirm previous research findings which revealed a relationship between achievement motivation and socioeconomic status. This may be a direct result of the differences in instrumentation used to collect the necessary data. The initial research in this area of study used projective measures of achievement motivation (Rosen, 1956; Shrivastava, 1956; and McClelland, 1959). Projective measures have been criticized because they do not have test-retest reliability. In addition, later research which used verbal measures, as did the present study, did not produce results which correlated with the projective measures (Mehrabian, 1968). Another possible explanation for these differences may pertain to the methods used for determining socioeconomic status. The present study used the Hollingshead Two Factor Index for determining socioeconomic status and divided the original scale into three distinct socioeconomic levels. Prior research which used the Hollingshead as a socioeconomic

measure used various other levels of socioeconomic status. Some studies used more than three levels of socioeconomic status or combined various levels in order to determine socioeconomic status (Hollingshead and Redlich, 1953, and Rosen, 1956). In addition, other studies which indicated a relationship between achievement motivation and socioeconomic status used other measures of socioeconomic status (Frankel, 1972).

In summary, it appears that athletes have a significantly higher achievement motive than non-athletes. It also appears that athletes may differ in regard to achievement motivation according to the particular sport in which they participate since achievement motivation differences were between athletes who participated in volleyball and athletes who participated in golf.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains a summary of the study, the findings derived from the analysis of the data collected, conclusions, and recommendations for further study.

Summary

The primary purpose of this study was to determine if significant differences existed between female athletes and non-athletes with regard to achievement motivation and socioeconomic status. Need for achievement was determined by scores obtained from the Edwards Personal Preference Schedule. Socioeconomic status was determined from values obtained from the Hollingshead Two-Factor Index. In addition, a secondary purpose of the study was to determine if a significant difference in achievement motivation existed with regard to the type of sport in which the athletes participated.

A total of 496 female subjects enrolled in the Amarillo Independent School District were administered the Hollingshead Two-Factor Index and the Edwards Personal Preference Schedule. The subjects were classified according

to socioeconomic status and athletes or non-athletes. There were 194 athletes and 302 non-athletes involved in the study.

Findings

The data collected in this study were analyzed and yielded the following findings:

1. H_0 There is no significant difference in achievement motivation between female athletes and non-athletes. Hypothesis one was rejected as a significant difference in achievement motivation was obtained for athletes and non-athletes.
2. H_0 There is no significant difference in achievement motivation among female athletes with regard to socioeconomic status. Hypothesis two was accepted as there was no significant difference in scores of achievement motivation among athletes with regard to socioeconomic status.
3. H_0 There is no significant difference in achievement motivation among female non-athletes with regard to socioeconomic status. Hypothesis three was accepted as there was no significant difference in scores of achievement motivation among female athletes with regard to socioeconomic status.
4. H_0 There is no significant difference in achievement motivation among female athletes with regard to sport. Hypothesis four was rejected as a significant difference in

achievement motivation was found between volleyball and golf athletes, volleyball athletes having higher scores in achievement motivation.

5. H_0 There is no significant difference in achievement motivation among female athletes with regard to race. Hypothesis five was not tested.

6. H_0 There is no significant difference in achievement motivation among female non-athletes with regard to race. Hypothesis six was not tested.

Conclusions

Results of the analysis indicated that athletes had the higher motive to achieve. Specifically, volleyball participants had a higher motive to achieve than golfers but not track and field or basketball participants. Achievement motivation was found to be unrelated to socioeconomic status.

Recommendations

The literature contained many studies of achievement motivation, yet relatively few of these dealt with women in general or women athletes.

In reviewing the methods, procedures and results of this study, the author believes the following recommendations to be in order:

1. The sample group tested should be expanded to include males as well as females. This would allow for a comparison of achievement motivation scores between males and females.

2. The sample group should be selected so as to include approximately equal numbers of subjects with regard to race.

3. The sample group should be expanded to compare subjects from rural school systems and school systems located in large cities.

4. The sample group should be expanded to include various sport groups classified according to team sports or individual sports.

5. The study should be replicated using college-aged subjects.

6. The study should be replicated comparing various methods of determining socioeconomic status within the same study while using the same methods of measuring achievement motivation.

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APPENDIX

EDWARDS PERSONAL PREFERENCE SCHEDULE

HOLLINGSHEAD TWO-FACTOR INDEX

DIRECTIONS

This schedule consists of a number of pairs of statements about things that you may or may not like; about ways in which you may or may not feel. Look at the example below.

- A I like to talk about myself to others.
- B I like to work toward some goal that I have set for myself.

Which of these two statements is more characteristic of what you like? If you like "talking about yourself to others" more than you like "working toward some goal that you have set for yourself," then you should choose **A** over **B**. If you like "working toward some goal that you have set for yourself" more than you like "talking about yourself to others," then you should choose **B** over **A**.

You may like both **A** and **B**. In this case, you would have to choose between the two and you should choose the one that you like better. If you dislike both **A** and **B**, then you should choose the one that you dislike less.

Some of the pairs of statements in the schedule have to do with your likes, such as **A** and **B** above. Other pairs of statements have to do with how you feel. Look at the example below.

- A I feel depressed when I fail at something.
- B I feel nervous when giving a talk before a group.

Which of these two statements is more characteristic of how you feel? If "being depressed when you fail at something" is more characteristic of you than "being nervous when giving a talk before a group," then you should choose **A** over **B**. If **B** is more characteristic of you than **A**, then you should choose **B** over **A**.

If both statements describe how you feel, then you should choose the one which you think is more characteristic. If neither statement accurately describes how you feel, then you should choose the one which you consider to be less inaccurate.

Your choice, in each instance, should be in terms of what you like and how you feel at the present time, and not in terms of what you think you should like or how you think you should feel. This is not a test. There are no right or wrong answers. Your choices should be a description of your own personal likes and feelings. Make a choice for every pair of statements; do not skip any.

The pairs of statements on the following pages are similar to the examples given above. Read each pair of statements and pick out the one statement that better describes what you like or how you feel. Make no marks in the booklet. On the separate answer sheet are numbers corresponding to the numbers of the pairs of statements. Check to be sure you are marking for the same item number as the item you are reading in the booklet.

For each numbered item completely blacken the circle next to the **A** or **B** to indicate the statement you have chosen.

EDWARDS PERSONAL PREFERENCE SCHEDULE
Allen L. Edwards, University of Washington

1. A. I like to be able to come and go as I want to.
B. I like to be able to say that I have done a difficult job well.
2. A. I would like to be a recognized authority in some job, profession, or field of specialization.
B. I feel guilty whenever I have done something I know is wrong.
3. A. I like to observe how another individual feels in a given situation.
B. I like to be able to say that I have done a difficult job well.
4. A. I like to be able to do things better than other people can.
B. I like to tell amusing stories and jokes at parties.
5. A. I like to travel and to see the country.
B. I like to accomplish tasks that others recognize as requiring skill and effort.
6. A. I would like to accomplish something of great significance.
B. I would like to put myself in someone else's place and to imagine how I would feel in the same situation.
7. A. I like to solve puzzles and problems that other people have difficulty with.
B. I like to judge people by why they do something - not by what they actually do.
8. A. I like to be one of the leaders in the organizations and groups to which I belong.
B. I like to be able to do things better than other people can.
9. A. I like to accomplish tasks that others recognize as requiring skill and effort.
B. I like to be able to come and go as I want.
10. A. I like to praise someone I admire.
B. I would like to write a great novel or play.
11. A. I like to be able to do things better than other people can.
B. I like to eat in new and strange restaurants.

12. A. I like to write letters to my friends.
B. I like to be successful in things undertaken.
13. A. I like to find out what great men and women have thought about various problems in which I am interested.
B. I would like to accomplish something of great significance.
14. A. I like my friends to encourage me when I meet with failure.
B. I like to be successful in things undertaken.
15. A. I like to be loyal to my friends.
B. I like to do my very best in whatever I undertake.
16. A. When things go wrong for me, I feel that I am more to blame than anyone else.
B. I like to solve puzzles and problems that other people have difficulty with.
17. A. I like to work hard at any job I undertake.
B. I would like to accomplish something of great significance.
18. A. I would like to be a recognized authority in some job, profession, or field of specialization.
B. I like to have my work organized and planned before beginning it.
19. A. I like to do my very best in whatever I undertake.
B. I like to help other people who are less fortunate than I am.
20. A. I like to tell amusing stories and jokes at parties.
B. I would like to write a great novel or play.
21. A. Any written work I do I like to have precise, neat, and well organized.
B. I would like to be a recognized authority in some job, profession, or field of specialization.
22. A. I would like to write a great play or novel.
B. I like to attack points of view that are contrary to mine.
23. A. I would like to be able to say that I have done a difficult job well.
B. I like to work hard at any job I undertake.

24. A. I like to accomplish tasks that others recognize as requiring skill and effort.
B. I like my friends to encourage me when I meet with failure.
25. A. I like to help my friends when they are in trouble.
B. I like to do my very best in whatever I undertake.
26. A. I like to be successful in things undertaken.
B. I like to form new friendships.
27. A. I like to solve puzzles and problems that other people have difficulty with.
B. I like to follow instructions and to do what is expected of me.
28. A. I would like to write a great play or novel.
B. When serving on a committee, I like to be appointed or elected chairperson.

Subject Number _____ Questionnaire

Directions

Please respond to the questionnaire items considering either one of the following conditions.

A. If both parents or guardians work, then the information concerning the parent/guardian with the higher income should be used to complete the questionnaire.

B. If neither parent or guardian is working, information concerning either parent/guardian may be used to complete the questionnaire.

1. Please circle the letter of the category which describes the educational training of your parent or guardian.

- A. Graduate professional training. (Persons who completed a recognized course of study which led to the receipt of a graduate degree. Such as doctor, dentist, lawyer, etc.)
- B. Standard university or college graduation. (Individuals who had completed a four-year college course leading to a recognized college degree. Such as teacher, registered nurse, accountant, etc.)
- C. Partial college training. (Individuals who had completed at least one year, but not a full college course of study.)
- D. High school graduation. (All secondary graduates, whether from a private preparatory school, public high school, trade school, or parochial school.)
- E. Partial High school. (Individuals who had completed the tenth or eleventh grades, but not officially graduated from the full course of high school study.)
- F. Junior High school. (Individuals who had completed the seventh, eighth, or ninth grades.)
- G. Less than seven years of school. (Individuals who had completed less than seven grades irrespective of the amount of education received.)

2. In the space provided below please list the present occupation of your parent or guardian and their employer. Also, briefly explain what their job involves.

Occupation: _____

Employer: _____

Description of occupation: _____

3. Racial Group:

- A. Chicano-English speaking Mexican-Americans
- B. Black-English speaking Negro Americans
- C. Asian or Pacific Islander-English speaking Americans
- D. American Indian or Alaskan Native
- E. White-English speaking Caucasian Americans also known as Anglos

Subject Number _____

ANSWER SHEET

- | | | | | | |
|-----|----|---|-----|----|---|
| 1. | A. | 0 | 15. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 2. | A. | 0 | 16. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 3. | A. | 0 | 17. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 4. | A. | 0 | 18. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 5. | A. | 0 | 19. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 6. | A. | 0 | 20. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 7. | A. | 0 | 21. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 8. | A. | 0 | 22. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 9. | A. | 0 | 23. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 10. | A. | 0 | 24. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 11. | A. | 0 | 25. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 12. | A. | 0 | 26. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 13. | A. | 0 | 27. | A. | 0 |
| | B. | 0 | | B. | 0 |
| 14. | A. | 0 | 28. | A. | 0 |
| | B. | 0 | | B. | 0 |

2
VITA

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Thesis: THE RELATIONSHIP BETWEEN ACHIEVEMENT MOTIVATION
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