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A STUDY OF THE CONSTRUCT OF FEAR OF SUCCESS: AN EXAMINATION OF ITS INTERNAL STRUCTURE AND ITS RELATIONSHIP TO SELECTED VARIABLES

BY

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ABSTRACT

A STUDY OF THE CONSTRUCT OF FEAR OF SUCCESS: AN EXAMINATION OF ITS INTERNAL STRUCTURE AND ITS RELATIONSHIP TO SELECTED VARIABLES

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Fear of success, as measured by the Fear of Success Scale (Zuckerman and Allison, 1976), was hypothesized to be multidimensional. The factor structure of fear of success was explored to test this hypothesis. The relationship of the resultant fear of success factors to selected variables was then investigated. A second hypothesis was that fear of success scores would be influenced by situational variables. This hypothesis was tested by observing the stability of fear of success over a time span.

Three hundred and twenty-seven questionnaires were distributed to several student and non-student groups. Two hundred and thirty-one subjects' responses were analyzed. Questionnaires measured; fear of success, self-satisfaction, sex, age, education, heterosexual attachment, parental education, parental occupation, perceived

closeness to father, perceived closeness to mother, importance of career and importance of family. Additional variables were measured for student subjects only: traditional versus non-traditional major, grade point average (GPA), grade point expectation, grade point aspiration, weekly time spent studying and weekly time spent socializing.

Several different statistical procedures were utilized to study the data. Initially, a factor analysis of the Fear of Success Scale was carried out. The relationship of the selected variables to each resultant fear of success factor was then examined by means of bi-variate correlational analysis. The selected variables were also entered into a multi-regression analysis to determine their efficacy in predicting each fear of success factor. Differences in fear of success scores between groups and each sex were explored through the use of multiple and one way analysis of variance. Test-retest reliability of fear of success was determined by bi-variate correlational analysis.

Fear of success was found to consist of two main factors: cost of success and importance of success. Cost of success and importance of success were negatively correlated. A number of variables were significantly related to one fear of success factor but not the other.

Multiple regression analysis resulted in the derivation of a significant regression equation for predicting

cost of success. However, no significant regression equation was calculated for predicting importance of success.

Test-retest reliability was calculated for both fear of success factors over a nine week period. Each fear of success factor was found to be stable over the nine week period.

The lack of a significant relationship between fear of success factors and a number of variables challenges fear of success theory. The variables in this study did not account for a substantial portion of the variance in fear of success scores. For females only, it was found that variables relating to family and interpersonal relationships were positively related to importance of success. This finding suggests that females may see and define success in a different manner than males. The stability of fear of success scores indicated that fear of success was not effected by situational variables.

DEDICATION

To those of whom I think of now and again and when I do a warm thought emerges which comforts my very being.

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Statement of the Problem

American Society concerns itself with any minority group not having the opportunity to succeed according to its ability. Yet, not until recently has society become interested in a majority group, not realizing its full potential. This majority group (51% of the population) is women. Although female achievement is comparable to male achievement throughout the formal schooling period, once this period has ended, female achievement drastically declines in areas outside their domestic accomplishments (Maccoby and Jacklin, 1974). Women are disproportionately represented in the professions and in higher education. In 1974, women represented 40% of the professional and technical workers yet less than 20% of the managers and administrators that year were women (U.S. Department of Labor, 1974). In 1970, only 5% of all lawyers and judges, 6% of all industrial managers, and 9% of all physicians were women (Council of Economic Advisors, 1973). Of 30,000

doctorates awarded in America in 1969-1970, only 4,000 (approximately 13%) went to women (Roby, 1973).

One factor which may inhibit a womens' achievement is the psychological motive to avoid success. Horner (1968) has hypothesized that when women aspire toward educational and career goals which are achievement-oriented and which connote need achieving, dominant, autonomous, and competitive behavior, they are deviating from what is assumed to be the traditional female sex role. Thus, women can be expected to experience conflict between their need for success and their concomitant need to maintain their femininity. This conflict produces a motive to avoid success in some women which is demonstrated through their fear of success. This study investigates fear of success.

Specifically, it explores the structure of fear of success, and the relationship between fear of success and selected demographic, attitudinal and personality variables. It attempts to determine whether fear of success is a unitary construct or multidimensional. In addition, it investigates whether fear of success fits the theoretical framework that Horner (1968) has constructed.

Many research studies on fear of success have been done. However, researchers have extensively utilized college students as subjects. This study examines fear of success in a non-college sample as well as in

graduate students.

Researchers have not addressed the issue of whether fear of success is a state or a trait. By examining the consistency of fear of success scores over a short time interval, this study will determine if fear of success demonstrates the properties of either a state or a trait.

Sex Differences in Achievement

Field (1951) first pointed out that there was a difference in male and female achievement patterns. According to Field (1951), female achievement motivation is linked to the need for social acceptability, the need to be liked. However, as Alper (1974) points out, Field's findings were largely ignored until the late 1960's.

Recently, there appears to be a growing dichotomy between researchers who are attempting to understand sex differences in achievement motivation from a global perspective and those researchers who are interested in very specific situational factors. Lenney (1977) indicates that researchers like Maccoby and Jacklin (1974) who don't account for isolated studies in which women are more self confident than men may miss evidence of great theoretical importance. These isolated studies provide evidence that ". . .women have been socialized not to be low in self-confidence regardless of the specific situation, but instead to be discriminative in making their self-evaluations

and to vary their opinions of their own ability in responses to specific achievement situations." (Lenney, 1977, p.11). Lenney asserts that women unlike men may be excessively vulnerable to situational influences and these influences could adversely effect their performance. A number of researchers (Stein, Pohly and Mueller, 1971; Montmayor, 1974; Brickman, Linsenmeier and McCareins, 1976; Deaux and Farris, 1977; Halperin, 1977) have also been recently looking at situational variables which directly effect achievement performance. A task's sex appropriateness (Stein, Pholy and Mueller, 1971; Deaux and Farris, 1977, sex role label (Montemayor, 1974) or relevancy of success (Brickman, Linsenmeier and McCareins, 1976) can differentially effect each sex's performance. Even the sex of the task administrator can evoke a sex difference (Halperin, 1977).

Jellison, Jackson-White, Bruder and Martyna (1975) indicate that it is the reward contingencies of the immediate situation rather than an enduring personality disposition which will determine the level of performance. When the cues in the situation indicate that high performance will be followed by positive external consequences, then people will not perform at a high level. Women have been shown to alter their performance to obtain maximal rewards (Fisher, O'Neal, Edgar and McDonald, 1974; Jellison et al., 1975). Jellison et al., (1975) assert

that the lower performance of women in many areas is due to the reward structure in our current society being such that women may be punished for their accomplishments by disapproval of valued males. Therefore, while males may see success as related to their quality of performance, females may define success in terms of the consequences of their performance. Hence, females will lower their performance where necessary to obtain maximal rewards.

Maccoby and Jacklin (1974) have speculated that the decline in achievement for women beginning in college is attributable to women's lower sense of "internal control". In Maccoby and Jacklin's (1974) review of five studies of college students, three showed that males had higher internal locus of control than females. The remaining two studies showed no differences. Nine studies of internal locus of control for children through high school showed no consistent sex differences (Maccoby and Jacklin, 1974). However, several recent studies show that boys are more likely to attribute their success to ability while girls will label luck as the cause of their success more frequently (Nicholls, 1975; Parsons, Ruble, Hodges and Small, 1976; Deaux and Farris, 1977). Observers are also more likely to explain a male's successful performance by ability, while the equivalent performance by a female is more readily attributable to luck (Deaux and Emswiller, 1974; Feather and Simon, 1975). The relationship of

internal attributes and achievement appears to be greater for success than failure (Schultz and Pomerantz, 1976). Also, on masculine tasks there appears to be a stronger relationship between internal attributes and achievement than on feminine or neutral tasks (Deaux and Farris, 1977).

Parsons et al. (1976) assert that sex differences in achievement motivation can be explained within an attributional theory of achievement motivation framework. The different expectancies of future success for men and women will result in different attribution patterns (Deaux and Farris, 1977). These differential attributions effect future performance. When success is related to ability, continued effort is called for to facilitate future success. However, when luck is the cause of success, effort is not an important factor in obtaining future success. Men being higher in the attribution of success to ability (internal locus of control) than women means that they will, therefore, have higher future performance and achievements (Feather, 1969; Nicholls, 1975).

Horner's Motive to Avoid Success

Martina Horner introduced the concept of the motive to avoid success to account for otherwise inexplicable differences in Atkinson's (1964) achievement motivation theory. Horner (1970) reported that the few

results collected on female subjects have not been consistent with the theory of achievement motivation (Atkinson, 1964), with the men's findings, or with one another. These few studies used dissimilar methods and diverse samples of subjects to further confuse the issues (Horner, 1970).

Horner speculated about the psychological meaning of achievement for women as it differed from men. She noted that in our society intellectual striving is seen as competitively aggressive behavior (Mead, 1949) which is consequently unacceptable for females. Freud (1933) felt that the whole essence of femininity lies in repressing aggressiveness. Kagan and Moss (1962) pointed out that the typical female has greater anxiety over competitive behavior than the male and that she, therefore, experiences greater conflict over intellectual competition which, in turn, leads to inhibition of intense strivings for academic excellence. Success in competitive situations implies that one has actively competed or been aggressive. However, without the success, simple involvement in achievement activity does not carry the implication of intense striving or aggressive, unfeminine behavior. By the time the average female reaches college age she has generally been subjected to a broad range of soico-cultural pressures to be feminine. If her indoctrination has been total, she has learned to avoid aggressive, domineering behavior, to cultivate a nurturant and primarily passive demeanor, get along well with people, and seek her

full identity through marriage, child-bearing, and home-making (Erickson, 1968).

Horner hypothesized that a girl equates intellectual achievement with loss of femininity, "A bright woman is caught up in a double bind. . .If she fails she is not living up to her own standards; if she succeeds she is not living up to societal expectations about the female role" (Horner, 1969, p.38). Since a female may face social rejection and unpopularity if she succeeds there develops in her a psychological barrier to achievement, the motive to avoid success. Horner (1968) wrote that this barrier involves fear of negative consequences resulting from success in a competitive situation. The resulting fear of success should be considered in attempting to understand the behavior of women in achievement situations. However, it should be emphasized that the motive to avoid success does not imply a wish to fail.

Horner (1968) enumerated several assumptions regarding the motive to avoid success and fear of success:

1. The motive to avoid success is a stable personality characteristic that the individual acquires early in life in conjunction with sex-role socialization. The motive to avoid success can be conceived of as a disposition to feel uncomfortable when successful in competition because this is inconsistent with femininity and females

expect negative consequences including social rejection to occur if they succeed.

2. The motive to avoid success is more common in females than males because success in competitive achievement situations is more consistent with masculinity than with femininity.
3. Fear of success is stronger for women who are highly motivated to achieve and/or highly able than women lower in motivation and/or ability. For those women for whom success is neither a major goal nor one readily within their reach, there is no reason to feel anxious about succeeding.
4. Fear of success is more strongly aroused in competitive situations, with internal standards of excellence and competition against others, than in non-competitive situations where competition is directed only against an impersonal standard.
5. Once aroused, the motive to avoid success either functions to (a) inhibit the positive tendency to achieve success or (b) stimulate defense responses which act to relieve the anxiety aroused by the motive to avoid success.
6. Fear of success is greater for women in

> competitive achievement situations than in non-competitive situations when women are competing against males rather than females, especially if the males are "important".

Introduction to Fear of Success Research

Horner's doctoral dissertation (1968) marks the origin of the concept of fear of success and the beginning of research on this construct. Since Horner's (1968) original study there has been a proliferation of research on fear of success, resulting in over 200 studies. Several reviews of the fear of success literature have been done (Zuckerman and Wheeler, 1975; Tresmer, 1976). Tresmer (1976) in his extensive annotated bibliography has listed 158 references on fear of success.

Unfortunately, the press has conveyed the wrong impression of fear of success in general, and Horner's work specifically, to the American public. The National Enquirer reported that, ". . .women see success as an outright threat and a woman who has talent and a desire to succeed pays a terrible price in anxiety." ("Most women fear success, doctor says," National Enquirer). In describing Horner, Time Magazine explained that "Her doctoral research at the University of Michigan paved the way for subsequent studies revealing that most American women fear success"

(p.50). These statements by the National Enquirer and Time Magazine are misleading for several reasons:

1. Horner's findings have not been subsequently supported.
2. Horner's study and virtually every subsequent study has utilized college students, limiting the generalizability of any findings.
3. Horner's study itself has been shown to be methodologically flawed.
4. Comparability of studies on fear of success is limited by each study using different measures of fear of success. In fact, each study may be measuring different factors of fear of success which might help account for inconsistent findings.

A theory of psychological construct is not supported through one experiment but rather by an extensive body of research literature. The subsequent review of the fear of success literature does not deal kindly with Horner's construct. However, Horner's work does indeed have value, being a powerful step in an important area of human motivation. The historical importance of Horner's study results from its focus on the many fears, and ambitions, surrounding various sorts of success experienced by male and female. The value of Horner's work lies in its proven ability to have generated further thought and research

rather than in its conclusiveness. Thus, Horner's study deserves the attention that it will be subsequently given.

Horner's Study

Horner's study attempted to investigate sex differences with respect to achievement motivation and performance in competitive and non-competitive situations. One hundred and seventy-eight (178) undergraduate students (90 female, 88 male) who were fulfilling requirements for introductory psychology courses at the University of Michigan during the Winter of 1965 were tested for individual differences in the strength of the motive to avoid success, to achieve, to avoid failure, and to affiliate with others. Data were gathered in two different sessions. In the first session subjects worked on a number of tasks in large, mixed sex groups. In the second session subjects worked on tasks similar to those in the first session, however, subjects were either non-competitively working alone, competitively working in mixed sex groups or competitively working in same sex groups. The presence of the motive to avoid success was determined from responses to a single cue: "After the first-term finals Anne (John) finds herself (himself) at the top of her (his) medical school class". Female subjects responded to the Anne cue while males responded to the John cue. Fear of success was scored as either being present or absent. Responses evidencing negative consequences of success, avoidance of

future success, expressions of conflict over success, denial of responsibility for succeeding or bizarreness indicated the presence of fear of success.

Results of the first session of Horner's experiment showed 65.5% of the female subjects, but only 9.0% of the males, wrote fear of success responses. Female subjects' fear of success stories demonstrated several themes: social rejection, concern for normality and femininity and denial or bizarre responses. The results of the second session were that 77% of the female subjects high in fear of success imagery were found to perform better in the non-competitive conditions while 93% of those low in fear of success imagery performed better, as did the men, in the competitive conditions. High fear of success females who worked alone reported doing well was more important than it was for the high fear of success female subjects in the two other competitive situations ($p<.05$). There was no significant difference in reported importance of doing well for females low in fear of success among the three experimental conditions. On the basis of these results, Horner (1968) concluded that females have a higher fear of success than males and that the motive to avoid success detrimentally effects the performance of women involved in competetive situations.

Horner's study has been depicted as having methodological flaws which, if corrected, would negate her findings

(Zuckerman and Wheeler, 1975). Zuckerman and Wheeler (1975) feel that Horner's analysis can be criticized on the following grounds:

1. The difference in percentage of fear of success stories between the sexes may be actually reflecting a difference between sex appropriate and sex inappropriate success rather than differences in general avoidance of success. The Anne cue refers to success in a male dominated field, therefore, it is possible that female responses reflect anxiety about success in competition with males rather than anxiety about success in general.

2. Inappropriate statistics were used by Horner in her comparisons of the subjects' reports of the importance of succeeding on a task. Horner conducted t tests for differences between the means of each condition (competitive and non-competetive) for each group (high and low fear of success) individually, instead of correctly, computing a t test between the two groups on the difference (competitive and non-competitive) scores. When Zuckerman and Wheeler (1975) reanalyzed the data correctly <u>both</u> low and high fear of success subjects working alone on a task

reported that doing well was more important than it was for their fellow students in the competitive situation.

3. There was no clear difference between the competitive and non-competitive conditions. In the competitive condition, subjects were not told that their performance would be compared to the performance of other subjects (Horner, 1968, p. 52). Also, the instructions for the non-competitive condition (p.52) were almost identical to the instructions given to subjects in the competitive group.

4. Assuming that the instructions for all three conditions were uniformly achievement oriented, Horner's results actually contradict her original predictions. Thus, the results would actually indicate that high fear of success subjects perform better than low fear of success subjects in competitive situations. In addition, working alone versus competing with males or females does not interact with fear of success to effect performance.

Research on Fear of Success

Sex Differences in Fear of Success

An important conclusion of Horner's study was that fear of success is more common to females than males. However, Tresmer (1974) reviewed 46 studies on fear of success, 22 of them including males, and found that the levels of fear of success for females ranged from 11 to 88%, 47% being the median, while male levels of fear of success ranged from 22 to 86%, with a median of 43%. Zuckerman and Wheeler (1975) found,in reviewing nine out of sixteen studies on fear of success, females showed more fear of success imagery than males, while males showed more fear of success imagery in the remaining seven studies. An exact replication of Horner's study done in 1971 resulted in 76.2% of the male subjects telling stories evidencing fear of success while 62.2% of the female subjects told fear of success stories (Hoffman, 1974). While the level of fear of success for the females in Hoffman's (1974) study was consistent with Horner's findings, there was a striking difference between Hoffman's findings that 3/4 of her male subjects exhibited fear of success compared to less than 1/10 of Horner's male subjects showing fear of success. Hoffman (1977) also did a follow-up study using 177 of Horner's original subjects and found that in 1974 Horner's males

displayed more fear of success than the females. Hoffman (1977) felt the discrepancy between male levels of fear of success in 1965 and 1971, 1974 was largely due to coding differences in the scoring of fear of success. Some recent studies (Dalsimer, 1975; Walton, 1975) have found that females showed higher fear of success than males. However, there have been a greater number of recent studies indicating no sex differences in fear of success (Logan, 1974; Wood, 1974; Griffore, 1976, 1977; Romer, 1975, 1977). Zuckerman and Wheeler (1975) mention two possible explanations advanced to account for the discrepancies between Horner's results and later research: 1) Horner's findings may be due to the highly competitive environment surrounding her subjects, and 2) the increased liberation of females and their changing role in our society has decreased females anxieties over success while increasing males. However, Zuckerman and Wheeler (1975) concluded that neither explanation is supported by the research literature they have reviewed. Horner's suggestion that fear of success is more common in females than males has not been empirically supported.

Age and Fear of Success

Since fear of success is viewed as a learned disposition, it may be hypothesized that it will increase

with age. Horner and Rhoem (1968) found that 88% of undergraduate female students reported fear of success compared with only 47% of 7th grade girls. Tenth grade girls were reported to have written more fear of success stories than fifth grade girls (Baruch, 1975). However, among 10-16 year old girls frequency of fear of success declined with age while for 10-16 year old boys there was no relationship between fear of success and age (Monahan, Kuka and Shaver, 1974). Romer (1975, 1977) found no relationship between fear of success and age for both male and female fifth through eleventh graders. For 18-50+ year old males and females, fear of success declined with age (Moore, 1974). The results of the research on fear of success and age do not support the hypothesis that fear of success increases with age.

Cognitive Development Level and Fear of Success

Since a childs age usually indicates his/her cognitive development, Horner's theory would also predict a positive correlation between fear of success and cognitive development level. However, Walton (1975) found that there was no significant correlation between fear of success and general cognitive development, as measured by two Piagetian tasks, for either high school boys or girls.

Femininity and Fear of Success

According to fear of success theory, women who are more traditionally feminine would be expected to have high fear of success. A woman's femininity can be expressed in many ways, some of these being her sex-role orientation, choice of academic major, views toward family and career, and attitude toward the women's liberation movement. Fear of success researchers exhibit interest in these indicators of a woman's traditional femininity.

A woman's sex-role orientation may be of critical importance in eliciting the motive to avoid success, since it would effect her perception of the appropriateness of success and its probable consequences. Alper (1974), using a direct measure of role orientation (the Wellesley Role Orientation Scale she developed), reported that female undergraduates with traditional sex role attitudes showed a relatively high level of fear of success. Greenspan (1974) found that female undergraduates with a traditional sex-role orientation had higher fear of success than their fellow female students with non-traditional sex-role orientation. However, several studies show no significant relationship between fear of success and sex-role orientation (Zanna, 1973; Moore, 1974; Unger and Krooth, 1974; Gearty and Milner, 1975; Williams and King, 1976; Jones, 1977). Heilbrun, Kleemeier and Piccola (1974) reported that high levels of fear of

success were related to a masculine orientation in female graduates. Tangri (1974) reports a negative relationship between fear of success and traditional sex-role orientation. Females who consider home and family more important and professional careers less important have been shown to be higher in fear of success, and consider themselves more feminine, than low fear of success females (Makowsky, 1972).

Schwenn (1970) reported that high fear of success females tended to major in the humanities, which are usually perceived as more feminine, and that these high fear of success females changed their career aspirations towards more traditionally feminine occupations during their college years more frequently than women low in the motive to avoid success. However, several studies reported no difference in fear of success between women pursuing traditional academic majors and women pursuing non-traditional areas of study (Moore, 1972; Zuckerman and Allison, 1976). In fact, one study (Jones, 1977) found that non-traditional majors had higher fear of success than traditional majors.

Although one would predict a negative relationship between women's attitudes towards the women's liberation movement and fear of success, Unger and Krooth (1974) found no difference in fear of success between women who

were activists and those that were not. While the women's liberation movement has grown in the last decade, females fear of success levels have not declined during this same period (Tresmer, 1974; Zuckerman and Wheeler, 1975). In conclusion, research utilizing several indicators of femininity has not provided consistent support of the prediction that women's fear of success is positively related to traditional feminism.

SES, Race, Ethnic Affiliation and Fear of Success

The motive to avoid success, according to Horner (1968), is a stable personality disposition learned early in life. As such, it is predicted that the motive to avoid success is influenced by the individuals SES as well as the mores of the race, culture and ethnic group of the individual and his/her parents. Unfortunately, the vast majority of fear of success studies utilized undergraduate college students, who were predominantly middle class whites. Yet the few studies done on SES and fear of success have shown no relationship between them (Weston and Mednick, 1970; Moore, 1974; Krishnan, 1975).

Peplau (1974) found that both Jewish males and females had lower fear of success than either Catholics and Protestants. Winchel, Fenner and Shaver (1974) reported low levels of fear of success imagery for Jewish male and female high school students, however, unfortunately the

researchers did not have an equivalent non-Jewish sample in their study.

Weston and Mednick (1970) hypothesized that black women will have lower fear of success than white women. American society places women in more dominant roles than those assumed by black men. Lower fear of success in black women is due to a successful black women being viewed as an economic asset and, therefore, attractive to the black male. Intellectual and professional achievement in that case is not threatening and will in fact not lead to rejection by the male. Weston and Mednick (1970) found less fear of success imagery for black undergraduate women than white undergraduate women. Bright (1970) found that black college women told a low percentage (22.1%) of fear of success stories. However, several studies have shown no difference in fear of success between black and white females (Esposito, 1975; Mednick, 1976). Additionally, no race difference has been found among Mexican-Americans and Anglo-Americans (Hernandez, 1976). Reseach extending to non-college populations may help define any relationship that exists between fear of success and race, SES and ethnic affiliation.

Parental Employment, Parental Education and Fear of Success

Only a limited amount of research has been done on the relationship between parental employment, parental education and fear of success. The few studies done point to no

relationship between fear of success and either parental employment (Baruch, 1973; Peplau, 1974) or parental education (Tomlinson-Keasy, 1974; Groszko and Morgenstern, 1974). However, these studies did not examine the specific type of employment of each parent and it has been reported that mothers of females without fear of success were more often employed in atypical female occupations than were mothers of females with fear of success (Patty and Shelley, 1974). In addition, Berens (1972) found that mothers who exhibited fear of success were more likely to have sons and daughters with fear of success than without. In general the research that has been done attempting to examine which variables, early in an individuals life, effect the development of fear of success has been neither extensive nor conclusive.

Achievement Motivation and Fear of Success

Horner (1968) postulated that women who were high in fear of success were actually also high in achievement motivation and, usually in a position where they are likely to achieve and, therefore, experience the negative consequences of their success. However, Horner (1972) has also suggested that fear of success may inhibit achievement related activities since these activities are inconsistent with appropriate sex-role standards, and this inconsistency causes anxiety. Zuckerman and Wheeler (1975) have pointed

out that these views would cause one to predict that a high fear of success female would either be successful and anxious or passive and non-achieving. One way of determining the achievement characteristics of high fear of success women would be to examine the correlation between fear of success and achievement motivation. However, attempts to correlate achievement motivation and fear of success have resulted in inconclusive findings. Several studies have found no correlation (Wellens, 1972; Sorrentino and Short, 1974). One study found a significant negative correlation between fear of success and resultant achievement motivation (Zuckerman and Allison, 1976).

Education and Fear of Success

Taking Horner's (1968) first description of a women high in fear of success, it would be expected that women who were better educated would have higher fear of success. Caballero, Giles and Shaver (1975) found that women who had some graduate school education exhibited more fear of success imagery than women who had only a BA degree or less. Fear of success for females increased as their education increased (from 43% in high school to 90% in graduate school), whereas a slight decline occurred for males as their education increased (Moore, 1974). Upper class undergraduate women were shown to be more likely to show fear of success than lower class students

(Breedlove and Cicerelli, 1974). The only other study (Veroff, Mcelland and Marquis, 1971) dealing with fear of success and education revealed a negative correlation, however, this study was methodologically flawed by using different measures of fear of success for groups that were compared.

IQ, Grade Point Average and Fear of Success

The relationship between IQ, grade point average and fear of success is unclear. Two studies have shown a positive relationship between fear of success and IQ and/or grade point average (Kresojevich, 1972; Sorrentino and Short, 1974). However, there have been several other studies which have not supported this relationship (Zanna, 1973; Baruch, 1975; O'Leary and Hammack, 1975; Zuckerman and Allison, 1976). Heilbrum, Kleemeier and Piccola (1974) found that the relationship between fear of success and academic performance was effected by the individuals reported similarity to his/her parents. For male and female subjects who reported greater similarity to their fathers than to their mothers fear of success was negatively correlated with academic performance. However, for subjects who reported greater similarity to their mother than their father there was no relationship between fear of success and academic performance.

Job Status and Fear of Success

Since job status is one measure of achievement in society, Horner's (1968) first depiction of women high in fear of success should lead to the prediction that these women would be in high status vocational positions. Very limited research has been done in this area of fear of success. Moore, (1974) has reported that white females who were in management told more fear of success stories than homemakers or those otherwise employed. However, white males were less likely to tell fear of success stories if management, professional or technical than if otherwise employed.

Summary - Achievment and Fear of Success

The only significant findings in the research literature related to achievement and fear of success is the positive correlations between education, employment status and fear of success. However, there have only been a limited number of research studies done on education, job status and fear of success. Interestingly, the studies looking at these two correlates of fear of success were the only studies which utilized subjects (adults from 18 to 50+ years old) other than college undergraduates. Lack of consistent findings between other achievement indicators and fear of success may be due to those studies

using a homogeneous population sample.

Heterosexual Attachment, Family Orientation and Fear of Success

A woman might not only seek success on her own, but may vicariously gain satisfaction through the accomplishments of her mate. High fear of success women have been reported to be more likely to date less (Major and Sherman, 1975) and to be unmarried (Tomlinson-Keasy, 1974) than low fear of success women. Yet two studies found no difference in fear of success between attached and unattached women (Puryear, 1974; Stewart, 1975). When asked about their future goals, women with high fear of success were more likely to talk of family-centered goals (as opposed to career-centered goals) than women without fear of success (Robinson, 1974).

Self-Esteem and Fear of Success

One can attempt to understand the motive to avoid success by examining the environmental influences which effect its development. However, as for any hypothesized personality characteristic, the motive to avoid success can be more clearly defined and understood if its relationship to other personality variables is determined. Several researchers have measured self-esteem using the Tennessee Self-Concept Scale, and looked at its relationship to fear of success (Hopkins, 1974; Patty and Shelley,

1974; Stericker, 1976). Except for one study (Patty and Shelley, 1974), finding that fear of success was positively correlated with personal and family self-scores, none of the other studies (Hopkins, 1974; Stericker, 1976) found any relationship between fear of success and self-esteem.

Pappo (1972), using his own measure of both fear of (academic) success and self-esteem, reported that high fear of success subjects were more likely to have low self-esteem than were low fear of success subjects. Major and Sherman (1975) found that women who were high in fear of success perceived themselves as less attractive than low fear of success women.

Locus of Control, Affiliation Need and Fear of Success

Although no consistent relationship has been found between fear of success and self-esteem, consistent findings of a positive relationship between externality and fear of success have been reported by several researchers (Midgley, 1974; Patty, 1974; Sturm, 1974; Zuckerman and Allison, 1976). Individuals high in fear of success will attribute their success more readily to factors outside their own ability than to their ability while the opposite pattern predominates in low fear of success individuals.

Another personality variable that was examined

is need for affiliation. Karabenick (1977) points out that no consistent relationship has been found between affiliative needs and fear of success.

Fear of Failure and Fear of Success

According to Horner (1968), fear of success is a separate construct from fear of failure. Theoretically, there should be no correlation between fear of success and fear of failure. Although researchers have found positive correlations between fear of failure and fear of success (Pappo, 1972; Griffore, 1976), several studies have reported no significant correlations (Sorrentino and Short, 1974; Groszko and Morgenstern, 1975).

Competition and Fear of Success

Griffore (1976) has postulated that the most important evidence supporting the construct of fear of success would be that high fear of success individuals perform poorly in competitive, success-producing situations in which they expect to succeed. Zuckerman and Allison (1976) presented subjects with a thirteen item anagram test; half the subjects being given instructions that it was a task (low arousal condition) and the other half being told that it was a test (high arousal condition). Although the interaction between fear of success and type of instruction was not significant, there were some sex differences. High fear of success males (but not

females) performed better under task instructions, while low fear of success subjects (especially females) performed better under the test condition.

Several studies show that high fear of success females did not perform as well in competition against men as against women or working alone (Makowsky, 1972; Groszko and Morgenstern, 1974; Allen and Boiven, 1976). However, several researchers have found no significant relationship between fear of success and working alone, in same sex groups or mixed sex groups (Feather and Simon, 1973; Zuckerman and Allison, 1973). Furthermore, whether a high fear of success woman's performance is lowered when she competes with males may be moderated by such variables as the sex-appropriateness of the task (Karabenick, 1977) and perceived similarity of herself to her father (Heilbrun, Kleemeier, and Piccola, 1974). In addition, Morgan and Mausner (1973) found that high-achieving (on a pretest) girls when paired with low-achieving boys either lowered their performance level sufficiently to drop below the boy's performance or showed evidence that their performance generated considerable tension. High boys paired with low girls showed a small decline in performance, and low females paired with high males demonstrated consistent performance while low males paired with high females showed markedly increased performance.

Task Difficulty, Importance and Fear of Success

The difficulty or importance of a task should also differentially effect the performance of individuals low and high in fear of success. High fear of success females performed better on a task when they believed that the task was not measuring any ability, while low fear of success females exhibited higher performance when the task was understood to involve a measure of intellectual or social skills (Patty, 1974). Yet, research has also shown no relationship between the difficulty of a task opposite either males or females, and fear of success levels (Zanna, 1973). Further highlighting inconsistent findings between fear of success and task difficulties is Griffore's (1977) findings that different measures of fear of success resulted in different correlations (or no correlation) with exam performance and item difficulty.

The "Cultural Hypothesis"

Horner depicted the motive to avoid success as a stable trait unamenable to specific situational influences. However, Zuckerman and Wheeler (1975) suggest that fear of success imagery may be reflecting a predominant cultural sterotype that women do not, in fact, succeed as highly as men rather than subjects' anxiety about success. This "cultural hypothesis" has received support

from several studies which show that both males and females wrote more fear of success stories to the Anne cue than to the John cue (Robbins and Robbins, 1973; Alper, 1974; Feather and Raphelson, 1974; Monahan, Kuhn and Shaver, 1974).

The "Cultural Hypothesis" explanation of fear of success predicts that changing the sex-role appropriateness of success for the presented cue will alter the resultant fear of success imagery. Modification of Horner's Anne cue to "After first term finals, Anne finds herself at the top of her nursing school" increased the sex-role appropriateness of this cue for females since female success is more sexually appropriate in nursing school than medical school. Subjects responded to the modified cue with less fear of success imagery (Grainger, Kostick and Staley, 1970). Katz (1971) hypothesized that if responses to the Anne cue reflected cultural stereotypes then making Anne's success less deviant would reduce fear of success imagery. In order to test his hypothesis, Katz (1971) added to Horner's cue one of the following two sentences: "All Annes' classmates in medical school are men," and "Half of Annes' classmates in medical school are women". Although females were not affected by the variation in cues, the male subjects demonstrated more fear of success imagery when responding to the deviant cue. Lockheed (1975) found that when

an activity was described as typical for both sexes no sex difference in fear of success occurred, but when the activity was described as typical for males but deviant for females, a higher percentage of men than women reported negative consequences for female success. However, Hoffman (1974) found no relationship between the content of the presented cue and fear of success imagery. Other studies support the conclusion that the response to deviancy, while apparent in both sexes, is not uniform; men appearing to be more disturbed by deviancy in women than women (Pappo, 1972; Bishop, 1974; Lockheed, 1975). Individuals of each sex high in fear of success view their opposite sex relationships as more precarious than individuals low in fear of success (Schnitzer, 1977). Lockheed (1975) and Condry and Dyer (1976) postulate that fear of success is explainable in terms of the hostile reaction of men to womens' achievements. Women who describe such negative consequences as male rejection and punishment in their fear of success stories may be simply demonstrating a clear perception of reality. Thus, Condry and Dyer (1976) conclude that fear of success might be more appropriately relabeled fear of response to deviancy.

Sex Differences in Content of Fear of Success Stories

Horner's theory of fear of success predicts that

females' fear of success stories would differ in content from males' fear of success stories. Several studies have supported this prediction (Krussel, 1973; Morgan and Mausner, 1973; Zuckerman and Allison, 1973; Hoffman, 1974). Males who evidenced high fear of success either questioned the value of achievement and rejected traditional goals and life-styles or wrote bizarre and/or hostile stories. Females' fear of success stories dealt with a loss of femininity or social rejection. Although these studies support Horner's conception of fear of success the data could also support the "cultural hypothesis," since the subjects' responses also reflect their beliefs about appropriate male and female achievements.

Situational Variables and Fear of Success

Fear of success researchers have treated the motive to avoid success as a intrapersonal dispositional factor. However, Condry and Dyer (1976) have recently postulated that fear of success effects are determined by situational variables. The nature of the cue has been shown to effect fear of success imagery (see The "Cultural Hypothesis"). Patty and Ferrell (1974) have reported that more premenstrual women exhibited fear of success than intermenstrual and menstrual women. Fear of success scores were found to be higher when the interviewer was a white male rather

than a black male (Veroff, McClelland and Marquis, 1971). Situational variables which had been thought to be fear of success evoking may instead be effecting it, that is, fear of success may be a state rather than a trait.

Summary - Research on Fear of Success

The inconsistency and inconclusiveness of the fear of success literature challenges the validity of the psychological construct of the motive to avoid success. Two-hundred studies done on fear of success resulted in extremely few consistent findings. The widespread use of college students as subjects limits the generalizability of the few findings. Important variables such as sex, age, femininity, achievement and competition have not been shown to be systematically related to fear of success. Evidence indicating that fear of success is amenable to situational influences challenges the concept that the motive to avoid success is a trait. Although fear of success comes out of expectancy-value theory, it appears that there is as much evidence to support that fear of success stems from cultural stereotypes as there is to support fear of success as being a latent personality trait. In conclusion, the research done on fear of success does not provide a firm foundation for the theoretical validity of fear of success. One would hesitate to put any weight on the theoretical framework of fear of success less it collapse.

Measurement of Fear of Success

Approximately 90% of the research literature on fear of success uses a projective cue to evoke fear of success imagery. This results in several concerns related to the accurate measurement of fear of success. One important concern is the large degree of subjectivity in scoring fear of success. Twenty stories written to one cue were scored by eight fear of success researchers who concurred on the absence or presence of fear of success in only six of the twenty stories (Moreland and Liss-Levinson, 1975). Tresmer (1974) believes that fear of success percentages may be inflated by coding errors, especially errors labelling all negative comments in a story as fear of success imagery. Tresmer (1974) first scored some protocols by his strict standards then after familiarizing himself thoroughly with Horner's scoring he rescored the protocols. Fear of success percentages leaped from 23 and 22 percent for boys and girls, respectively, under Tresmer's scoring, to 76 and 73 percent under Horner's system. Female scorers scored more fear of success imagery for females than male scorers (Robbins and Robbins, 1973). This compells one to wonder whether wide differences in reported fear of success is largely due to scoring differences.

Horner (1968) used a single cue to evoke fear of success but over the ast decade there has been a proliferation of cues in research literature. Tresmer

(1976) in his extensive annotated bibliography lists 12 cues that have been used in the literature and comments, "Sometimes the wording of these cues was slightly changed and often their names were different" (p. 23). When different cues were presented to the same subjects, measured fear of success across cues varied (Weston and Mednick, 1970; Karabenick and Marshall, 1974). Several studies found very low correlations in fear of success imagery between different cues presented to one subject (Major and Sherman, 1975; Moreland and Liss-Levinson, 1975).

The very limited research looking at the consistency of fear of success for the same individual over a time span additionally questions the reliability of projective measures of fear of success. Moore (1974) found that 10 of 17 subjects who demonstrated fear of success imagery to a cue did not display fear of success to the same cue one year later. Halprin (1974) reported a correlation of .45 for fear of success scores four weeks apart. High scores tended to decrease while low scores increased.

Another drawback using a thematic measure of fear of success is that the length of the protocol may effect the scoring. Entwisle (1972) highly criticized the use of thematic measures of achievement motivation in motivational research suggesting that

productivity is the single most important mediating variable between motive measures and the behavior that they are supposed to predict. Although the research is limited, there appears to be a positive correlation between fear of success and story length (Moore, 1974; Sorrentino and Short, 1974; Tresmer, 1976).

Considering all the problems inherent in utilizing thematic measures of fear of success, there appears to be a clear need for a reliable objective measure of fear of success. Recently, two objective measures of fear of success were introduced: one by Marice Pappo (1972), the FOS, the other by Miron Zuckerman and Stephen Allison (1976), the FOSS. The FOS measures academic fear of success, while the FOSS measures general fear of success. Zuckerman and Wheeler (1975) recommended the use of the FOS and FOSS in future research hoping that they will lead to the resolution of some of the inconsistencies reported by previous researchers on the motive to avoid success.

Shortcomings in the Literature

There are several shortcomings in the fear of success literature which are a barrier to determining if fear of success has psychological reality, and, if so, its relationship to variables of interest. An important shortcoming in all areas of fear of success research is the

over utilization of college students as subjects. Comparisons between fear of success in student and non-student groups have not been made. Yet, generalizations have been made from female undergraduates to all American women.

The question of whether fear of success and fear of failure are separate, unrelated constructs has not been clearly determined in the research literature. Griffore (1977) indicates that fear of success and fear of failure may be measuring a number of factors in common. However, researchers have largely ignored looking at the factor structure of fear of success and fear of failure. Examining the factor structure of fear of success would help to clearly define what fear of success is. The research on fear of success does not clearly specify what is meant by fear of success and success. Is fear of success analogous to Freud's success neurosis and, therefore, an emptional inhibitor of the full use of one's resources or, is it limited to vocational success, academic success, fear of failure or plain old anxiety? Is success limited to academic and vocational achievements, or does it also encompass personal growth? Inconsistent results in the research literature could be related to each researcher applying his own definitions to the same terms as well as each study tapping different factors of fear of success if, indeed, fear of success is multidimensional.

Two objective measures of fear of success, the FOS and the FOSS, have been created in an attempt to alleviate concerns over the use of thematic measures of fear of success. However, there has been little research done on indices of reliability and validity of the FOS and FOSS. Furthermore, examining the consistency of FOS and FOSS scores over a time interval would be beneficial in exploring the effect of situational influences on fear of success.

Purpose of this Study

The purpose of this study was to explore the factor structure of fear of success and its relationship to several important variables. Variables that were examined are; sex, age, race, education, academic area, opposite-sex attachments, parental education and work history, self-esteem, grade point average, birth order, career and family orientation, perceived closeness to mother, perceved closeness to father, GPA expectation, GPA aspiration, weekly time spent studying, weekly time spent socializing, and fear of failure. In order to avoid the shortcomings of previous research studies several steps were taken:

1. Subjects who are not college students were utilized in order to gather a heterogeneous sample selection.
2. An objective measure of fear of success,

the FOSS, were used.

3. The reliability of the FOSS was determined.

4. The consistency of fear of success scores over a time interval were examined.

CHAPTER II

METHODOLOGY

Hypotheses

The internal structure of fear of success has been examined in this study. The purpose was to determine if the internal structure of fear of success is unitary or multidimensional. The following hypothesis was first examined:

Hypothesis I:

Fear of success will consist of several factors rather than one general factor.

Following an examination of the internal structure of fear of success, an investigation was made of the relationship of fear of success to variables of interest.

Hypothesis II:

Females will obtain higher fear of success scores than males.

Hypothesis III:

Older males and females will obtain higher fear of success scores than younger males and females.

Hypothesis IV:

Females who are majoring in traditionally feminine

academic areas will obtain higher fear of success scores than females who are majoring in traditionally non-feminine academic areas.

Hypothesis V:

Black females will obtain lower fear of success scores than white females.

Hypothesis VI:

Males and females who have more formal education will obtain higher fear of success scores than males and females with less education.

Hypothesis VII:

For males and females, there will be no significant correlation between fear of success scores and fear of failure.

Hypothesis VIII:

For males and females, there will be a negative correlation between fear of success scores and self-satisfaction.

The relationship between fear of success and several other variables was studied. These variables are:

A. Opposite-sex attachment.

B. Employment status of parents.

C. Perceived closeness to parents.

D. Parental education.

E. Importance of career and family.

F. Birth order.

In addition, for student subjects, the relationship of fear of success and the following variables was also investigated:

A. Prior work experience.

B. Grade point average.

C. Grade point average expected.

D. Grade point average aspired to.

E. Time spent studying.

F. Time spent socializing.

While not stated as a formal hypothesis, it was predicted that fear of success scores would be subject to situational influences. Thus, retest reliability was expected to be significantly lower than fear of success's internal consistency.

Subjects

Data was collected from five different groups of subjects. One group of subjects were U.S. citizens who were students living in Owen Graduate Hall, Michigan State University, Spring term 1978. During Fall term, 1977, there were 896 residents of Owen Graduate Hall of which 195 were non- U.S. citizens (foreign students attending Michigan State University). The housing clerk estimated that during Spring term 1978, Owen Graduate Hall would be filled to its full occupancy level of 896 residents and that the number of foreign students

would still be approximately 195 or 22% of the total occupants. Based on Owen's full occupancy level (896 residents), a list of 224 (25%) room numbers was generated by this researcher with the utilization of a random number table. With the cooperation and help of the housing and advisory staff in Owen, room numbers of all non-U.S. citizens and unoccupied rooms on the randomly-generated list were deleted. Questionnaires were then distributed to the U.S. citizens who were occupants of the rooms on the room list through the Owen mail boxes. Following the distribution of questionnaires, a first and second reminder note was sent to subjects. A total of 144 questionnaires were distributed and ninety-eight (68%) were returned. Four questionnaires were not included in the data analyses (three belonging to foreign students and one only partially filled out). Seventy-three (78%) of the ninety-four subjects returning the first questionnaire responded to a retest questionnaire.

The second group of subjects consisted of staff members of the Project Head Start Program for Lansing,Michigan. Questionnaires were distributed April 1978, to the total Head Start staff of seventy-three members either through their in-service workshops or in their mail boxes at work. Follow-up procedures were identical to those for the first group. Fifty-five staff members or 75% of the total

returned completed questionnaires.

The third group of subjects consisted of parents of Head Start children enrolled in the Lansing Project Head Start Program as of April 1978. The questionnaires were distributed to the parents by either the Head Start Social Service coordinators or Home Start teachers. Sixty-two parents were asked to participate in this study. Thirty-four (55%) of the Head Start parents agreed to participate and filled out questionnaires. Twenty-three out of thirty-three parents in counties outside of Ingham refused to participate in this study; hence the low return rate. Additionally, one social service coordinator lost a group of filled-out questionnaires from Ingham county parents.

The fourth group of subjects was thirty-three undergraduate and graduate students Spring 1978, at Illinois State University, Normal, Illinois. These students were in two psychology classes taught by Dr. Mark Swerdlick. He collected the data from these subjects.

The fifth and last group of subjects was fifteen students from Lansing Community College, Lansing, Michigan, Spring term 1978. These students were in a natural science class taught by Dr. Gene Kales. Six of these students (40%) returned retest questionnaires. The retest data from these subjects was not used in this study.

Data from a total of 231 subjects (148 females, 82 males, 1 subjects' sex was undeterminable because it was

TABLE I: SUBJECTS PARTICIPATING IN STUDY

Group	Questionnaires Distributed	Returned	Percentage Returned	Utilized in Data Analyses
Owen Students	144	98	68%	94
Head Start Staff	73	55	75%	55
Head Start Parents	62	34	55%	34
Illinois State University Students	33	33	100%	33
Lansing Community College Students	15	15	100%	15
TOTALS	327	235	72%	231
Student Groups	192	146	76%	142
Non-Student Groups	135	89	66%	89

not indicated), was utilized in this study. Table I summarizes subjects participaing in this study.

Measures

Two separate but similar questionnaires were devised to measure variables of interest. One questionnaire was utilized with the student groups. The second questionnaire was used with the non-student groups. Both questionnaires are largely comprised of Zuckerman and Allison's Fear of Success Scale (FOSS) with thirty items (Row 2 - Self-Satisfaction) from the Tennessee Self-Concept Scale (TSCS). The student questionnaire also contains the Debilitating Anxiety Scale (DAS) from the Alpert-Haber (1960) Achievement Anxiety Test (AAT) which is not included in the non-student questionnaire. Both questionnaires also contain items designed to assess the following variables of interest; sex, race, age, education, heterosexual attachment, parental education, parental occupation, birth order, perceived closeness to father and mother, and family versus career orientation. In addition, the questionnaire given to student subjects contains items assessing several variables which the non-student questionnaire does not. The additional variables assessed on the student questionnaire are: traditional versus non-traditional major, year in program, grade point average, grade point average expectation, grade point

average aspiration, weekly time spent studying and weekly time spent socializing. Appendix A shows the questionnaire that was given to the student groups, while Appendix B displays the non-student questionnaire.

The measure of fear of success for this study was the Zuckerman and Allison (1976) Fear of Success Scale (FOSS). The FOSS is composed of twenty-seven items for which respondents are required to indicate agreement or disagreement along a 7-point agree-disagree continuum. Originally, thirty-five 7-point agree-disagree statements were written by Zuckerman and Allison and their colleagues. These thirty-five statements described, (a) the benefits fo success, (b) the cost of success, and (c) respondent's attitude toward success. These thirty-five items were administered to 183 male and 193 female undergraduates. On the basis of correlations between each of the items and the total score excluding that item, eight items were deleted and the remaining twenty-seven items became the FOSS. Of the twenty-seven items in the FOSS, sixteen are scored such that subjects' agreement indicates high fear of success while for eleven items disagreement indicates high fear of success. Zuckerman and Allison (1976) reported that coefficient alpha for the FOSS was .69 among males and .73 among females.

The potential range of scores on the FOSS is from twenty-seven to 189, high scores indicating high fear of success. Fear of success theory indicates

a prediction that females score higher on the FOSS than males. Zuckerman and Allison (1976) reported three studies in which females scored significantly higher on the FOSS than males; female means were 111.3, 107.2, and 109.4; while the respective male means were 106.7, 101.4, and 103.5. However, Griffore (1976) found that there was no significant difference between the proportion of females (52.6%) compared to males (44.0%) that obtained high fear of success scores on the FOSS.

Zuckerman and Allison (1976) reported low but significant correlations for males and females combined between the FOSS and Horner's original measure of fear of success of .19 ($p<.05$) and .25 ($p<.05$). For males alone, reported correlations were .18 ($p<.05$) and .30 (n.s.). Correlations between the FOSS and Horner's measure of fear of success may be because each instrument tapped either different constructs or different factors of the same construct.

The Tennessee Self-Concept Scale (TSCS) is composed of 100 self-description items,ninety of which assess self-concept and ten assess self-criticism (the self-criticism items are all Minnesota Multiphasic Personality Inventory Lie Scale items). For each item, the respondent chooses one of five response options labeled from "completely false" to "completely true." According to Fitts (1965), the construction of the TSCS began with

the selection of a large pool of items from earlier self-concept measures and written self-descriptions of patients and non-patients. The selected items were sorted into a two-dimensional 3 x 5 clasification scheme. The ninety items that are used in the TSCS are all items for which there was perfect agreement on their classification and direction of content by all the judges. The 3 x 5 format of the TSCS divides items into both columns (external frame-of-reference) and rows (internal frame-of-reference). The three row classifications are: identity, self-satisfaction and behavior. The five column classifications are; physical self, moral-ethical self, personal self, family self and social self. This study utilized only the thirty items that comprise the self-satisfaction row in the interest of saving respondents' time. The self-satisfaction scores consist of those items where ". . . the individual describes how he feels about the self he perceives. In general, this score reflects the level of self-satisfaction or self-acceptance" (Fitts, 1965, p.2).

The TSCS was normed on a broad sample of 626 persons of varying age, sex, race, socioeconomic status, intelligence and education. Fitts (1965) reported that demographic variables such as race, sex, education and intelligence have a negligible effect on the scale scores. Retest reliability varies for the

different scales, but is generally in the high 80s. The retest reliability for college students over a two week period for Row 2 self-satisfaction has been reported as .88.

Two factor analytical studies of the TSCS supported Fitts' model of the construct of self-concept on which the TSCS is based (Vacchiano and Struss, 1968; Bertinelli and Fabry, 1977). However, the results of another study (Fitzgibbons and Cutler, 1972) did not appear to concur with constructs as proposed by Fitts (1965). The strongest evidence for the validity of the TSCS is in its ability to distinguish between groups. Suinn in his review of the TSCS in The Seventh Mental Measurement Yearbook found that the TSCS appears to be especially valuable in differentiating normals from psychiatric patients. High correlations between scores on the TSCS and other measures (Minnesota Multiphasic Personality Inventory, Taylor Anxiety Scale, Cornell Medical Index, etc.) for which correlations should be predicted have been found. Bentler, in his review of the TSCS (Buros, 1972), reported ". . .many psychometric qualities of the scale meet the usual test construction standards that should exist in an instrument that hopes to receive wide usage" (p. 366). Suinn, in his review of the TSCS, concluded that, "In all, the TSCS offers great potential as a promising clinical instrument" (Buros, 1972, p. 369).

The Debilitating Anxiety Scale (DAS) has been used frequently as a measure of fear of failure. The DAS is a ten-item questionnaire which is part of the Alpert-Haber (1960) Achievement Anxiety Test (AAT). Along with some neutral buffer items, the AAT also contains a nine-item Facilitating Anxiety Scale (FAS). The DAS measures anxiety interfering with students' performance on academic tasks while the FAS independently measures the anxiety which leads to improved students' performance. This study has utilized only the DAS, since the DAS has been the traditional measure of fear of success. Incorporating more items into this studys' questionnaire might have jeopardized the response rate.

The DAS has a test-retest reliability of .76 after an eight-month interval and .87 over a ten-week time span (Alpert and Haber, 1960). Alpert and Haber (1960) reported that when the DAS was correlated with the Mandler Sarason Test Anxiety Scale (1952) they obtained a correlation of .64 ($p < .01$).

"Closeness to father" was assessed by presenting subjects with two statements, one that they felt close to their father while growing up, and the other that they feel close to their father now (for which they had to indicate the extent of their agreement-disagreement along a 7-point scale). The same procedure was used to

assess "closeness to mother". Comparisons of the subjects' responses to the statements of closeness to mother and father indicates whether the subject perceives himself/herself as closer to his/her mother, father or equally close to both.

Career versus family orientation was measured through subjects' indicating agreement/disagreement along a 7-point scale to two statements: "I feel that it is important to have a career," "I feel that having one's own family is important. . .". The numerical difference between the responses to the two statements shows the magnitude and the direction of the individuals career versus family orientation.

Whether respondents (students only) academic major is traditional was determined by examining the number of males and females obtaining degrees for the school year 1972 - 73 (as reported in the Digest of Education Statistics 1975), at the level that the respondent was working toward. For the school year 1972-73, 518,191 men and 404,171 women received bachelor's degrees, while 154,468 men and 108,903 women were awarded master's degrees and 28,571 men and 6,206 women earned doctoral degrees (U.S. Department of Health, Education and Welfare/Education Division, 1976). The approximate ratios of men to women in the school year 1972-73 receiving bachelor's, master's and doctoral degrees are: 1.3: 1.0, 1.5: 1.0,and 4.5 :1.0, respectively. For the

purposes of this study, women were considered to be in a traditionally non-feminine academic major if the ratio of men to women who obtained a degree in the 1972-73 school year at the level that the woman is working toward, exceeds the following ratios for bachelor's, master's and doctoral degrees, respectively; 2.5:1.0, 3.0:1.0, 9.0:1.0. A man was considered to be in a non-traditional academic major if, in his academic area, twice as many females as males were awarded the degree that he was working toward in 1972-73.

Procedure

During the first two weeks of Spring quarter (per Michigan State University), 1978, all subjects were asked to complete either the student or non-student questionnaire. During the last week of Spring quarter 1978, approximately eight weeks after the initial collection of data, the Owen Graduate Hall subjects and the Lansing Community College subjects were asked to complete a second questionnaire (containing the FOSS and the DAS).

Analyses

An important use of factor analysis is to find ways of identifying fundamental and meaningful dimensions of a multivariate domain (Cooley and Lohnes, 1962). Factor analysis was used in this study to determine whether fear

of success is multidimensional and, if so, what groupings of variables comprise factors within the fear of success construct. The factors derived from the factor analysis of a psychological construct can either add to or challenge the validity of the theoretical base of that psychological construct. Further, variables of interest may emerge from a factor analytical study. Cattell (1952) indicates that the use of factor analysis can help avoid the mistake of making the wrong arbitrary choice of variables that the experimenter wishes to examine.

Nie, Hull, Jenkins, Steinbrenner and Bent (1975), listed three main uses of factor analysis. The first (and most common) use of factor analysis is the exploration and detection of patterns of variables with a view toward discovering new concepts and possible reduction of data. The second use is to test hypotheses about the structure of variables in the construct under examination in terms of the expected number of significant factors and factor loadings. The third use of factor analysis is to aid in the construction of indices to be used as new variables in later analyses.

Factor analysis is readily distinguishable from other statistical procedures by its data-reduction capability. However, factor analysis is far less standardized in its procedures and application than other statistical techniques. Dubois (1965) reminded

us that factor analysis is far from an exact set of procedures for drawing inferences about the structure of a construct under examination. Furthermore, the results of any factor analytical procedure must be cautiously interpreted. Fruchter (1954) has warned researchers that factors do not necessarily have psychological reality, but merely represent fundamental underlying sources of variation operating in a given set of scores or other data observed under specific conditions. Thus, one might question the value of derived factors from a factor analysis. However, when these derived factors originate from empirically measured individual differences, they do have value. Perceived communalities in groups of variables comprising separate factors aid one's understanding of the construct under examination. In addition, these derived factors do have psychological reality when personality is defined by the differences between individuals. Further evidence for the psychological reality of derived factors is their correlation with other variables in the environment or in the biological composition of the individual not included in the factor analysis.

Factor analysis was chosen for this study because, (1) it is a parsimonious analytical tool, and (2) it is a method that can be used to explore and identify underlying relationships between variables from different

sets of measures.

Initially a factor analysis of all items on the non-student questionnaire was done with the data collected the first two weeks of Spring quarter from all subjects. Factor analyses were then done on each scale (DAS, TSCS and FOSS) used by this researcher in the questionnaire and two scales combined (FOSS and TSCS). The results of the factor analysis on each scale was used to create subscales wherever a scale was shown to be composed of multiple factors. Items with low factor loadings on a subscale and/or scale were deleted. This process increased the reliability (coefficient alpha) of that subscale and/or scale. The newly created subscales/scales were used in subsequent analyses.

All the analyses done in this study were done at the Michigan State University Computer Facility. Two computer packages were utilized for the analyses of data. The two computer packages used were the Statistical Package for the Social Sciences (SPSS) and Package (Hunter and Cohen, 1969). Initially, factor analyses were done utilizing the SPSS subprogram factor. These first analyses with subprogram Factor utilized all the default options. Principal factoring with iteration (PA2) was the factoring method. The number of factors extracted was determined by the number of factors with an eigenvalue greater than or equal to 1.0. The

diagonals of the correlation matrix were initially replaced by squared multiple correlations. The iterations were stopped when the convergence reached the .001 criterion. The maximum number of iterations was twenty-five; and finally, the varimax rotation was used. Subsequent SPSS factor analyses utilized all the default options except for indicating the number of factors desired and in one case, increasing the number of allowable iterations to 100.

Factor analyses utilizing the FACTRB program of Package were done. Like Factor, FACTRB does a principal components analysis followed by varimax rotations. However, FACTRB automatically performs a cluster analysis following the last varimax rotation. Thus, variables are grouped according to their largest factor loading and factors are listed in the order of the amount of accountable variance. Another advantage of FACTRB over Factor is the reliability coefficient (coefficient alpha) of each factor being printed along with the correlations (Pearson) between each factor.

After completion of the factor analyses, computed with Factor and FACTRB, subscales were formed. Oblique multiple-group analyses were then done using each subscale as a group or indicating the number of groups (equal to the number of subscales) desired. The oblique

multiple-group analyses were done utilizing routine MGRP from Package.

Subsequent to the factor analyses, two 2 x 5 analyses of variance were done utilizing subprogram Anova of SPSS. The dependent variable for each Anova was a newly created subscale (factor) of the FOSS. The independent variables for each Anova were Sex (2) and Group (5). After these two Anova's were done, several oneway Anova's (subprogram Oneway) were run to examine significant main effects found in the previous 2 x 5 Anova's.

Bi-variate correlational analysis was used to examine the relationship between the newly created subscales/ scales of the FOSS, DAS and TSCS. Specifically, Pearson product-moment correlation coefficients were calculated using subprogram Pearson Corr of SPSS. Pearson product-moment correlation coefficients had also been previously generated from the FACTRB factor analyses. FACTRB also provided reliability coefficients (coefficient alpha) for the subscales and scales.

Subprogram Pearson Corr was used to examine the relationship of the following variables to each fear of success factor: sex, age, race, education, heterosexual attachement, divorce, number of children, father's occupation, mother's occupation, father's education, mother's education, birth order, past closeness to father, current closeness to father, past closeness to mother, current

closeness to mother, importance of career, and importance of family. For the student groups only, the relationship of several other variables to each fear of success factor were examined. These additional variables were; education level, major, year in program, previous work experience (or lack of), grade point average, grade point average expected, grade point average aspired to, weekly time spent studying, and weekly time spent socializing.

Also examined was the relationship of the variables of interest, previously listed, to the fear of success factors through the use of multiple regression analysis. The subjects in this study were randomly assigned to two groups of 128 and 103 subjects, respectively. A multiple regression analysis was done on the first group of 128 subjects, with independent variables being the eighteen variables of interest previously listed. Subprogram Regression (SPSS) was used with forward (stepwise) inclusion. The resultant regression equation was used on the second group of 103 subjects to calculate predicted fear of success factor scores. The predicted fear of success factor scores were then correlated with the actual fear of success scores of the subjects in the second group. The correlation coefficient was then squared to obtain coefficients of determination through cross validation. After the initial multiple regression equation was derived, the independent variables in the

equation were entered into another multiple regression equation in a predetermined order. The predetermined order specified that the variables with the lowest predictive value in the prior regression equation be entered first. This second multiple regression analysis allowed examination of the effect of multicollinearity on the initial regression equation. Multiple regression analysis was done with the nine variables applicable to the student groups. A group of seventy-six students was utilized to derive the initial regression equation with the nine variables and cross validation, as described above, was done on a second group of sixty-six students.

Subprogram Pearson Corr was used to determine the retest reliability of the fear of success factors. Retest reliability for the fear of success factors was calculated only for the Owen group.

CHAPTER III

RESULTS

Introduction

The results of the statistical analysis conducted are presented here. Each research hypothesis will be restated and the outcome of the test of this research hypothesis described. Following the results of the tests of the formal research hypotheses, the results of several additional analyses are discussed. These additional analyses include the examination of; the relationship between fear of success and several other variables, the stability of fear of success, and group and sex differences in fear of success and self-concept.

All of the statistical analyses depicted in this chapter were calculated on the Control Data Corporation 6500 Computer System at the Michigan State University Computer Center.

Structure of Fear of Success Measure

Results of the Test of Hypothesis I:

Fear of success will consist of several factors rather than one general factor.

The initial factor analysis (SPSS) of the twenty-seven item FOSS scale resulted in eight factors being generated. These eight factors had eigenvalues ranging from a high of 4.56 to a low of 1.02. A review of this analysis, by this researcher, indicated that there was a scree distribution of factors. The first two factors had eigenvalues of 4.56 and 3.17, while the third factor had a eigenvalue of 1.58. These first two factors accounted for 16.9% and 11.7% of the cumulative variance while the third factor only accounted for 5.9%.

A factor analysis (SPSS) was done on the twenty-seven item FOSS scale with the number of factors to be generated set at two. The results of this analysis were reviewed, by this researcher, and items that had low or equal loadings on both factors noted. The items having low or equal loadings on both factors were number 1, 5, 6, 7, 11, 15, 19, 22, and 24. These nine items were deleted from subsequent factor analyses .

A multiple group factor analysis (Edpack) done on the remaining eighteen items from the FOSS scale.

Two factors resulted composed of ten and eight items, respectively. For each factor, the item with lowest item-scale correlation, Item 3 (.35) and Item 26 (.36), was dropped from the remaining analyses.

The last factor analyses of the FOSS scale were done utilizing the sixteen remaining items. Both a multiple-group factor analysis (Edpack) and a factor analysis (SPSS) were done. The results of these analyses are depicted in Tables II and III, respectively. Two factors composed of nine and seven items resulted. These factors were named "Cost of Success" and "Importance of Success" for this study. They will be referred to as FOS1 and FOS2, respectively.

The results of the factor analyses done on the FOSS scale support Hypothesis I. Fear of success has been shown to be multidimensional rather than being composed of one general factor. Subsequent analyses involving fear of success utilize each derived factor of the FOSS separately.

The reliability (coefficient alpha) of FOS1 (Cost of Success) was calculated as .78 while the reliability of FOS2 (Importance of Success) .74. The correlation between FOS1 and FOS2 was -.35.

TABLE II: Results of Multiple Group Factor Analysis of Sixteen Items from the FOSS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Mean	SD
Cost of Success	2	Often the cost of success is greater than the reward.	.40	.00	3.33	1.90
	9	A person who is at top faces nothing but a constant struggle to stay there.	.59	-.39	3.62	1.86
	12	In order to achieve one must give up the fun things in life.	.44	-.32	5.36	1.81
	13	The cost of success is overwhelming responsibility.	.52	-.26	4.00	1.85
	16	A successful person is often considered by others to be both aloof and snobbish.	.48	-.25	4.00	1.85
	18	People's behavior change for the worst after they become successful.	.64	-.11	4.89	1.57
	20	Once you're on top, everyone is your buddy and no one is your friend.	.60	-.25	4.94	1.73
	23	I believe that successful people are often sad and lonely.	.61	-.11	4.09	1.85
	25	When I am on top the responsibility makes me feel uneasy.	.52	.01	4.41	1.79

TABLE II: Results of Multiple Group Factor Analysis of
(Cont.) Sixteen Items from the FOSS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Mean	SD
Importance of Success	4	The only way I can prove my worth is by winning a game or doing well on a task.	-.24	.50	2.99	1.88
	8	In competition I try to win no matter what.	-.11	.63	2.92	1.95
	10	I am happy only when I am doing better than others.	-.22	.55	2.96	1.78
	14	Achievement commands respect.	-.28	.48	4.82	1.84
	17	When you're on top, everyone looks up to you.	-.07	.63	3.26	1.70
	21	When you're the best, all doors are open.	-.38	.58	3.64	2.00
	27	I believe I will be more successful than most of the people I know.	-.02	.37	4.32	1.60

TABLE III: Results of Factor Analysis of Sixteen Items from the FOSS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Mean	SD
Cost of Success	2	Often the cost of success is greater than the reward.	.39	.06	3.33	1.90
	9	A person who is at the top faces nothing but a constant struggle to stay there.	.55	-.26	3.62	1.86
	12	In order to achieve one must give up the fun things in life.	.44	-.18	5.36	1.81
	13	The cost of success is overwhelming responsibility.	.53	-.11	4.00	1.85
	16	A successful person is often considered by others to be both aloof and snobbish.	.47	-.07	4.00	1.85
	18	People's behavior change for the worst after they become successful.	.60	.05	4.89	1.57
	20	Once you're on top, everyone is your buddy and no one is your friend.	.61	-.05	4.94	1.73
	23	I believe that successful people are often sad and lonely.	.58	.06	4.09	1.86

TABLE III: Results of Factor Analysis of Sixteen Items from the FOSS (Cont.)

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Mean	SD
Cost of Success	25	When I am on top the responsibility makes me feel uneasy.	.56	.17	4.41	1.79
Importance of Success	4	The only way I can prove my worth is by winning a game or doing well on a task.	-.23	.47	2.99	1.88
	8	In competition I try to win no matter what.	-.11	.65	2.92	1.95
	10	I am happy only when I am doing better than others.	-.16	.56	2.96	1.78
	14	Achievement commands respect.	-.28	.37	4.82	1.84
	17	When you're on top, everyone looks up to you.	-.10	.53	3.26	1.70
	21	When you're the best, all doors are open.	-.37	.43	3.66	2.01
	27	I believe I will be more successful than most of the people I know.	.00	.43	4.32	1.60

Results of the Tests of Hypotheses II through VIII:

Females will obtain higher fear of success scores than males.

Since the main tenet of fear of success theory is that females will score higher than males on measures of fear of success, the results of the test(s) of Hypothesis II were of prime interest. Sex differences in the fear of success were examined by a variety of analytical methods; analysis of variance, Pearson product-moment correlation and multiple regression. The findings of the first two analytical approaches will be discussed in this section while discussion of the results of the multiple regression analyses will be presented in a later section of this chapter.

Two 2 x 5 analyses of variance were done. The independent variables in each analysis were sex and group, while the dependent variable in one was FOS1 and in the other FOS2. The results of these analyses are shown in Tables IV and V.

Since, for each analysis, there was no significant interaction effect between group and sex, it was appropriate to look at the main effect of sex. For FOS1 there was no significant (S= .393) main effect for sex. Therefore, for FOS1 Hypothesis II is not supported. However, the analysis of variance with FOS2 as the dependent variable

showed a significant ($p < .01$) main effect for sex. A one-way analysis of variance indicated that females scored significantly ($p < .05$) higher on FOS2 than males.

TABLE IV: Results of Analysis of Variance on Group and Sex Using FOS1 as the Fear of Success Measure

Source	SS	df	MS	F	Significance Level
Group	1300.653	4	325.163	3.626	p<.01
Sex	65.676	1	65.676	.732	n.s.
Group X Sex	408.390	4	102.098	1.139	
Within-Groups	18830.994	210	89.671		
Total	20605.713	219			

TABLE V: Results of Analysis of Variance on Group and Sex Using FOS2 as the Fear of Success Measure

Source	SS	df	MS	F	Significance Level
Group	1711.506	4	427.876	8.095	p<.01
Sex	458.821	1	458.821	8.680	p<.01
Group X Sex	375.895	4	93.974	1.778	n.s.
Within-Groups	11311.399	214	52.857		
Total	13857.621	223			

Tests for homogeneity of variances indicated a significant difference between the variances of each sex's score on FOS1. Both Cochran's C test (.6619, $p<.01$) and Bartlett's Box F (10.394, $p<.01$) showed more variance in FOS1 scores for females than males. There was no sex difference in the variance of FOS2 scores

TABLE VI: Mean Scores by Sex on Fear of Success Factors

Factor	Male	Female
FOS1 (Cost of Success	38.5823	38.6312
FOS2 (Importance of Success)	28.5500	32.4167

A significant ($p<.01$) positive correlation was found between sex and FOS2, while almost zero correlation between sex and FOS1 (see Table VII). These results, as expected, are congruent with the results of the analyses of variance previously discussed.

Hypothesis III:

Older males and females will obtain higher fear of success scores than younger males and females.

Hypothesis IV:

Females who are majoring in traditionally feminine academic areas will obtain higher fear of success scores than females who are majoring in traditionally

non-feminine academic areas.

Hypothesis V:

Black females will obtain lower fear of success scores than white females.

Hypothesis VI:

Males and females who have more formal education will obtain higher fear of success scores than males and females with less education.

Hypotheses III through VI were tested by bivariate correlational analyses. The variables of interest in each hypothesis was correlated with each fear of success factor. The results of these analyses are presented in Table VII.

The relationships of the variables in Hypotheses III through VI to the fear of success factors was also investigated with the use of multi-regression analysis. The results of the multi-regression analyses are described later in this chapter.

No significant correlation was found between age and FOS1 for either sex separately or combined. A significant correlation (.19977, $p < .05$) was found for males but not for females between age and FOS2. However, for females there was a trend in the direction of a positive relationship between age and FOS2. For male and female subjects combined there was a significant positive correlation (.1337, $p < .05$) between age and FOS2. Thus, for

one fear of success factor Hypothesis III is supported. On the other hand, the results of the analyses utilizing the other fear of success factor (FOS1) would reject Hypothesis III.

There was no significant correlations for female subjects between major (traditional versus non-traditional) and either FOS1 or FOS2. These findings lend no support to Hypothesis IV. However, an interesting finding, for which no hypothesis had been formulated, was that males who were enrolled in traditional majors had higher scores on FOS2 than males in non-traditional academic majors. This finding is derived from the significant negative correlation (-.3069, $p<.01$) between major and FOS2 for males alone (see Table VII).

For male and female subjects alone and combined there were no significant correlations between race and either fear of success factor. Thus, there is no support for Hypothesis V.

No significant correlations were found between education and FOS2 for male and female subjects either alone or combined. A significant positive correlation was found between education and FOS1 for females alone (.2993, $p<.01$) and male and female subjects combined (.2135, $p<.01$). For males alone there was no correlation between education and FOS1. The positive relationship (.2135, $p<.01$) between education and FOS1 is the

TABLE VII: Correlations Between Fear of Success Factors and Variables in Hypotheses II through VI

Variable	FOS1 Male	FOS1 Female	FOS1 Combined	FOS2 Male	FOS2 Female	FOS2 Combined
Sex	-	-	.0024 S=.486	-	-	.2330 S=.001
Age	.0237 S=.418	.0495 S=.281	.0422 S=.268	.1977 S=.040	.0932 S=.136	.1337 S=.024
Major *	-.0281 S=.417	.0517 S=.333	.0368 S=.339	-.3069 S=.009	-.0230 S=.422	-.0417 S=.316
Race	.0306 S=.396	-.0822 S=.167	-.0516 S=.225	-.0354 S=.380	-.0838 S=.160	-.0654 S=.167
Education	.0488 S=.337	.2993 S=.001	.2135 S=.001	-.0206 S=.429	.0292 S=.365	-.0635 S=.174

* Traditional versus non-traditional.

result of the strong positive relationship (.2993, $p<.01$) that exists between education and FOS1 only for females.

Hypothesis VII:

For males and females, there will be no significant correlation between fear of success scores and fear of failure.

A factor analysis on the ten item DAS indicated that the scale had one underlying main factor. Two factors were generated that had eigenvalues in excess of 1.00000, 4.24843 and 1.16485,respectively. The first factor accounted for 42.5% of the variance while the second factor accounted for 11.6%. After the factor matrix was rotated, the first factor had a eigenvalue of 3.70418 and accounted for 87.4% of the variance while the second factor's eigenvalue was .53532 and only 12.6% of the variance from the two factors was accounted for by the second factor. Thus, the DAS was treated as a unitary scale. However, as a result of the factor analysis (Edpack) and item-scale correlations (SPSS), three items were deleted. These items were numbers 3, 6 and 7. The revised scale utilized in this study is shown in Tables VIII and IX.

The reduced seven item DAS scale was positively correlated (.535, $p<.05$) with FOS1. There was no significant relationship between the seven item DAS scale

TABLE VIII: Results of Multiple Group Factor Analysis of Seven Items From the DAS

Item No.	Item	Correlation with Scale	Mean	SD
1	Nervousness while taking a test or exam hinders me from doing well.	.75	2.61	.91
2	In a course where I have been doing poorly, my fear of a bad grade cuts down my efficiency.	.67	2.58	1.00
4	The more important the examination, the less well I seem to do.	.68	2.35	.85
5	During exams or tests, I block on questions to which I know the answers, even though I might remember them as soon as the exam is over.	.62	2.43	.89
8	Time pressure on an exam causes me to do worse than the rest of the group under similar conditions.	.67	2.38	1.04
9	I find myself reading exam questions without understanding them and I must go back over them so that they will make sense.	.58	2.98	.91
10	When I don't do well on difficult items at the beginning of an exam, it tends to upset me so that I block on even easy questions later on.	.67	2.41	.83

and FOS2. The reliability (coefficient alpha) of the seven item DAS scale was .85.

TABLE X: Correlation Between Seven Item DAS Scale and Fear of Success Factors

Factor	Correlation with DAS
FOS1	.1535 S=.034
FOS2	.0459 S=.295

Hypothesis VIII:

For males and females, there will be a negative correlation between fear of success scores and self-satisfaction.

An initial factor analysis of the thirty items (self-satisfaction row) from the TSCS revealed eight factors. Only four of the eight factors had eigenvalues over 1. A subsequent factor analysis was done designating the number of factors to be four. After reviewing the results of the last factor analysis, five items were deleted from subsequent factor analyses. The deleted items were Numbers 1, 2, 22, 24 and 30. A multiple group factor analysis was then done on the remaining twenty-five items. The results of the twenty-five item multiple group factor analysis are displayed in Table XI. Four factors emerged which

were named; trust and sensitivity (nine items), family and social relationships (nine items), physical self (four items), and religious self (three items). The correlations between the four factors are depicted in Table XII.

Fitts (1965) depicts five subscales within the self-satisfaction row; physical self, moral-ethical self, personal self, family self, and social self. Although only four factors were generated in this study, the factor structure of the TSCS self-satisfaction row per this study appeared close to Fitts' model. Family and social self grouped together to form family and social relationships. Fitts' moral-ethical self contained all the items in this researcher's religious self. Trust and sensitivity were comprised mainly of items that Fitts grouped under personal self.

The reliability (coefficient alpha) of each TSCS factor derived in this study was:

Trust and Sensitivity	.80
Family and Social Relationships	.80
Physical Self	.72
Religious Self	.75.

The reliability of the full twenty-five items from the TSCS was .87.

Correlations between each factor of fear of success and each factor of the twenty-five items from the TSCS

TABLE XI: Results of Multiple Group Analysis of Twenty-Five Items from the TSCS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Cl.3	Cl.4	Mean	SD
Trust & Sensitivity	5	I wish I could be more trustworthy.	.54	.22	.14	.08	3.99	1.21
	6	I shouldn't tell so many lies.	.45	.19	-.03	.07	4.16	1.05
	8	I am not the person I would like to be.	.37	.27	.40	-.05	3.56	1.08
	9	I wish I didn't give up as easily as I do.	.52	.09	.22	.05	3.65	1.24
	11	I am too sensitive to things my family say.	.43	-.12	.26	.05	3.09	1.23
	12	I should love my family more.	.59	.29	-.01	.27	3.69	1.22
	14	I should be more polite to others.	.58	.16	.06	.05	3.63	1.07
	15	I ought to get along better with people.	.53	.21	.22	.06	3.48	1.13
	27	I should trust my family more.	.54	.07	-.03	.12	3.82	1.15
Family and Social Relationships	7	I am as smart as I want to be.	.11	.38	.22	.17	2.61	1.24
	10	I treat my parents as well as I should (use past tense if parents are deceased).	.17	.49	-.05	.11	3.83	.93

TABLE XI: (Cont.) Results of Multiple Group Analysis of Twenty-Five Items from the TSCS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Cl.3	Cl.4	Mean	SD
Family and Social Relationships	13	I am satisfied with the way I treat other people.	.18	.55	.13	.05	3.70	.90
	19	I am satisfied with my moral behavior.	.10	.47	.13	.24	3.99	1.02
	23	I am just as nice as I should be.	.22	.60	.20	.13	3.49	.96
	25	I am satisfied with my family relationships.	.29	.59	.04	-.09	3.72	1.13
	26	I understand my family as well as I should.	.19	.59	-.02	-.07	3.47	1.07
	28	I am as sociable as I want to be.	.13	.52	.26	.08	3.30	1.09
	29	I try to please others, but I don't overdue it.	.02	.44	.16	.09	3.69	.92
Physical Self	3	I should have more sex appeal.	.32	.13	.51	.16	3.35	1.23
	16	I am neither too thin nor too fat.	-.03	.10	.54	.07	3.25	1.40
	17	I like my looks just the way they are.	.13	.14	.75	.07	3.28	1.14

TABLE XI: (Cont.) Results of Multiple Group Analysis of Twenty-Five Items from the TSCS

Cluster Name	Item No.	Item	Correlation of Item with Cluster and True Score Cl.1	Cl.2	Cl.3	Cl.4	Mean	SD
Physical Self	18	I would like to change some parts of my body.	.22	.01	.42	-.04	2.94	1.38
Religious Self	4	I am as religious as I want to be.	.13	.20	.01	.85	3.53	1.16
	20	I am satisfied with my relationship to God.	.10	.40	.10	.65	3.61	1.12
	21	I ought to go to church (synagogue, etc.) more.	.10	-.02	.10	.51	3.08	1.42

TABLE XII: Correlations Between the Four Factors from Twenty-Five Items of the TSCS

Factor	Correlation with Factor 1	2	3	4
1. Trust and Sensitivity	1.00	.60	.40	.48
2. Family and Social Relationships	.60	1.00	.51	.42
3. Physical Self	.40	.51	1.00	.29
4. Religious Self	.48	.42	.29	1.00

were calculated. The correlations between FOS1 and trust and sensitivity, family and social relationships, physical self and religious self were .15, .45, .22, and .18, respectively. The correlations between FOS2 and the TSCS factors were -.29, -.21, -.06, and -.19. Thus, FOS1 showed a positive relationship to self-satisfaction while, contrary-wise, FOS2 and self-satisfaction were negatively correlated.

Relationship of Fear of Success to Selected Variables, Multi-Regression Analyses, Group and Sex Differences and Stability of Fear of Success

Initially, in this section, the results of the examination of the relationship between fear of success and several variables of interest are presented. The results of the multi-regression analyses, using the aforementioned variables and the variables in Hypotheses II to VI, are then discussed. The penultimate analyses examines group and sex differences in fear of sex. Finally, the stability of fear of success is examined.

Relationship of Fear of Success to Selected Variables

The relationship of selected variables of interest common to each fear of success factor are presented in Table XIII. There was a significant positive relationship between current closeness to father (.1848, $p < .01$), closeness to mother growing-up (.1616, $p < .01$),

TABLE XIII: Correlations Between Fear of Success Factors and Selected Variables

Variable	FOS1 Male	FOS1 Female	FOS1 Combined	FOS2 Male	FOS2 Female	FOS2 Combined
Heterosexual Attachment	.1573 S=.086	-.0285 S=.369	.0158 S-.408	.0056 S-.481	.1524 S-.035	.1367 S-.021
Divorce	.0643 S=.292	-.0064 S=.471	.0108 S=.439	-.0734 S=.264	-.2361 S=.003	-.2183 S=.001
Number of Children	.0793 S=.248	-.0726 S=.198	-.0382 S=.289	.2610 S=.011	.1075 S=.101	.1937 S=.002
Father's Occupation	.0184 S=.438	.0877 S=.158	-.0651 S=.176	.0355 S=.381	-.1154 S=.091	.0730 S=.146
Mother's Occupation	-.0021 S=.493	-.0779 S=.180	.0534 S=.218	-.1830 S=.057	.0621 S=.231	.0390 S=.283
Father's Education	-.0364 S=.376	.0812 S=.171	.0475 S=.243	-.0487 S=.335	-.0951 S=.130	-.0890 S=.094
Mother's Education	-.1345 S=.120	.2288 S=.003	.1085 S=.056	-.1882 S=.048	-.0838 S=.161	-.1638 S=.007
Birth Order	.1451 S=.102	.0543 S=.261	.0789 S=.122	.1284 S=.130	.0591 S=.241	.0839 S=.106
Closeness to Father Growing-Up	.0511 S=.332	.1447 S=.046	.0995 S=.074	.0588 S=.307	.1557 S=.033	.1337 S=.025
Current Closeness to Father	.0314 S=.400	.2676 S=.002	.1848 S=.006	.0446 S=.359	.1409 S=.062	.1159 S=.056
Closeness to Mother Growing-Up	-.0027 S=.108	.2666 S=.001	.1616 S=.009	.0650 S=.287	.0905 S=.142	.0854 S=.104
Current Closeness to Mother	-.0027 S=.491	.1812 S=.001	.1799 S=.005	.1140 S=.165	.0831 S=.173	.1128 S=.053
Importance of a Career	.0089 S=.469	.1210 S=.076	.0771 S=.127	-.1173 S=.150	-.2548 S=.001	-.2095 S=.001
Importance of Family	-.0719 S=.265	.2116 S=.006	.1169 S=.041	-.1354 S=.116	.0344 S=.342	.0009 S=.495

importance of a family (.1169, p <.05), and FOS1 for subjects of both sexes combined. There was a trend towards a significant positive relationship between mother's education, closeness to father growing-up and FOS1 for all subjects. No significant relationship existed between FOS1 and eight other variables (heterosexual attachment, divorce, number of children, father's occupation, mother's occupation, father's education, birth order and importance of a career) for all subjects. For the four variables which had a significant positive relationship with FOS1, and the two with the trend toward significance, the relationship of females alone for that variable was significantly positive. However, for males alone there was no significant relationship between any of those variables and FOS1. Thus, it was always the strong positive relationship between females and FOS1 on the significant variables that caused the overall (all subjects) significant relationship to FOS1.

There was a significant relationship between six variables and FOS2. The variables that were significantly related to FOS2 are; heterosexual attachment (.1367, p <.05), divorce (-.2183, p <.01), number of children (.1937, p <.01), mother's education (-.1638, p <.01), closeness of father growing-up (.1337, p <.05) and importance of a career (-.2095, p <.01). There was a trend toward significance for two additional variables

(father's education and current closeness to father) and FOS2 for both sexes combined. For five of the six variables that were significantly related to FOS2, the overall relationship was determined by the strong relationship for females only, within that variable, to FOS2, while males alone showed no relationship. The single exception (a variable with males alone showing a significant relationship to FOS2), was number of children. For number of children females alone did not show a significant relationship to FOS2 although there was a trend toward significance.

The relationships of selected variables of interest, common only to student subjects, to each fear of success factor are presented in Table XIV. There was no significant relationship, for both sexes combined, between any of the eight variables of interest (education level, year in degree program, prior work experience, grade point average (GPA), GPA expected, GPA aspired to, time spent studying and time spent socializing) and FOS1. However, there was a trend towards significance between FOS1 and four variables (year in degree program, GPA, GPA expected and time spent studying). Females who had high GPA's scored higher on the FOS1 than females with lower GPA's, however, there was no difference between males with high or low GPA's on FOS1.

There was no relationship for both sexes, alone or combined, between five variables (education level, year

in degree program, prior work experience, time spent studying and time spent socializing) and FOS2. Students of both sexes, alone and together, who expected higher GPA's scored higher on the FOS2 than students who expected lower grades. Females with higher GPA's scored higher on the FOS2 than females with lower GPA's. While no relationship existed for males alone between GPA and scores on the FOS2, the positive relationship for females was strong enough to determine a positive relationship between GPA and FOS2 for both sexes combined. Surprisingly, females who aspired toward a high GPA scored lower on the FOS2 than females with lower aspirations in that area. For males the trend in the opposite direction.

Multi-Regression Analyses

Eighteen variables were entered into two multi-regression analyses predicting FOS1 and FOS2 scores. The eighteen variables were; the variables in Hypothese II, IV, V, VI and those variables in Table XIII. Two other multi-regression analyses were done utilizing the variables in Hypothesis III, (traditional major versus non-traditional), and Table XIV to predict FOS1 and FOS2 scores for student subjects.

The eighteen variable multi-regression analysis used to predict FOS1 scores derived no significant regression

TABLE XIV: Correlations Between Fear of Success Factors and Selected Variables Applicable Only to Student Subjects

Variable	FOS1 Male	FOS1 Female	FOS1 Combined	FOS2 Male	FOS2 Female	FOS2 Combined
Education Level	-.0878 S=.252	.0523 S=.331	-.0109 S=.451	.0197 S=.440	-.0062 S=.479	-.0525 S=.272
Year in Degree Program	-.2027 S=.067	-.1097 S=.180	-.1437 S=.053	-.1427 S=.145	.1096 S=.434	-.0360 S=.364
Prior Work Experience	.0856 S=.254	-.0552 S=.321	.0008 S=.496	.0179 S=.288	-.0400 S=.366	.0008 S=.496
GPA	.0457 S=.365	.2103 S=.041	.1350 S=.064	.2620 S=.022	.0894 S=.254	.1689 S=.026
GPA Expected	.0122 S=.465	.1925 S=.054	.1177 S=.096	.3479 S=.005	.2012 S=.043	.2610 S=.001
GPA Aspired To	.0517 S=.355	.0463 S=.351	.0498 S=.291	.1534 S=.134	-.2488 S=.016	-.0937 S=.146
Time Spent Studying	.0632 S=.317	.1802 S=.065	.1242 S=.079	.0187 S=.444	.0960 S=.206	.0140 S=.436
Time Spent Socializing	-.0347 S=.397	.1001 S=.203	.0442 S=.309	.0799 S=.272	.0979 S=.203	.0601 S=.245

equation. However, the first nine variables in the equation did determine a significant regression equation (1.9981, $p < .05$). The results of the multi-regression analysis are presented in Table XV. Only one variable, current closeness to father, was a significant predictor of FOS1 (4.7371, $p < .05$). When current closeness to father was entered into another multi-regression analysis, as the fifteenth variable it was not significant. The significance level for other variables changed when the entry order was altered. Thus, changing the order in which variables were entered into the multi-regression equation revealed multicollinearity was effecting the significance level of the variables in the regression equation. The second multi-regression analysis, which changed the order of entry of the variables, was also not a significant predictor of FOS1. None of the variables were significant alone.

After the initial regression equation for predicting FOS1 scores was determined on 128 subjects, the equation was used to compute predicted FOS1 scores for the remaining 103 subjects. The predicted FOS1 scores were correlated with the actual FOS1 scores for the remaining 103 subjects as a cross-validation procedure. The resulting pearson product-moment correlation coefficient was not significant.

A significant regression equation (2.1012, $p < .05$)

TABLE XV: Results of Multi-Regression Analysis Using Eighteen Variables in Forward Stepwise Inclusion to Predict FOS1

Variable	B	F	Significance Level	Multiple R	R Square
Current Closeness to Father	.6465	4.7371	.032	.2169	.0470
Education	2.9678	2.9320	.090	.2749	.0756
Birth Order	3.6944	1.9903	.162	.3078	.0947
Number of Children	2.0553	1.7751	.186	.3342	.1117
Current Closeness to Mother	.9053	1.8985	.172	.3601	.1296
Age	-.2053	1.2518	.266	.3761	.1415
Mother's Education	2.2011	1.0640	.305	.3892	.1515
Race	-2.1681	1.1945	.277	.4034	.1627
Mother's Occupation	-1.5018	.7375	.393	.4119	.1697
Closeness to Mother Growing-Up	.4309	.2372	.627	.4147	.1719
Importance of a Family	-.1896	.0641	.801	.4154	.1726

TABLE XV: (Cont.) Results of Mutli-Regression Analysis Using Eighteen Variables in Forward Stepwise Inclusion to Predict FOS1

Variable	B	F	Significance Level	Multiple R	R Square
Heterosexual Attachment	.1564	.0457	.831	.4159	.1730
Father's Occupation	.4044	.0295	.864	.4163	.1733
Closeness to Father Growing Up	-.1105	.0242	.877	.4166	.1735

Variables Not in the Equation

Sex	-	.0007	.978	-	-
Divorce	-	.0014	.970	-	-
Father's Education	-	.0008	.978	-	-
Importance of a Career	-	.0068	.934	-	-

predicting FOS2 was calculated by entering eighteen variables into a multi-regression analysis. The coefficient of determination was .29. Thus, twenty-nine percent of the variance of FOS2 scores was accounted for by sixteen variables (see Table XVI). Only two of the variables alone, divorce (16.3697, $p < .01$) and importance of a career (4.3242, $p < .05$), were significant predictors of FOS2. These two variables were still significant at the same levels when they were entered into another multi-regression analysis in a different entry order (see Table XVII). Thus, they seem to account for a unique portion (18%) of the variance of FOS2 scores.

The cross-validation of the derived regression equation for predicting FOS2 resulted in a significant correlation (.3116, $p < .01$) between predicted and actual FOS2 scores. The coefficient of determination was .097. Thus, approximately 10% of the variance of FOS2 scores for 103 subjects was accounted for by the sixteen variables in the regression equation.

The regression equation that was derived from a multi-regression analysis with nine variables did not significantly predict FOS1 scores for seventy-six student subjects. None of the nine variables were, by themselves, significant predictors of FOS1. Another multi-regression analysis with the same nine variables entered,

TABLE XVI: Results of Multi-Regression Analysis Using Eighteen Variables in Forward Stepwise Inclusion to Predict FOS2

Variable	B	F	Significance Level	Multiple R	R Square
Divorce	-6.3899	16.3697	.000	.3817	.1457
Importance of a Career	-1.2042	4.3242	.040	.4276	.1829
Sex	2.4414	3.2835	.073	.4588	.2105
Race	-2.5676	2.2963	.133	.4790	.2295
Current Closeness to Mother	.8495	1.7218	.193	.4936	.2436
Number of Children	1.3085	2.3287	.130	.5124	.2625
Birth Order	1.8994	.8522	.358	.5191	.2694
Age	- .1518	.6940	.407	.5245	.2751
Education	.7547	.7154	.400	.5300	.2809
Mother's Education	1.2655	.4321	.513	.5333	.2845
Heterosexual Attachment	.3320	.5270	.470	.5374	.2888
Closeness to Mother Growing-Up	.2186	.2326	.631	.5392	.2908

TABLE XVI: (Cont.) Results of Multi-Regression Analysis Using Eighteen Variables in Forward Stepwise Inclusion to Predict FOS2

Variable	B	F	Significance Level	Multiple R	R Square
Mother's Occupation	- .3757	.1087	.742	.5401	.2917
Current Closeness to Father	- .3122	.0699	.792	.5406	.2923
Closeness to Father Growing-Up	.1430	.0607	.806	.5411	.2928
Father's Education	- .1810	.0582	.810	.5416	.2933

Variables Not in the Equation

Father's Occupation	-	.0097	.922	-	-
Importance of a Family	-	.0096	.922	-	-

TABLE XVII: Results of Multi-Regression Analysis Using Eighteen Variables in Predetermined Order to Predict FOS2

Variable	B	F	Significance Level	Multiple R	R Square
Father's Occupation	.2085	.0082	.928	.1235	.0153
Current Closeness to Mother	.8761	.8353	.364	.1419	.0201
Birth Order	1.8938	1.3852	.247	.1692	.0286
Sex	2.4274	1.6957	.197	.2773	.0769
Race	-2.5502	2.6033	.111	.3176	.1009
Closeness to Father Growing-Up	.1564	.0838	.773	.3177	.1009
Divorce	-6.3875	8.1163	.006	.4585	.2103
Mother's Occupation	- .3737	.0836	.773	.4616	.2130
Heterosexual Attachment	.3410	.3848	.537	.4787	.2292
Importance of a Career	-1.1947	4.1573	.045	.5156	.2659
Education	.7560	.4161	.521	.5161	.2663
Age	- .1516	1.2012	.276	.5161	.2664
Importance of a Family	- .0530	.0080	.929	.5162	.2664

TABLE XVII: (Cont.) Results of Multi-Regression Analysis Using Eighteen Variables in Predetermined Order to Predict FOS2

Variable	B	F	Significance Level	Multiple R	R Square
Mother's Education	1.2447	.6133	.436	.5198	.2702
Closeness to Mother Growing-Up	.2126	.0992	.754	.5224	.2729
Father's Education	- .2167	.0522	.820	.5225	.2730
Current Closeness to Father	- .3077	.1377	.712	.5226	.2731
Number of Children	1.3257	2.2814	.135	.5417	.2935

in a different order, did not produce either a significant regression equation or any variables that were significant predictors of FOS1. The cross-validation procedure resulted in no significant relationship between predicted and actual FOS1 scores.

Nine variables were entered into a multi-regression analysis to compute a regression equation predicting FOS2 scores for student subjects. A significant regression equation (2.4958, $p < .05$) was calculated. The results of the multi-regression analysis are depicted in Table XVIII. The coefficient of determination was .29. Thus, 29% of the variance of FOS2 scores were accounted for by the nine variables in the regression equation. Only one variable, GPA expected, was found by itself to be a significant predictor of FOS2. GPA expected was also found to be a significant predictor of FOS2 when it was entered into another multi-regression analysis in a different order. The results of the multi-regression analysis with the nine variables, entered in a different order from stepwise inclusion is presented in Table XIX. Interestingly, in this analysis four variables were, by themselves, significantly related to FOS2 scores. These four variables were; GPA expected (12.9118, $p < .01$), education level (9.8055, $p < .01$), time spent studying (4.1775, $p < .05$), and GPA aspired to (4.0474, $p < .05$).

The cross-validation of the derived regression

equation predicting FOS2 on sixty-six student subjects produced a significant Pearson product-moment correlation coefficient (.2379, $p < .05$). The coefficient of determination for the correlation of predicted and actual FOS2 scores was .057. Thus, approximately 6% of the variance of FOS2 scores were accounted for by the nine variables in the regression equation for the sixty-six student subjects.

Group and Sex Differences in Fear of Success and Self-Concept

Earlier, two 2 x 5 analyses of variance were presented (see Tables IV and V), and sex differences in fear of success were discussed. Group differences in fear of success were not discussed at that time. They are first discussed here.

Since, for each analyses, there was no significant interaction effect between group and sex, it was appropriate to look at the main effect of group. Both analyses showed a significant main effect for group. This main effect was investigated through two one-way analyses of variance, groups being the independent variable and FOS1 and FOS2 being the dependent variables. The results of these one-way analyses of variance are presented in Tables XX and XXI.

The FOS1 and FOS2 means and standard deviations of each group are presented in Tables XXII and XXIII, respectively.

TABLE XVIII: Results of Multi-Regression Analysis Using Nine Variables in Forward Stepwise Inclusion to Predict FOS2 for Student Subjects

Variable	B	F	Significance Level	Multiple R	R Square
GPA Expected	10.2075	5.4009	.023	.2831	.0801
Education Level	-3.3090	2.6761	.107	.3447	.1188
Time Spent Socializing	.1151	3.1067	.083	.4027	.1622
Time Spent Studying	.1106	2.7934	.100	.4473	.2001
GPA Aspired To	-5.1142	1.6219	.208	.4710	.2218
Year in Degree Program	-1.4496	2.7561	.102	.5076	.2577
Major	4.7338	2.1389	.149	.5339	.2850
GPA	-1.0990	.3943	.533	.5386	.2901
Prior Work Experience	- .8879	.2807	.598	.5420	.2938

TABLE XIX: Results of Multi-Regression Analysis Using Nine Variables in Predetermined Order to Predict FOS2 for Student Subjects

Variable	B	F	Significance Level	Multiple R	R Square
Prior Work Experience	- .8879	.2807	.598	.0455	.0021
Time Spent Socilizing	.1151	1.9763	.166	.1706	.0291
Time Spent Studying	.1106	4.1775	.046	.2391	.0572
Major	4.7337	1.8207	.183	.2415	.0583
Year in Degree Program	-1.4496	3.8280	.056	.2694	.0726
GPA Expected	10.2075	12.9118	.001	.3573	.1277
GPA Aspired To	-5.1142	4.0474	.049	.4108	.1687
Education Level	-3.3090	8.8055	.004	.5383	.2898
GPA	-1.0990	.3052	.583	.5420	.2938

TABLE XX: Results of One-Way Analysis of Variance Between Groups Using FOS1 as the Measure of Fear of Success

Source	SS	df	MS	F	Significance Level
Between Groups	1323.3215	4	330.8304	3.6546	p <.01
Within Groups	19553.3663	216	90.5248		
Total	20876.6878	220			

TABLE XXI: Results of One-Way Anlaysis of Variance Between Groups Using FOS2 as the Measure of Fear of Success

Source	SS	df	MS	F	Significance Level
Between Groups	2005.4464	4	501.3616	9.0690	p <.01
Within Groups	12162.2692	220	55.2830		
Total	14167.7156	224			

TABLE XXII: Group Means and Standard Deviations on FOS1

Group	Mean	SD
1	39.5056	8.4479
2	41.3889	10.7325
3	37.4667	11.7039
4	33.6875	11.3035
5	37.4516	6.5566
Total	38.6968	

TABLE XXIII: Group Means and Standard Deviations on FOS2

Group	Mean	SD
1	29.5652	6.6849
2	34.9811	7.8532
3	24.8000	10.0655
4	33.7576	7.7299
5	28.8438	7.0890
Total	31.0356	

Groups 1 and 2 scored significantly higher than Group 4 on FOS1, according to the Tukey post hoc procedure. However, according to the Scheffe procedure, only Group 2 was significantly higher than Group 4. There were no other significant differences between group means on FOS1 utilizing either the Tukey or Scheffe approaches.

TABLE XXIV: Results of Analysis of Variance on Group and Sex Using Twenty-Five Items from the TSCS as a Measure of Self-Concept

Source	SS	df	MS	F	Significance Level
Group	3664.045	4	916.012	5.127	p <.01
Sex	15.757	1	15.757	.088	n.s.
Group X Sex	1454.847	4	363.712	2.036	n.s.
Within Group	34663.195	194	178.676		
Total	39797.844	219			

TABLE XXV: Results of One-Way Analysis of Variance Between Groups Using Twenty-Five Items from the TSCS as the Measure of Self-Concept

Source	SS	df	MS	F	Significance Level
Between Groups	390.5852	4	97.6463	1.8404	n.s.
Within Group	10611.1709	200	53.0559		
Total	11001.7561	204			

Bartlett's Box F Test indicated that there was a significant difference (3.458, p <.01) between groups on the variance of FOS1 scores. However, Cochran's C Test yielded no significant difference in variances between groups.

The Tukey and Scheffe methods obtained the same results for the analyses of group differences in FOS2. Members of Groups 2 and 4 scored higher on FOS2 than members of Group 3. In addition, members of Group 2 scored higher on the FOS2 than members of Groups 1 and 5.

Cochran's C Test found a significant difference (.3189, p <.01) between groups in the variance of FOS2 scores. However, Bartlett's Box F Test indicated no significant difference.

Group and sex differences in self-concept were examined by a two-by-five analysis of variance. The independent variables were sex and group, while the measure of self-concept was the twenty-five items from the TSCS (see Table XI). The results of this analysis of variance are given in Table XXIV.

Since, for this analysis, there was no significant interaction effect between group and sex, it was appropriate to look at the main effects of group and sex individually. There was no significant main effect for sex. However, there was a significant main effect for group (which was further investigated). A one-way analysis of variance between groups was done to examine group

differences in self-concept. The results of this analysis are presented in Table XXV.

The one-way analysis of variance revealed no significant difference between groups in self-concept. The group means on self-concept are detailed in Table XXVI.

TABLE XXVI: Group Means and Standard Deviations on Self-Concept

Group	Mean	SD
1	73.8023	5.6105
2	74.3333	6.0295
3	72.8462	4.3750
4	77.7586	13.4607
5	74.9310	5.7441
Total	74.5854	

Both Cochran's C Test (.6016, $p < .01$) and Bartlett's Box F Test (13.146, $p < .01$) indicated that the variances in self-concept scores differed significantly between groups.

Stability of Fear of Success

The stability of fear of success was examined by looking at the test-retest reliability of each fear of success factor over approximately a nine week period. The

test-retest reliability was only calculated for students living in Owen Graduate Hall, Michigan State University (Group 1). Pearson product-moment correlation coefficients were computed between FOS1 and FOS2 test scores and re-test scores on FOS1 and FOS2, respectively. For FOS1 the test-retest relaibility was .76 ($p < .01$), while FOS2 had a test-retest relability of .80 ($p < .01$). Thus, each fear of success factor exhibited a high degree of stability over the nine-week period.

Summary

Fear of success, as measured by the FOSS, was found to be comprised of two factors, FOS1 (Cost of Success), and FOS2 (Importance of Success). Each hypothesis was tested for each fear of success factor separately. For FOS1, Hypothesis VI was supported, while Hypotheses II, III, IV, V, VII, and VIII were rejected. For FOS2, Hypotheses II, III, VII, and VIII were supported, while Hypothesis IV, V, and VI were rejected.

Additional analyses examined the relationship of twenty-two variables (eight of which were only applicable to students subjects) to each fear of success factor. Twelve variables, four for FOS1 and eight for FOS2, were significantly related to one fear of success factor. None of the twelve (or twenty-two) variables were significantly related to both fear of success factors. For eight of the twelve variables there was a significant

relationship between that variable and one fear of success factor for females alone, but not males alone.

Multi-regression analyses with eighteen and nine variables failed to obtain a significant regression equation predicting FOS1. A significant regression equation predicting FOS2 was obtained for both eighteen and nine variables. In several of the analyses the entry order of the variables was a factor effecting the significance levels of several variables. Less than 1/3 of the variance of FOS2 scores was accounted for by the eighteen and nine variables separately. Cross-validation indicated a low, but significant, correlation between actual and predicted FOS2 scores.

The calculation of test-retest reliability for both FOS1 and FOS2 indicated that each fear of success factor was stable over a nine-week period.

CHAPTER IV

DISCUSSION

This chapter, in addition to discussing the results of this study, will also focus on: methodological issues and limitations, and recommendations for future research.

Discussion

An important finding is that fear of success, as measured by the FOSS, is composed of two factors. These two factors, cost of success and importance of success, are negatively correlated. Thus, the relationship of variables of interest to fear of success has to be discussed factor by factor. Previous studies of the relationship of numerous variables to fear of success reveal inconsistent findings. The gypothesis that inconsistent findings result from different studies tapping different factors of fear of success is supported by the findings. Important variables such as sex and age were related to one fear of success factor, but not the other. In fact, there were no situations where the same variable was significantly related to both fear of success factors. Finding

two fear of success factors explains why measuring fear of success by individual reactions to different cues varied (Weston and Mednick, 1970; Karabenik and Marshall, 1974). One cue may have tapped cost of success while the next cue could have evoked importance of success.

The relationship between several variables and the fear of success factors leads to some interesting interpretations. Females may have been defining success as having a family and developing close interpersonal relationships. Females who felt that having a family was very important scored higher on cost of success (FOS1) than females who did not. This pattern did not exist for males. A review of the variables significantly related to FOS1 indicated a pattern for females where closeness to both parents, in the past and present, was positively related to high cost of success. Again, this pattern did not exist for males. Females who had a close relationship to a male saw success as more important than females who were less closely attached to a male. This finding suggests that females who feel that success is important may strive for social success through attachment to a male. Another finding supporting the idea that females may not define success in terms of academic and vocational accomplishments is that females who rated a career relatively unimportant still

rated success important. These findings suggest that for females success and social relationships are inexorably intertwined. These findings may lead to the hypothesis that females avoid paying the price of academic and/or vocational success by emphasizing family concerns and developing close interpersonal relationships. This greater emphasis on social relationships and family structure by women fearing the high cost of success is a method of achieving satisfaction (success) from the social sphere and thereby avoiding the negative features of success. Maccoby and Jacklin (1974) concluded that ". . .women have less confidence than men in their ability to perform well in a variety of tasks assigned to them; they have less sense of being able to control the events that affect them, and they tend to define themselves more in social terms" (p. 162). Even when women achieve academic success, the reasons for achievement may differ. Females may seek achievement for more personal goals (Ladon and Crooks, 1976).

Divorced females saw success as more important than females who had not been divorced. Marriage being a prerequisite to divorce, the divorced group may have contained a higher percentage of females who originally felt that marriage was important and desirable.

If importance of success is measured in social terms, then divorcees would score higher having already achieved the success of marriage at one time. Another explanation is that the divorced females perceiving their divorce as a failure might have increased their desire for future success. These individuals might attempt to compensate for their failed marriages by achievements in academic and vocational areas.

Subjects whose parents were not well educated saw success as more important than subjects whose parents were well educated. Parents who were not well educated may have stressed the importance of succeeding to their children more than the parents who were well educated.

One puzzling finding is that the number of children that a subject had was positively related to importance of success. A possible explanation is that having children increases the responsibility an individual feels to support those children. Success, then, becomes necessary in order to provide for a large family. Another explanation is that a large family may be considered a type of success. Males may be unconsciously displaying their virility by producing a large number of progeny. For females, having a large family may assure and confirm their role as a mother and homemaker.

It is not surprising that subjects who had a high GPA and those who expected high grades scored higher on the importance of success. However, when GPA aspired to was looked at, an interesting sex difference appeared. Females who felt that success was important did not aspire to as high grades as females who felt that success was less important. Meanwhile, males who aspired to high grades saw success as more important than males who had lower grade aspirations. A possible explanation for this strange finding could, again, lie in different interpretations of success. For females success was not defined in terms of a grade point average.

Subjects who were better educated had higher cost of success scores. This may reflect a clearer perception that life on top has its drawbacks. These subjects can be seen as having already obtained a measure of success, and, therefore, they may have some first-hand knowledge of the price one pays for success. As subjects become older the time left for achieving one's aspirations lessens. Thus, the importance of achieving success in life may increase as less time remains.

Fear of failure, as measured by the DAS, was positively correlated (.1535, $p < .05$) with FOS1, but not significantly related to FOS2. Other researchers found a positive relationship between fear of failure and fear of success (Pappo, 1972; Griffore, 1976). However, some researchers found no relationship

(Sorrentino and Short, 1974; Grinzko and Morgenstern, 1975). Whether fear of failure was positively related or not to fear of success may have depended on which fear of success factor previous research studies evoked.

Self-satisfaction, as measured by the TSCS, was found to be positively related to FOS1 and negatively related to FOS2. Again, inconsistent past research findings may have been the result of these findings tapping different fear of success factors.

The results of the multi-regression analyses indicated that none of the variables were significant predictors of FOS1 either alone or combined in a regression equation. FOR FOS2, only three of the variables were significantly related to FOS2 when order of entry was taken into account. While two significant regression equations were derived for predicting FOS2 only a small portion of the variance in FOS2 scores was accounted for by the variables in each of the equations. Since the majority of variables in the regression equation were those that fear of success theory postulated would be related to fear of success, the finding of weak and/or non-existent relationships challenges the theoretical groundwork of fear of success.

Differences in fear of success between groups were found. Group 2 (Head Start Staff) scored higher than any other group on both fear of success factors. Group 2

differs primarily from the other groups in that all its members are working while the majority of members of every other group are not working. It appears that a relationship between work and fear of success might exist. One might hypothesize that individuals who are working see both the cose of success as higher and the importance of success as more desirable than their non-working peers.

Group 4 (Head Start Parents) scored higher on self-satisfaction than any other group. They had the lowest percentage return rate of any of the groups. This researcher feels that many individuals who would have been in Group 4, but did not want to fill out the questionnaire, are individuals with low self-concepts. Thus, since Group 4 did not contain as many low self-concept individuals as the other group, its mean was higher. The mean of Group 4 could also have been effected by the fact that this group had the largest variance of scores.

Fear of success scores were quite stable. Group 1 was first measured during the beginning of an academic quarter. Retest scores were then collected at the end of the quarter. These collection times were deliberately selected to maximize the effect of situational variables upon the individual responding to the questionnaire. Yet the stability of fear of success scores were quite high.

This indicated that fear of success scores were not effected by the increased pressure and anxiety that students face at the end of an academic quarter.

Methodological Issues and Limitations

Several shortcomings appear in this study. First, the generalizability of this study is limited. Groups were selected to obtain widespread representation across several variables, i.e., age, education, work experience, etc. However, because the groups were arbitrarily picked rather than randomly selected, the generalizability of this study is severely limited. For example, although adults of all ages are included, the majority of subjects were in their twenties, Thus, generalizations to older populations is not warranted due to their under representation in the subject pool.

There are many different measures of fear of success. Unfortunately, not all of these measures correlate (Griffore, 1976; Zuckerman and Wheeler, 1975). Thus, the generalizability of the discussion of fear of success in this study is limited by the instrumentation that was selected by this researcher.

The measurement of self-concept in this study was determined by this researcher. Self-concept is a hypothetical psychological construct. Scales that

purport to measure self-concept may be measuring different constructs. Thus, it is important to point out that the definition of self-concept is twenty-five items from the TSCS. Self-concept as measured in this study differs from the measurement of self-concept using the total TSCS or other instrumentation.

Over one-quarter (28%) of the subjects that were asked to participate in this study declined. The characteristics of this substantial group are unknown. Whether this group differed from the subjects in this study on any of the scales and/or variables being measured is a relevant but unanswered question.

Although the same instructions and explanations of this study were given to all the groups participating in the study, the relationship of this researcher to each group may have differentially effected responses. Whether an individual was responding to a questionnaire from the staff psychologist, a fellow graduate student living in the dormitory, or a friend of the instructors could be a factor effecting an individuals answers.

Factor analysis is far from an exact set of standard procedures. Decisions as to what factoring methods to use had to be made. Likewise, decisions about which items to delete from a scale were judgments of this researcher rather than determined by set guidelines. These pragmatic decisions were necessary, yet each

may have effected the final results.

Recommendations for Future Research

This study can be characterized as largely exploratory. The factor structure of fear of success and the relationship of fear of success to selected variables of interest was probed. Several important questions and issues were raised from the findings. The value of this study is not in its conclusion, but rather in its heuristic strength. Several areas of future research are suggested. One involves the continued examination of the factor structure of fear of success. Instruments measuring fear of success other than the FOSS should be factor-analyzed and the results of these analyses compared across the various fear of success scales. Thus, factors that are common to all measures of fear of success can be determined.

The relationship of additional variables, not included in this study, to each fear of success factor would add to the accumulated knowledge of fear of success. Two important variables are; achievement motivation, and competition. The relationship of the motive to achieve success to the cost of success and the importance of success suggests that the higher the cost of success, the lower the importance of success, and an increase in the motive.

Another avenue of fear of success research involves adding new test items to the FOSS scale. Items that tap different areas of success, especially social, would be incorporated into a new fear of success instrument. Thus, the question of sex differences in the meaning of success and the measurement of fear of success could be explored.

This study has challenged the traditional view of fear of success. The findings of this study have questioned the theoretical paradigm of fear of success, as originally conceived by Horner (1968). Future researchers will have the difficult task of unraveling the complexities of the nature of fear of success while developing a theory that can account for the findings of recent research studies.

APPENDICES

APPENDIX A

STUDENT QUESTIONNAIRE

Lewis Krash
E 526 Owen Graduate Hall
Michigan State University

April 6, 1978

Resident Room
Owen Graduate Hall

Fellow Owen Resident:

I would greatly appreciate your helping me to learn more about adult attitudes and values. Would you please fill out the attached questionnaire. Although it may look long, this questionnaire will only take you approximately 20 minutes to fill out. In addition, I may ask 5 more minutes of your time to respond to a shorter similar questionnaire later in the quarter. Nothing else is required. This research that I am doing is part of the requirements for my doctoral degree. Since you have been randomly selected from the Owen population to receive a questionnaire, your response is very important to me. All responses will be kept confidential and you are not asked to put your name or any identifying number anywhere on this questionnaire. When you return this questionnaire, you can detach this cover letter and consent form (please sign below) and return it separately. Thus I will know that you have responded but not which response is yours.

After you have finished filling out this questionnaire and signed the consent form would you please leave them in my box or at the desk. If you have any questions please feel free to contact me. Thank you for your cooperation.

Lewis Krash

CONSENT FORM

1. I freely consent to take part in a scientific study being conducted by Lewis Krash MA, doctoral candidate, Department of Counseling, Personnel Services and Educational Psychology.

2. I have read the above letter and I understand what my participation will involve.

3. I understand that I am free to discontinue my participation in the study at any time.

4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of this study will be made available to me at my request.

5. I understand that my participation in this study does not guarantee any beneficial results to me.

6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed _____

Date _____

Lewis Krash
E 526 Owen Graduate Hall
Michigan State University
E. Lansing, Michigan 48824

Dear Student:

I would greatly appreciate your helping me to learn more about adult attitudes and values. Would you please fill out the attached questionnaire. Although it may look long, this questionnaire will only take you approximately 20 minutes to fill out. This research that I am doing is part of the requirements for my doctoral degree and your participation is very important to me. All responses will be kept confidential and you are not required to put your name or any identifying numbers anywhere on this questionnaire. When you return this questionnaire, you can detach this cover letter and consent form (please sign below) and return it separately. Thus I will know that you have responded but not which response is yours.

Thank you for your cooperation.

Lewis Krash

CONSENT FORM

1. I freely consent to take part in a scientific study being conducted by Lewis Krash MA, doctoral candidate, Department of Counseling, Personnel Services and Educational Psychology, Michigan State University.

2. I have read the above letter and I understand what my participation will involve.

3. I understand that I am free to discontinue my participation in the study at any time.

4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of this study will be made available to me at my request.

5. I understand that my participation in this study does not guarantee any beneficial results to me.

6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed _____

Date _____

1. Sex: Male_____ Female_____ 2. Date of Birth: __ / __ / __
mo. day year

3. U.S. Citizen: Yes_____ No_____ 4. Race: White____ Black____ Other____

5. Educational Level: _____Undergraduate _____Ph.D. candidate

_____MA candidate _____Professional (MD,DC, etc.)

_____Post-Doc _____Other

6. Highest Degree Obtained:

7. Academic Department:

8. Major Area of Study:

9. Year in Program: ____First ____Second ____Third ____Fourth ____Over Fourt

10. Current Marital Status: ____Single ____Married

11. Previously divorced: ____Yes ____No

12. No. of Children, if any:

13. Are you:

_____Formally engaged

_____Dating one person regularly with informal plans for a future committment

_____Dating one person regularly with no informal plans for a future committment

_____Not dating any one person regularly

14. Have you ever had a full time job (exclude any position held for less than one year):

Yes_____ No_____

Family Background Information

1. What is (or was, if retired) your father's occupation?

2. What is (or was, if retired) your mother's occupation?

How old were you when she began working?

Has she worked steadily since then (exclusive of periods of unemployment of less than one year) ?

3. What is your father's educational attainment?

___Less than high school ___MA, MS

___high school ___Ph.D.

___BA,BS ___Professional (MD,JD,DDS,etc.)

___Other (please specify)

4. What is your mother's educational attainment?

___Less than High school ___MA,MS

___high school ___Ph.D.

___BA,BS ___Professional (MD,JD,DDS,etc.)

___Other (please specify)

5. Number of:

Older brothers_____

Older Sisters_____

Younger brothers_____

Younger sisters_____

Respond to the next items by circling one of the responses, 1 to 7.

A response of 1 indicates that you strongly disagree with the statement, and a response of 7 indicates that you strongly agree.

If either parent is deceased, write deceased next to the appropiate item and leave response blank if you are unable to respond.

1. I felt close to my father while growing up.

1	2	3	4	5	6	7
strong disagreement			undecided			strong agreement

2. I feel close to my father now.

1	2	3	4	5	6	7

3. I felt close to my mother growing up.

1	2	3	4	5	6	7

4. I feel close to my mother now.

1	2	3	4	5	6	7

5. I feel that it is important to have a career.

1	2	3	4	5	6	7

6. I feel that having one's own family is important.

1	2	3	4	5	6	7

What is your current grade point average (GPA)? Please respond to the nearest tenth, i.e. 3.4. A= 4.0, B= 3.0, C= 2.0, D= 1.0, F= 0.0.

What grade point average do you realistically expect to get this term?

What grade point average would please you (for this term)?

During the average week (over the term) how many hours do you spend studying?

During the average week how many hours do you spend socializing?

Self Description Inventory

The following statements are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Read each statement carefully; then select one of the five responses listed below by circling the appropiate number:

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

1. I am neither too short nor too tall.

1 2 3 4 5

2. I don't feel as well as I should.

1 2 3 4 5

3. I should have more sex appeal.

1 2 3 4 5

4. I am as religious as I want to be.

1 2 3 4 5

5. I wish I could be more trustworthy.

1 2 3 4 5

6. I shouldn't tell so many lies.

1 2 3 4 5

7. I am as smart as I want to be.

1 2 3 4 5

8. I am not the person I would like to be.

1 2 3 4 5

9. I wish I didn't give up as easily as I do.

1 2 3 4 5

10. I treat my parents as well as I should(use past tense if parents are deceased).

1 2 3 4 5

11. I am too sensitive to things my family say.

1 2 3 4 5

12. I should love my family more.

1 2 3 4 5

13. I am satisfied with the way I treat other people.

1 2 3 4 5

14. I should be more polite to others.

1 2 3 4 5

15. I ought to get along better with people.

1 2 3 4 5

16. I am neither too thin nor too fat.

1 2 3 4 5

17. I like my looks just the way they are.

1 2 3 4 5

18. I would like to change some parts of my body.

1 2 3 4 5

19. I am satisfied with my moral behavior.

1 2 3 4 5

20. I am satisfied with my relationship to God.

1 2 3 4 5

21. I ought to go to church(synagogue, etc.) more.

1 2 3 4 5

22. I am satisfied to be just what I am.

1 2 3 4 5

23. I am just as nice as I should be.

1 2 3 4 5

24. I despise myself.

1 2 3 4 5

25. I am satisfied with my family relationships.

1 2 3 4 5

26. I understand my family as well as I should.

1 2 3 4 5

27. I should trust my family more.

1 2 3 4 5

28. I am as sociable as I want to be.

1 2 3 4 5

29. I try to please others, but I don't overdo it.

1 2 3 4 5

30. I am no good at all from a social standpoint.

1 2 3 4 5

INSTRUCTIONS: Read each statement and set of alternatives carefully. Then select the answer which best describes your own actual feelings or behavior and circle the letter that corresponds to the alternative you have selected for that particular item.

Please answer ALL items, giving only one response for each.

1. Nervousness while taking a test or exam hinders me from doing well.
   a. always
   b. often
   c. sometimes
   d. rarely
   e. never

2. In a course where I have been doing poorly, my fear of a bad grade cuts down my efficiency.
   a. never
   b. hardly ever
   c. sometimes
   d. usually
   e. always

3. When I am poorly prepared for a test or exam, I get upset and do less well than even my restricted knowledge should allow.
   a. This never happens to me.
   b. This hardly ever happens to me.
   c. This sometimes happens to me.
   d. This often happens to me.
   e. This practically always happens to me.

4. The more important the examination, the less well I seem to do.
   a. always
   b. usually
   c. sometimes
   d. hardly ever
   e. never

5. During exams or tests, I block on questions to which I know the answers, even though I might remember them as soon as the exam is over.
   a. This always happens to me.
   b. This often happens to me.
   c. This sometimes happens to me.
   d. This hardly ever happens to me.
   e. I never block on questions to which I know the answers.

6. I find that my mind goes blank at the beginning of an exam, and it takes me a few minutes before I can function.
   a. I almost always blank out at first.
   b. I usually blank out at first.
   c. I sometimes blank out at first.
   d. I hardly ever blank out at first.
   e. I never blank out at first.

7. I am so tired from worrying about an exam that I find that I almost don't care how well I do by the time I start the test.
   a. I never feel this way.
   b. I hardly ever feel this way.
   c. I sometimes feel this way.
   d. I often feel this way.
   e. I almost always feel this way.

8. Time pressure on an exam causes me to do worse than the rest of the group under similar conditions.
   a. Time pressure always seems to make me do worse on an exam than others.
   b. Time pressure often seems to make me do worse on an exam than others.
   c. Time pressure sometimes seems to make me do worse on an exam than others.
   d. Time pressure hardly ever seems to make me do worse on an exam than others.
   e. Time pressure never seems to make me do worse on an exam than others.

9. I find myself reading exam questions without understanding them and I must go back over them so that they will make sense.
   a. never
   b. rarely
   c. sometimes
   d. often
   e. almost always

10. When I don't do well on difficult items at the beginning of an exam, it tends to upset me so that I block on even easy questions later on.
   a. This never happens to me.
   b. This very rarely happens to me.
   c. This sometimes happens to me.
   d. This frequently happens to me.
   e. This almost always happens to me.

Attitudes Inventory

INSTRUCTIONS: In this questionnaire you will find a number of statements. For each statement a scale from 1 to 7 is provided, with 1 representing one extreme and 7 the other extreme. In each case, circle a number from 1 to 7 to indicate whether or not you agree with the statement. This is a measure of personal attitudes. There are no right or wrong answers. Please answer <u>all</u> items.

1. I expect other people to fully appreciate my potential.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

2. Often the cost of success is greater than the reward.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

3. For every winner there are several rejected and unhappy losers.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

4. The only way I can prove my worth is by winning a game or doing well on a task.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

5. I enjoy telling my friends that I have done something especially well.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

6. It is more important to play the game than to win it.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

7. In my attempt to do better than others, I realize I may lose many of my friends.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

8. In competition I try to win no matter what.

Definitely Agree						Definitely Disagree
1	2	3	Undecided 4	5	6	7

9. A person who is at the top faces nothing but a constant struggle to stay there.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

10. I am happy only when I am doing better than others.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

11. I think "success" has been emphasized too much in our culture.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

12. In order to achieve one must give up the fun things in life.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

13. The cost of success is overwhelming responsibility.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

14. Achievement commands respect.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

15. I become embarrassed when others compliment me on my work.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

16. A successful person is often considered by others to be both aloof and snobbish.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

17. When you're on top, everyone looks up to you.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

18. People's behavior change for the worst after they become successful.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

19. When competing against another person, I sometimes feel better if I lose than if I win.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

20. Once you're on top, everyone is your buddy and no one is your friend.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

21. When you're the best, all doors are open.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

22. Even when I do well on a task, I sometimes feel better if I lose than if I win.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

23. I believe that successful people are often sad and lonely.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

24. The rewards of a successful competition are greater than those received from cooperation.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

25. When I am on top the responsibility makes me feel uneasy.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

26. It is extremely important for me to do well in all things that I undertake.

Definitely Agree						
			Undecided			
1	2	3	4	5	6	7

27. I believe I will be more successful than most of the people I know.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

APPENDIX B

NON-STUDENT QUESTIONNAIRE

Lewis Krash
-134- E 526 Owen Graduate Hall
Michigan State University

April 6, 1978

Head Start Staff
Head Start
101 E. Willow St.

Dear

I would greatly appreciate your helping me on some research that I am doing on adult attitudes and values. Would you please fill out the attached questionnaire. This questionnaire will take you approximately 15 minutes to completely fill out. In addition, I may ask you at a later period to fill out another short questionnaire (similar to the first) which should only take you 5 minutes or less. Nothing else is required. This research that I am doing is part of the requirements for my doctoral degree and your participation in this study is very important to me. All responses will be kept confidential and you are not required to put your name or any identifying numbers anywhere on this questionnaire. You can detach this cover letter and consent form (please sign below) and return it separately. Thus, I will know that you've responded but not which response is yours.

After you have finished filling out this questionnaire would you please leave it either in my box or on my desk. If you have any questions please feel free to contact me. Thank you, for your cooperation.

Lewis Krash

CONSENT FORM

1. I freely consent to take part in a scientific study being conducted by Lewis Krash MA, doctoral candidate, Department of Counseling, Personnel Services and Educational Psychology.

2. I have read the above letter and I understand what my participation will involve.

3. I understand that I am free to discontinue my participation in this study at any time.

4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

5. I understand that my participation in this study does not guarantee any beneficial results to me.

6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed _____

Date _____

Lewis Krash
E 526 Owen Graduate Hall
Michigan State University

Head Start Parent
Project Head Start
Lansing, Michigan

Dear

I would greatly appreciate your helping me on some research that I am doing on adult attitudes and values. Would you please fill out the attached questionnaire. This questionnaire will take you approximately 15 minutes to fill out. In addition, I may ask you at a later period to fill out another short questionnaire (similar to the first) which should only take you five minutes or less. Nothing else is required. This research that I am doing is part of the requirements for my doctoral degree and your participation is very important to me. All responses will be kept confidential and you are not required to put your name or any identifying numbers anywhere on this questionnaire. You can detach this cover letter and consent form (please sign below) and it will be returned separately. Thus, I will know that you have responded but not which response is yours.

If you have any questions please feel free to contact me. Thank you, for your cooperation.

Lewis Krash

CONSENT FORM

1. I freely consent to take part in a scientific study being conducted by Lewis Krash MA, doctoral candidate, Department of Counseling, Personnel Services and Educational Psychology, Michigan State University.

2. I have read the above letter and I understand what my participation will involve.

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4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

5. I understand that my participation in this study does not guarantee any beneficial results to me.

6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed_____

Date _____

Demographic Information

1. Sex: Male_____ Female_____ 2. Date of Birth: __ / __ / __
mo. day year

3. Race: White_____ Black_____ Other_____

4. Education: _____Less than high school completed _____MA,MS
_____high school completed _____Ph.D.
_____BA,BS _____Other

5. Current Marital Status: _____Single _____Married

6. Previously divorced: _____Yes _____No

7. Number of Children, if any:

8. If single, are you:
_____Formally engaged
_____Seeing one person regularly with informal plans for a future committment
_____Seeing one person regularly with no informal plans for a future committment
_____Not seeing any one person regularly

9. Are you currently working: _____Yes _____No
_____Full Time _____Part Time
_____At Head Start _____Not for Head Start

Family Background Information

1. What is (or was, if retired) your father's occupation?

2. What is (or was, if retired) your mother's occupation?

How old were you when she began working?

Has she worked steadily since then (exclusive of periods of unemployment of less than one year) ?

3. What is your father's educational attainment?

___Less than high school ___MA, MS

___high school ___Ph.D.

___BA,BS ___Professional (MD,JD,DDS,etc.)

___Other (please specify)

4. What is your mother's educational attainment?

___Less than High school ___MA,MS

___high school ___Ph.D.

___BA,BS ___Professional (MD,JD,DDS,etc.)

___Other (please specify)

5. Number of:

Older brothers_____

Older Sisters_____

Younger brothers_____

Younger sisters_____

Respond to the next items by circling one of the responses, 1 to 7.

A response of 1 indicates that you strongly disagree with the statement, and a response of 7 indicates that you strongly agree.

If either parent is deceased, write deceased next to the appropiate item and leave response blank if you are unable to respond.

1. I felt close to my father while growing up.

1	2	3	4	5	6	7
strong disagreement						strong agreement

2. I feel close to my father now.

1	2	3	4	5	6	7

3. I felt close to my mother growing up.

1	2	3	4	5	6	7

4. I feel close to my mother now.

1	2	3	4	5	6	7

5. I feel that it is important to have a career.

1	2	3	4	5	6	7

6. I feel that having one's own family is important.

1	2	3	4	5	6	7

Self Description Inventory

The following statements are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Read each statement carefully; then select one of the five responses listed below by circling the appropiate number:

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

1. I am neither too short nor too tall.

1 2 3 4 5

2. I don't feel as well as I should.

1 2 3 4 5

3. I should have more sex appeal.

1 2 3 4 5

4. I am as religious as I want to be.

1 2 3 4 5

5. I wish I could be more trustworthy.

1 2 3 4 5

6. I shouldn't tell so many lies.

1 2 3 4 5

7. I am as smart as I want to be.

1 2 3 4 5

8. I am not the person I would like to be.

1 2 3 4 5

9. I wish I didn't give up as easily as I do.

1 2 3 4 5

10. I treat my parents as well as I should(use past tense if parents are deceased).

1 2 3 4 5

11. I am too sensitive to things my family say.

1 2 3 4 5

12. I should love my family more.

1 2 3 4 5

13. I am satisfied with the way I treat other people.

1 2 3 4 5

14. I should be more polite to others.

1 2 3 4 5

15. I ought to get along better with people.

1 2 3 4 5

16. I am neither too thin nor too fat.

1 2 3 4 5

17. I like my looks just the way they are.

1 2 3 4 5

18. I would like to change some parts of my body.

1 2 3 4 5

19. I am satisfied with my moral behavior.

1 2 3 4 5

20. I am satisfied with my relationship to God.

1 2 3 4 5

21. I ought to go to church(synagogue, etc.) more.

1 2 3 4 5

22. I am satisfied to be just what I am.

1 2 3 4 5

23. I am just as nice as I should be.

1 2 3 4 5

24. I despise myself.

1 2 3 4 5

25. I am satisfied with my family relationships.

1 2 3 4 5

26. I understand my family as well as I should.

1 2 3 4 5

27. I should trust my family more.

1 2 3 4 5

28. I am as sociable as I want to be.

1 2 3 4 5

29. I try to please others, but I don't overdo it.

1 2 3 4 5

30. I am no good at all from a social standpoint.

1 2 3 4 5

Attitudes Inventory

INSTRUCTIONS: In this questionnaire you will find a number of statements. For each statement a scale from 1 to 7 is provided, with 1 representing one extreme and 7 the other extreme. In each case, circle a number from 1 to 7 to indicate whether or not you agree with the statement. This is a measure of personal attitudes. There are no right or wrong answers. Please answer all items.

1. I expect other people to fully appreciate my potential.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

2. Often the cost of success is greater than the reward.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

3. For every winner there are several rejected and unhappy losers.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

4. The only way I can prove my worth is by winning a game or doing well on a task.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

5. I enjoy telling my friends that I have done something especially well.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

6. It is more important to play the game than to win it.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

7. In my attempt to do better than others, I realize I may lose many of my friends.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

8. In competition I try to win no matter what.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

9. A person who is at the top faces nothing but a constant struggle to stay there.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

10. I am happy only when I am doing better than others.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

11. I think "success" has been emphasized too much in our culture.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

12. In order to achieve one must give up the fun things in life.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

13. The cost of success is overwhelming responsibility.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

14. Achievement commands respect.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

15. I become embarrassed when others compliment me on my work.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

16. A successful person is often considered by others to be both aloof and snobbish.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

17. When you're on top, everyone looks up to you.

Definitely Agree						Definitely Disagree
			Undecided			
1	2	3	4	5	6	7

18. People's behavior change for the worst after they become successful.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

19. When competing against another person, I sometimes feel better if I lose than if I win.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

20. Once you're on top, everyone is your buddy and no one is your friend.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

21. When you're the best, all doors are open.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

22. Even when I do well on a task, I sometimes feel better if I lose than if I win.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

23. I believe that successful people are often sad and lonely.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

24. The rewards of a successful competition are greater than those received from cooperation.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

25. When I am on top the responsibility makes me feel uneasy.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

26. It is extremely important for me to do well in all things that I undertake.

Definitely Agree						
		Undecided				
1	2	3	4	5	6	7

27. I believe I will be more successful than most of the people I know.

Definitely Agree						Definitely Disagree
		Undecided				
1	2	3	4	5	6	7

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