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A STUDY OF THE INFLUENCE OF EDUCATIONAL

ENVIRONMENT ON 'FEAR OF SUCCESS' IN

HIGH SCHOOL AND COLLEGE WOMEN

by

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ABSTRACT

A series of three projective cues, designed to measure fear of success, were administered to fifty women with co-educational backgrounds (twenty-eight from grade 11 and twenty-two from first year university) and forty-eight women from single-sex schools (thirty from grade 11 and eighteen from first year university). The groups were matched for socio-economic status and intellectual ability. Following the administration of the verbal cues, subjects were tested in competitive and non-competitive conditions on two performance tasks, before which they were asked to estimate their performance. They also completed a Sex-Role Differentiation (SRD) questionnaire and a general information sheet. The results indicated that the level of fear of success was the same for public and private school women in Grade 11 but increased significantly for private school women in university. Women evidencing high fear of success gave lower expectancy estimates of their performance while those low in fear of success made significantly more accurate estimates of their performance on the tasks. Women with high fear of success also held more traditional views of male and female roles as evidence by their higher scores on the SRD scales. However, no significant relationship between fear of success and performance was revealed. The implications of a private school environment for the future education of women were discussed.

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First, I wish to thank the principals, teachers and students of Sentinel Secondary School and Crofton House School for Girls for their cooperation and participation in the study, and the first year students at the University of British Columbia who volunteered their time for this research. I would also like to thank Ann Clement for acting as an independent rater and Virginia Green and Frank Flynn of the Statistics Centre for help with analyzing the data.

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TOBY ROSE YAN

Much research has been carried out to understand the determinants of achievement-oriented behaviour. A theoretically consistent body of data exists which enables one to predict achievement behaviour as a function of the strength of the achievement motive. According to Atkinson, 1966,

> The strength of motivation to achieve at a particular task in a particular situation must be viewed as jointly determined by general disposition to achieve (achievement motive) and an expectancy concerning the consequences of the action defined by situational cues.[1]

The tendency to approach a task, then, is a multiplicative function of the motive to achieve success (Ms), the strength of expectancy (subjective probability) that success will be the consequence of the activity (Ps) and the incentive value of that particular activity (Is): Ts=Ms x Ps x Is. Similarly, the tendency to avoid failure is determined by an individual's motive to avoid failure (Maf), the perceived probability of failure (Pf), and the perceived value of the conseuqences of that failure (If): Taf=Maf x Pf x If. Therefore, the resultant achievement-oriented tendency is dependent on an individual's tendency to succeed, tendency to avoid failure, and on other tendencies aroused by environmental cues (Atkinson, 1966); then Ta=(Ts-Taf)+Text.

Studies have shown an increase in achievement motivation in response to experimental achievement conditions

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[1]J.W. Atkinson, A Theory of Achievement Motivation, Atkinson, J.W. and Feather, N.F. New York, John Wiley and Sons, Incorporated, 1966, p. 52.

stressing intellectual and leadership capabilities and have described significant relationships between achievement motivation and risk-taking behaviour, work partner selection, problem-solving effectiveness and academic performance.

For example, Litwin (1958) has reported that risk-taking behaviour and expectancy of success differed for students high in achievement motivation as compared with students low in achievement motivation. Several weeks before the experimental session, Litwin instructed 78 male college students to write stories to four thematic apperception pictures. These pictures were presented as a test of creative imagination. The stories were then scored for need achievement imagery according to the manual by McClelland et al. (1953). Subjects were also given the first section of the Test Anxiety Questionnaire (TAQ). Twenty subjects were selected with need achievement scores above the group median and TAQ scores below the group median. These were considered to be achievement-oriented subjects. Twenty other subjects, who were named failure-oriented subjects, received need achievement scores below the group median and TAQ scores above the group median. All forty Ss played a series of games in which they had to choose one from a set of tasks varying in difficulty. There were two experimental conditions, one in which Ss estimated probability of success before playing the games, and the other in which no probability estimate was obtained. Achievement-oriented Ss selected tasks of

intermediate difficulty significantly more often than failure-oriented $\underline{Ss}$ who chose tasks of higher difficulty. Achievement-oriented $\underline{Ss}$ also gave higher and more accurate probability estimates of success than failure-oriented $\underline{Ss}$, but not in games where objective cues were present.

Although the expectancy-value theory of motivation has been largely supported by experimental data, its predictive power falls down when achievement motivation in women is concerned. Relatively few studies have dealt with the motive to achieve in women and those that have been done show neither consistency with male data, nor any internal consistency among themselves.

Veroff, Wilcox and Atkinson (1953) found that when confronted with an achievement-oriented condition, American high school and college women did not respond with the predicted increase in need achievement (nAch) imagery on the Thematic Apperception Test (TAT). In the first part of the experiment, male and female high school students were divided into two conditions, a Relaxed condition in which achievement-arousing cues were intended to be minimized, and an Achievement condition where motivation was experimentally increased by increasing achievement-arousing cues. After administration of the thematic stories to both groups, a significant increase in the mean nAch scores from the Relaxed to the Achievement condition was found for male subjects. No such increase was found for females. Even when effects were made

to ensure a relaxed, informal atmosphere in the second part
of the experiment, female Ss (in this case, college women)
still did not show an increase in nAch over the two condi-
tions. The failure to demonstrate an increment in nAch
imagery did not imply a lack of achievement motivation, because
under relaxed conditions, the nAch scores for women were
higher than for the men.

During the second part of the study, an anagrams task
was used as both a vehicle for experimentally increasing
achievement motivation prior to administration of the stories
and as a fairly reliable performance measure of achievement
motivation. Clark and McClelland (1950) reported that for
males the number of anagrams correct increased as nAch in-
creased. Veroff et al. found that for both male and female
pictures, the high nAch group produced more anagrams than
the low nAch group. Therefore, despite the failure to show
an experimentally produced difference in nAch for women over
the two conditions, the relationship of nAch to performance
on an anagrams task is the same for women as for men. It
was also found that pictures containing male and female
figures elicited different responses in terms of need achieve-
ment. Male cues produced significantly more achievement
imagery in both sexes.

Angelini (1955) attempted to replicate Veroff et al.'s
findings and discovered that nAch scores of both male and
female subjects increased significantly after experimental

arousal. For certain female samples, then, experimental instructions which appeal to leadership and academic ability produce an increase in achievement motivation scores. Angelini was dealing with a highly select sample of the female population of Brazil. Only few Brazilian women receive the opportunity to attend university. The women who participated in the study, then, were highly competitive persons who placed high value on academic accomplishment.

Lesser, Kravitz and Packard (1963) chose a group of American women who, they assumed, were comparable to the Brazilian sample Angelini had used. These women attended Hunter High School, a highly competitive school in New York. The subjects were divided into two groups: achievers and underachievers. Both groups were matched for IQ. However, women whose grade averages fell in the first quartile of the class for five-sixths of the preceding semesters were called achievers. Underachievers described a group of women whose grade averages fell in the fourth quartile of the class for the last five-sixth semesters. No differences in response to the experimental arousal conditions were found. Nevertheless, an important second order effect was discovered. The achievement motivation scores of the achievers increased in response to female pictures but not to male pictures. Similarly, the underachievers'scores increased when they produced stories to male versus female

figures. Thus, achievement imagery was engaged and attached to figures whom the subjects viewed as proper agents for it. For the achievers, the female figures' activities were directly related to their own strivings; the underachievers perceived male figures as more appropriate agents for achievement imagery.

Achievement in intellectual endeavours for males is quite consistent with achievement in other areas such as social adeptness and athletics. For women, though, social adeptness is considered to be a primary goal (Bardwick, 1970). Under experimental conditions which aroused concern for social acceptance, Feld (1955) found that need achievement imagery increased for female subjects. Morrison (1955) reports that women's scores based on material containing male and female figures in non-achievement situations were related to performance. Need achievement scores based on male pictures in achievement situations also predicted performance on an anagrams task. However, women's nAch scores which were derived from stories written to pictures of career women were not related to performance. If the scores were to be valid indicators of performance, the picture cues had to be of men only or of females in non-achievement situations.

Veroff (1959) was interested in the relationship of women's attitudes to housework and their achievement scores on TAT figures that showed women in both career situations and domestic scenes. If attitudes change as women pass

through different periods in their lives, then more information can be gathered about the determinants of achievement motivation in females. A measure of women's attitudes toward housework was obtained by a questionnaire which all subjects filled out. Veroff found that elementary school and high school girls responded positively to all TAT figures; that is, their attitudes toward housework were positively correlated with their achievement scores on the TAT figures that showed women in either domestic scenes or career situations. For college women, however, the attitude to housework measure was negatively related to their achievement scores on the career pictures, but positively related to the scores for the domestic TAT scenes. Thus, unlike the consistent responses of the other two groups, the responses of the college women reflected a conflict these women experience with regard to fulfilling the expectations of both a family and a career. For these women, positive attitudes toward household duties are not psychologically compatible with a career. This incompatibility between housework and career does not develop until women reach college, or are of an age where the consequence of the choices they make in life are much more immediate.

From the results of these studies, French and Lesser (1964) concluded that value orientation was an important factor in determining an increase in achievement motivation imagery. They hypothesized that female subjects would respond to arousal cues with increased achievement motivation scores

and high performance relationships when the cues were related to a goal that was relevant to them. The results were disappointing; irrespective of motivational profile, motivation scores were always higher under intellectual arousal when male figures were used, and higher under women's role arousal when female figures were used.

It is evident that results obtained for women in relation to achievement motivation are conflicting and unclear. Sampling differences and methodological problems still account for many of the difficulties in this area of research. Recently, though, Horner (1968) introduced a concept, Fear of Success, which seems to clarify some of the contradictions about females in the achievement motivation literature. Like the tendency to approach success, and the tendency to avoid failure, the tendency to avoid success is dependent on an individual's motive to avoid success (M-s), the perceived probability of the success (Ps), and the perceived value of avoiding the success (I-s), such that

$$T\text{-}s = M\text{-}s \times I\text{-}s \times Ps.$$

The tendency to avoid success (T-s) can have a positive value for many women but takes on a negative value for most men. Therefore, the tendency to achieve is hampered by T-s for some women but not for men. Now T-s can be included in Atkinson's theoretical formulation; thus,

$$Ta = (Ts - Taf - T\text{-}s) + Text.$$

One consistent finding for females has been the attainment of higher anxiety measures for females than for males in a testing situation. Feld and Lewis (1969) stated that girls have higher scores than boys on the Test Anxiety Scale for Children (TASC), and that these differences become greater with increased time at school or with increased age. This achievement-related anxiety has generally been considered to be a result of the motivation to avoid failure; that is, performance in a task may lead to negative consequences. However, women may be just as threatened by the consequences of success as those of failure. Successful achievement may be perceived to lead to rejection or loss of femininity. On the other hand, males are not likely to encounter both sources of anxiety. Their anxiety stems from the expectancy or negative consequences, for example, shame, if they fail the task. Achievement motivation in women, however, may be inhibited by the arousal of both the fear of success and the fear of failure.

For men, academic or intellectual success is consistent with success in other areas such as attractiveness and social adeptness, and primarily holds positive gain. On the other hand, such success has both positive and negative consequences for women. Throughout her education, a girl is faced with a dilemma; she is told to learn the same things as boys and is encouraged to do well by her parents. However, when she reaches adolescence, a change in emphasis concerning achievement

occurs where competition with males is ultimately unre-
warding (Mead, 1949). Success is no longer compatible
with femininity. A girl can display enough of her abilities
to be considered moderately successful, but not too success-
ful. The female role, then, becomes more clearly defined as
non-competitive and achievement is assigned almost exclusively
to the male role (Mead, 1949). It is quite evident, there-
fore, to see why gifted girls do not fulfill their potential
as adults as often as gifted boys (Terman and Oden, 1947).

In an attempt to measure fear of success, Horner gave
90 first-year college women the cue, "At the end of first-
term finals Ann stood at the top of her medical school
class," and asked them to write a story in response to certain
question guidelines. While 59 of the 90 women (65 per cent)
wrote stories containing fear of success themes, only 8 of
the 88 males tested (9 per cent) evidenced any fear of success.
(For the men, the name, John, was substituted for Ann in the
story). Horner also found that the presence of the motive
to avoid success negatively affected the women's performance
in a competitive situation. Women low in fear of success
performed in the same way in a competitive situation as the
male subjects, and did better in this condition than in the
non-competitive condition. In contrast, 77 per cent of the
women, who scored high in the fear of success measure, per-
formed better in a non-competitive situation than during a
competitive one.

It is quite apparent from the data that, for some women, fear of success presents a barrier to the achievement of certain goals. "When highly competent women are faced with a conflict between their feminine image and developing their abilities, they adjust their behaviour to their internalized sex-role stereotype (Horner, 1972).[2] In a study concerning women's vocational preferences, Farmer and Bohn (1971) removed fear of success when they told a group of high school women to pretend that men liked intelligent women and that a woman could successfully combine both career and family responsibilities. After these instructions, career interest, as measured by the Strong Vocational Interest Blank (Women's form), increased for six fields: artist, author, lawyer, life-insurance saleswoman, physician and psychologist, and decreased for the following eight: business, education, teacher, secretary, office worker, elementary school teacher, home-economics teacher, dietition, and housewife. This study suggested that when freed from the fear of social rejection women, who are fearful of entering occupations traditionally viewed as masculine, change their vocational interests in terms of more demanding careers.

If something is to be done to break the psychological barrier that fear of success creates, one must determine when the anxieties concerning achievement develop, and what the precipitating factors are surrounding this occurrence. One area of research involves the study of the relationship

[2]M.S. Horner, Towards an understanding of achievement-related conflicts in women, Journal of Social Issues, 1972, 28(2), p. 173.

of parents' behaviour to their children's achievement
behaviour. Katkovsky et al. (1964) found sex differences
between parents' attitudes toward their own personal
achievements and toward the achievement behaviour of their
children. The importance parents placed on intellectual
competence for their daughters was closely tied to the
values they held for themselves. However, the importance
they placed on intellectual achievement for their sons was
more independent of the values they held for themselves.
The findings were different for minimal standards of per-
formance. Parents set standards for their sons more similar
to their own standards for intellectual performance than for
their daughters. Fathers, especially, wanted their sons to
perform as well as they would like to themselves.

These differences in parents' attitudes towards
children's achievement and performance may reflect a cultural
stereotype regarding children's achievement activities. It
is quite acceptable for young girls to emphasize intellectual
achievement and to do well in school. Yet, it is not as
appropriate for boys to do so well as to be labelled a book-
worm. Therefore, parents may consider it more important for
girls than for boys to do well at this age; but, in setting
similar minimal standards of performance for boys as for
themselves, parents show that their sons must meet certain
standards of achievement. They are willing to accept less
from girls, but boys must achieve a particular standard of

performance in order to ensure future vocational success. Katkovsky et al. show that parents emphasize intellectual achievement for girls to a certain extent, but do not follow through or encourage them as much as boys. If girls know that less will be accepted from them and that achievement for them is not that important, they may not put forward the effort to perform as well as they could.

Crandall et al. (1964) found more significant correlations between parents' attitudes and behaviour and their daughters' academic achievement than for their sons' performance. For girls, the amount of achievement and amount of approval-seeking behaviour was positively related, but for boys, this relationship did not hold. Furthermore, while maternal nurturance and affection was negatively related to girls' achievement, the results for boys were largely inconsistent. Crandall interpreted these findings as evidence for the independent character of achievement in boys. Achievement behaviour in boys is autonomous of adult or other external influences; boys take responsibility for themselves. On the other hand, girls' achievement behaviour is tied to the reactions of others and is dependent on the approval it can win from others.

Bardwick argues that for women, the need to affiliate is often fused with the need to achieve. Women use achievement as a way of securing love and approval, whereas, for men, successful achievement has positive merit in its own right.

Therefore, women value success when it brings positive rein-
forcement from others; however, if it brings negative re-
actions from others, then it may acquire a negative value.

From a study of 42 mother-child pairs, Berens (1973)
concluded that a pattern of experiences exists which is
associated with high achievement motivation in <u>both</u> boys and
girls. These experiences include a strong encouragement of
achievement by the mother and expectations for achievement
and independence from her child. For boys, the most important
single variable that discriminated high achievers from low
achievers was a warm supportive relationship with the mother.
As all girls reported warm mother-daughter interactions, this
variable did not separate high and low achievers for females.
However, maternal demands made for independence were related
to the development of achievement motivation in girls.
Berens emphasized that "for both boys and girls some elements
of parental training inconsistent with traditional sex-role
stereotypes seem to contribute to producing high levels of
achievement motivation."[3] A warm mother-child relationship
is more typical of girls; but, all of the other factors
related to the development of achievement motivation, such
as early demands for independence and high verbal inter-
ference, are more characteristic of the socialization process
of boys. The pattern of experiences associated with the
development of achievement motivation seems to be incompatible
with the sex-role socialization pattern for girls. It is,

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[3]A. Berens, Sex-role stereotypes and the development of
achievement motivation, <u>Ontario Psychologist</u>, <u>5</u>, 1973, p. 33.

therefore, more likely for boys to develop high achievement motivation and to sustain it throughout their lives.

Veroff (1969) put forward the hypothesis that, in order to have a mature orientation to achievement, one must master the three developmental stages of achievement motivation. The three stages are: (1) autonomous competence, (2) social comparison about achievement, and (3) autonomous achievement motivation integrated with social comparison strivings. For mastery of stage one, demands and opportunities for independence must be appropriately timed and support for autonomous activity must be given. Stage two requires that the child feel adequate in comparison with the significant others in his peer group. Finally, stage three demands a sense of independence and effectiveness on the part of the person apart from his or her social group.

One type of orientation, Veroff discussed, was fear of success. A person high in fear of success has mastered social comparison in spite of earlier inconsistent experiences with successful autonomy strivings. This person is successful in competition with others, but fears the consequences of success. Boys generally perceive fewer conflicts and ambivalent feelings regarding autonomy than girls. If girls are not allowed the early experiences required for the development of autonomous competence, then they will not reach a complete development of achievement motivation.

Hoffman (1972) is generally in agreement with Veroff. Between one and three years of age, timing of independent experiences is critical; the child must not be thrown to the outside world too early. He or she needs a secure base from which to explore; but if the parent waits too long and does not give adequate encouragement for independent strivings, then autonomy will not be fostered. Kagan and Moss (1962) reported that maternal protectiveness in the first three years of life was negatively related to achievement behaviour as an adult. Because of differential parental attitudes and behaviour toward male and female infants, girls are more protected and soon learn that they can depend on mother for comfort and consolation without being rejected. The achievement of male children draws clearcut sanctions from parents, but the ambivalent feelings they have about girls' achievements are conveyed to the girls and may lead them to doubt their own competence. Since a girl has less parental encouragement for independence, more parental protectiveness, and less pressure for establishing a separate identity from the mother, she is likely to engage in less independent exploration of her environment than a boy her age.

Bardwick proposes that academic and professional achievement does not present a conflict for middle-class girls until it begins to threaten social achievement during adolescence. Several studies have supported this statement (Horner, 1972; Kimball, 1972). Horner found an increase in

fear of success imagery in girls between junior and senior
high school and between the first and last years of college.
In a study of grade 8 and grade 12 students at private
schools, Kimball found an increase in fear of success imagery
for girls between grades 8 and 12, but no comparable increment
for boys.

As boys move through high school, academic values
become more important, but for girls, they begin to take
second seat to social leadership. After experiencing reward
for achievement, on previous occasions, girls begin to find
achievement threatening to their affiliative needs and to
their femininity and, therefore, concentrate less on academic
achievement. However, after the affiliative needs have been
satisfied through marriage and child rearing, the need to
achieve returns. Baruch (1967) reported that in a study of
Radcliffe alumnae, achievement motivation dropped 5 to 10
years after college, but increased after 15 years after
graduation and remained stable thereafter.

Women are supposed to perform well, but are not
supposed to publicly say they are competent. Viriginia
Crandall (1969) reports that girls give expectancy estimates
of their performance that are consistently lower than boys'
estimates. Males appear relatively more optimistic about
their performance than females. In an experiment where feed-
back about performance given to subjects was either neutral
or contradictory, Crandall found that the two sexes resolved

the conflicts they experienced about the reports in different ways. Boys' expectations about their achievements increased, whereas girls suffered a decrement. Even with a basis for prediction such as past grades in a course, boys overestimated their performance on a test while girls' estimates were lower than their grades warranted.

Several studies have shown that height of expectancy of success, whether it be on novel tasks or future grades, does predict performance at approximately equal levels for both sexes. Battle (1965) and Feather (1963) demonstrated that height of expectancy predicted the amount of goal approach behaviour that occurred. Both male and female junior high school students, who reported high expectation of success in their mathematics courses, spent more time on a difficult mathematics problem than students with low expectation of success. (Battle, 1965). Similarly, college subjects, who had high initial expectations of success on a difficult reasoning problem, persisted longer in an attempt to solve it than subjects with low initial expectancies (Feather, 1963).

In a study where expectancies were experimentally controlled, Tyler (1958) found that subjects, who were given high expectancies of success through encouraging remarks from the examiner during pretest trials, reached the solution of a novel pattern--learning problem more frequently than Ss who were given low expectancies through discouraging comments.

Furthermore, significantly fewer Ss with low expectancies
conceptualized the logical steps involved in the solution
of the problem. They used rote memorization to give the
proper series of responses.

Feather (1966) reported that Ss, who were given high
expectancies by previous success trials, performed better
on an anagrams task than those who were given low expec-
tancies with previous failure trials. Finally, in a series
of experiments with different tasks and age groups, Crandall
et al. (1965) found that the height of expectancy was a good
predictor of academic competence. Correlations of expectancy
estimates from the studies averaged .53 with grades and .50
with achievement test scores.

Undoubtedly, low expectancies have a deleterious effect
on performance and can prevent one from being too successful.
Whether a woman internally believes that she will perform
poorly on a task, or whether fear of social rejection leads
her to deliberately give an erroneous estimate of performance,
low expectancies are not beneficial for one's self-esteem or
for freedom from anxieties. Since a person high in fear of
success is more anxious about the consequences of success, he
or she would tend to play down his/her capabilities and would
underestimate his/her performance on a task to a greater
extent than would a person who did not fear success. Given
these low expectancies, low performance and thus a lack of
success would almost be guaranteed.

In a study of attitudes to sex roles, Lambert (1967) gave a large sample (7500) of ten to sixteen year old boys and girls across Canada, a questionnaire which was designed to measure differences in attitudes and behaviour toward the sexes with respect to personality traits, behaviour, jobs, parental power and discipline, parental caring, authority relations and peer relations. Other items were included in the questionnaire which tapped variables that were hypothesized to be related to the Sex Role Differentiation (SRD) measures. Some of these variables were: birth order, number of siblings, amount of power the child has in determining what the family does, and amount and kind of feeling expressed in the family. Questionnaires were also distributed to parents (a majority of whom were mothers) and teachers. The parent questionnaires attempted to measure traditionalism and the mother's concept of the female role. The teacher's questionnaire gathered more information about the pupil's behaviour and attitudes towards the opposite sex, personal background and attitudes toward traditional institutions.

Lambert reported three major findings:

1) a positive relationship between parental role differentiation and sex-role differentiation existed;

2) boys who shared in the distribution of power within their families tended to sex-type more than boys who had little power; the relationship was reversed for girls, and

3) subjects who interacted differently with the sexes thought in segregated ways about the sexes.

Lambert also found relationships between sex-role imagery
and other behaviours. Children who dated were somewhat more
prone to sex-type. In addition, girls who sex-typed were
less likely to do well academically than those who did not
sex-type.

Wren's study (1972) of the effects which the motive
to avoid success have on college women's attitudes to
marriage, careers, and vocational choices concluded that
those women, high in fear of success, held negative attit-
tudes toward careers, and defined success in terms of
marriage and a family. It follows that these preferences
of women high in the motive to avoid success for traditional
female activities would be reflected by Lambert's SRD scales.
In contrast, women, low in fear of success, would be expected
to show a less stereotyped view of the female role than women
high in fear of success.

Although Lambert studied children from urban and rural
schools, he did not take into consideration whether sex-role
differentiation would be affected by coeducational versus
single-sex schools. One of the questions which Horner has
raised about the development and arousal of the motive to
avoid success deals with the influence of the educational
environment on the arousal of this motive. Does attendance
at a non-educational school reduce the impact of the motive
to avoid success so that women can develop their interests
and potential more fully? If these women are not afraid of
success, as evidenced by their choice of career and desire

for further education, will this influence and support continue after they leave this kind of academic atmosphere? This thesis is an investigation of these issues which Homer has raised.

Private, non-coeducational schools usually have traditions of high academic standards and encourage their students to do well. Students are often faced with vigorous competition in order to attain high academic success, and the desire for further education and interest in careers is quite strong. While girls who attend co-educational institutions may be just as achievement-oriented as the private school girls, in a private school, academic life is independent of social life simply because of the absence of male students. In a co-educational school, the two cannot be separated and, consequently, may provide a conflict situation for the girls who attend. Those girls who are intellectually capable of doing a task may not perform well when faced with mixed-sex competition. Private school girls do not meet this situation, and are not given the opportunity to resolve any conflict that may occur; but when they reach university, these women will be confronted with male competitors immediately. For the co-ed, the experience will not be a new one and, therefore, not as shocking. Then, for the private school girls, it is possible for an academic-social conflict to appear, resulting in a decrement in performance because of the arousal of the motive to avoid success.

Therefore, on the basis of the above assumptions, the hypotheses of the thesis are as follows:

1) Women from non-coeducational high schools (grade 11) will show fewer fear of success responses to projective stories than women from coeducational high schools (grade 11);

2) Women in first year college who spent their high school years in non-coeducational institutions will show more fear of success responses to projective stories than their counterparts from coeducational high schools and than women in attendance at private schools;

3) Women with high motive to avoid success will demonstrate a higher level of performance in a non-competitive situation than in a competitive one, whereas women with low motive to avoid success will show better performance on a task in a competitive situation than in a non-competitive one;

4) Women with high motive to avoid success will underestimate their test score results; that is, their expectation of their performance on the tasks will be lower than the actual level of performance. However, women with low motive to avoid success will make significantly more accurate predictions of their performance than women high in fear of success;

5) Women high in fear of success will have a more traditional view of male and female roles than women low in fear of success, as evidenced by their high scores on the Sex Role Differentiation measures in the attitude questionnaire.

METHOD

Subjects

Four groups of middle-class females were selected for this study. One group of 28 girls was chosen from the grade 11 class of Sentinel Secondary School in West Vancouver,

a coeducational high school. A second group of 30 girls
was selected from Crofton House School for Girls, Grade 11,
a private non-coeducational school. The third group con-
sisted of 20 first year university students who attended
non-coeducational high schools and the fourth group included
22 freshmen women from coeducational high schools in West
Vancouver. The high school and college groups were matched
for socioeconomic status and intellectual ability in order
to prevent confounding of the experimental results of these
variables.

Procedure

Socioeconomic status was determined by father's
occupation and educational background. A questionnaire
concerning family background was distributed to all subjects
in order to gather this information (see Appendix A). A
measure of intellectual ability was obtained from the
Vocabulary subtest of the Wechsler Adult Intelligence Scale
(see Appendix B). The Vocabulary subtest of the WAIS has
been shown to correlate highly (.87) with the total IQ score
over the entire test (Wechsler, 1958). The questionnaire
was administered in a group setting, but because of the
nature of the WAIS, the vocabulary test was given individually.

Once the groups were matched, the administration of
the fear of success measures began. Each subject was given
a booklet containing instructions and four specific situa-
tions about which she must write a store (see Appendix C).

The order of the four stories were counterbalanced across subjects. One story was taken directly from Horner:

> After first term finals Ann finds herself
> at the top of her medical school class.

<div align="right">(Horner,1968, p. 59)</div>

Certain questions were asked to guide the reader:

1) What has led up to the situation?
   What has happened in the past?

2) How does Ann feel? What is she thinking?

3) What will happen in the future?
   What will Ann do?

The second story involved a different setting:

> For the past year Phyllis has been working
> on a new television station. Finally, CITY-TV
> is scheduled to start broadcasting next month.
> Phyllis is named as one of the executive pro-
> ducers.

The third story was concerned with a supposedly less threatening situation than the others:

> For a number of months Mary has been chief
> fund raiser at the university for the Hospital
> Fund. This year, a new record was set for the
> amount of money collected. As a result, the
> organization has called a special meeting of
> all its members to honour Mary and to present
> her with an award.

The job of fund raiser is a more typical feminine activity and was included in order to provide some information regarding the conditions which arouse the motive to avoid success.

The fourth story was designed as a control. The content had no relationship to achievement motivation:

Margaret and Ken have been going steady
for a few months. Now it seems as if they
are going to break up.

Since the sex of the character does not affect the content

of the stories written (Kimball, 1972), only female names

were used in the achievement-oriented stories. All subjects

were given six minutes to write as complete a story as

possible.

The second part of the experiment investigated the

effect of competitive conditions on performance in various

tasks. Under the assumption that the motive to avoid

success is more strongly aroused in competitive conditions

than in non-competitive ones, Horner found that women high

in fear of success would perform more poorly in a compe-

titive than in a non-competitive achievement situation.

In order to compare the performance of each person

in a competitive and non-competitive situation, all subjects

were tested in both a group setting and an individual

setting. The competitive performance task was an anagram

test taken in a group setting. The instructions were worded

in such a way as to emphasize the competitive nature of the

condition. Subjects were told that the test was a measure

of "general intelligence" and were given ten minutes (two

minutes per page) to do the test. The words for all four

groups of subjects were the same as those used by Horner

(1968). The test and instructions are given in Appendix D.

The non-competitive task was a word generation test. Subjects were told that the purpose of this part of the study was to find out how many shorter words could be made from a longer word. All subjects responded to three words: generation, transcience and degradation, and were given five minutes per word. The non-competitive task condition was structured such that anxiety and competitiveness were minimized. (See Appendix E for the instructions and the test). Students were called out individually for this test and examined alone. Since the presence of the examiner could have introduced variables that could alter the nature of the condition, she was present just long enough to greet the subject and present her with the written instructions. The examiner would then turn on a tape recorder which gave more detailed instructions and timed the subject's performance.

Included in the instructions for both tests was the question: "How well do you expect to do on this test?" This question attempted to evaluate how accurately subjects assess their own performance. The subjects were given six choices and were expected to check one of the six. The choices available were: very well, well, fair, not too well, poorly, and very poorly.

The final part of the study consisted of an attitude questionnaire for which most of the items were taken from Lambert's Sex Role Differentiation Questionnaire (see Appendix F). All subjects filled out the questionnaire

during class time. The SRD Questionnaire consisted of two major parts. The first part contained three groups of items (out of a total of five) which measured how the subject perceived sex roles. These groups were jobs, peer relations, and authority relations. The second part consisted of four groups of items which measured how the subject perceived her parents' dividing of family responsibilities: household activities, discipline, power in making decisions, and support of the children. Each SRD item consisted of a verbal description, for example, "does the shopping," which the subject rated on both of two seven point scales. One scale was entitled "Girls Your Age or Mother" and the other was labelled "Boys Your Age or Father." The sum of the scores for all individual items was the score for that group. Therefore, if a subject perceived no differences between boys and girls or mother and father on these activities, the SRD score would approach zero.

Several other items were included in the questionnaire. These questions dealt with the educational background and work status of the subjects' mothers and the educational and occupational goals of the subjects themselves. Another item was concerned with the importance of achieving these goals to the subject. Subjects were also asked which factors, they felt, were most important in making a job choice and which attributes they considered most helpful in getting along in the world. A copy of the questionnaire is included in Appendix A.

RESULTS

The high school and university groups were matched for socioeconomic status and intellectual ability. All subjects fell within Social Class I and Social Class II as defined by Hollingshead and Redlich (1958). A X^2 test of differences in social class for public and private school subjects was not significant: (X_1^2=.018, $p > .05$ for the grade 11 group and X^2=.005, $p > .05$ for the university group). Application of a X^2 analysis to the scores obtained from the Vocabulary subtest of the WAIS showed no differences in intellectual ability between the groups (X_1^2=.004, $p > .05$ for the grade 11 group and X_1^2=.046, $p > .05$ for the university group).

All three projective cues were scored 0,1,or 2 according to the degree of fear of success present in the protocols. The fourth story, which had no relationship to achievement motivation, was included as a control and was not scored. A score of 0 was assigned if fear of success was absent and a score of 1 or 2 was given if the motive to avoid success (M-s) was present. Following Horner's scoring technique, M-s in the stories were given 2 points if the subject expressed concern about the following:

    a) negative consequences because of the success;

    b) anticipation of negative consequences because of the success;

    c) instrumental activity away from present or future
        success including leaving the field for more
        traditional female work such as teaching,
        nursing, or social work;

    d) any direct conflict about success;

    e) denial of the situation described by the cue;

    f) bizarre, inappropriate, unrealistic or non-
        adaptive responses to the situation described
        by the cue.

A score of 1 was assigned if the story was largely positive except for mention of negative effect, negative social consequences because of the success, or some mild form of denial of effort. For example, if the subject expressed some anxiety over disapproval of her activities by her friends, or stated that she had not worked that hard to achieve first-class standing, then the story was considered mild in fear of success. On the other hand, if cheating had been mentioned as the reason for success, then this story was classified as strong in fear of success. Each subject, then, received a score for each story and a total fear of success score which was the sum of the three individual scores. All of the stories were scored by two independent raters with .90 per cent agreement. The other 10 per cent of the stories were included with the other data. In this case, the least extreme scores were selected for analysis.

The results were analyzed in a 2x2x3 analysis of variance with type of school background (public and private) and grade level (high school and university) treated as

between-subjects variables, and the projective cues (Phyllis, Ann and Mary stories) treated as a within-subjects variable. Women with private school backgrounds had significantly higher fear of success scores (based on all three cues) than women with a coeducational background, $F_{(1,94)}=7.42$, $p<.001$. The main effects for grade level did not reach statistical significance $F_{(1,94)}=.87$, $p>.05$.

TABLE I

SUMMARY OF THE ANALYSIS OF VARIANCE OF
FEAR OF SUCCESS AS RELATED TO WMEN WITH
PUBLIC AND PRIVATE SCHOOL BACKGROUNDS
IN GRADE 11 AND UNIVERSITY

SOURCE	SS	df	MS	F	P
Between Subjects	114.8333				
School	8.05037	1		7.569	.007*
Grade	.92841	1		.873	
School x Grade	5.87894	1		5.527	.0198*
Subjects within groups	99.97558	94	10.6357		
Within Subjects					
Story	1.81796	2	.90898	2.395	.09
School x Story	.02841	2	.014205	.037	
Grade x Story	.11427	2	.057135	.151	
School x Grade x Story	.74423	2	.372115	.999	
Story by Subj. Within groups	71.34167	188	.379477		
Within Cell	171.31725	282			

Figure 1 shows the significant interaction of type of school x grade level, $F_{(1,94)}=5.42$, $p<.019$. For public school women, fear of success decreased somewhat from high school to university; on the other hand, for private school women, fear of success increased greatly from high school to university.

Figure 1. Means for Fear of Success of Public and Private School Groups in High School and University.
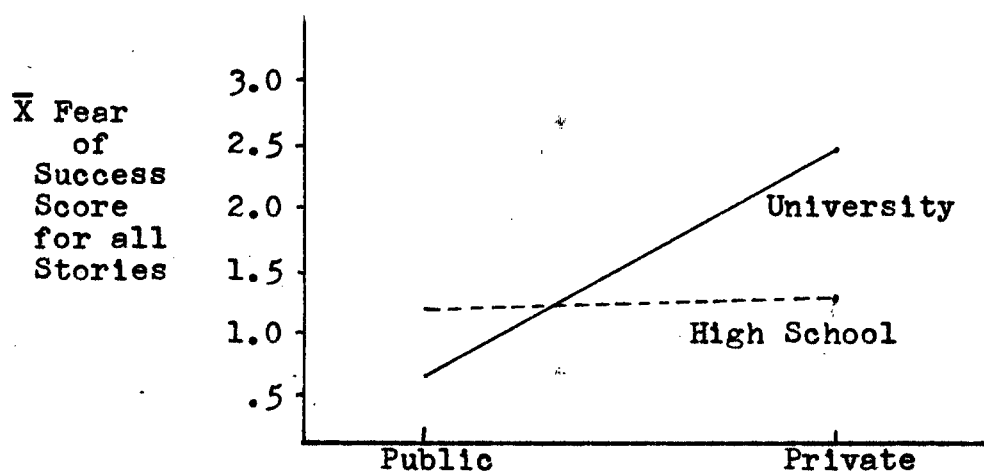
The within-subjects factor, story, failed to reach the generally accepted statistical level of significance, $F_{(2,188)}=2.39$, $p<.09$. However, comparisons between means show that Ss wrote fewer fear of success stories to story three (Mary) than to the Ann story, $p<.08$.

A X^2 analysis demonstrated that there was no difference in the number of fear of success stories told in high school between public and private school students. Twenty per cent of the public school students told at least one fear of success

story compared to 25 per cent of the private school subjects. University women from private schools, however, told significantly more fear of success stories than women with public school backgrounds. In this group, 46.6 per cent of the women who attended private schools wrote at least one fear of success story compared with 13.6 per cent of the women with coeducational backgrounds (X_1^2=16.58, p<.001).

Significant differences between university students from public schools and university students from private schools were found for two cues individually. Fifty-five per cent of the private school university students wrote fear of success stories to the Ann cue compared with 18 per cent of the women from public schools (X_1^2=4.52, p<.05). Similarly, 40 per cent of the private school Ss wrote fear of success stories to the Mary cue whereas only 9 per cent of the women from public institutions responded with fear of success imagery (X_1^2=4.75, p<.05). Although the data for the Phyllis cue failed to reach the conventionally accepted level of significance, there was evidence for a strong trend (X_1^2=3.66, p<.06), which supports the hypothesis that university students with non-coeducational backgrounds show more fear of success on projective measures than their counterparts from coeducational high schools.

It was found that in an analysis of the three fear of success cues across all subjects, significantly more fear of success stories were told to the Ann cue than to the Mary

cue ($X_1^2 = 5.58$, p $<$.05). Out of the total number of fear of success stories written, 43 per cent were told to the Ann cue while only 25 per cent of them were told to the Mary cue. Yet, there were no differences between responses to the Phyllis and Mary cues ($X_1^2 = 1.15$, p $>$.05). Thirty-three per cent of the fear of success stories were told to the Phyllis cue compared with 25 per cent told to the Mary cue.

A comparison of fear of success imagery in high school and university showed that an increase occurred for private school women between grade 11 and first year university; 46.6 per cent of the college students responded with fear of success imagery as compared with 25.5 per cent of the women in high school ($X_1^2 = 7.21$, p $<$.01). There was no such increment for public school women over the same period of time ($X_1^2 = 1.01$, p $>$.05). For this group 20 per cent of the university women told fear of success stories compared with 13.6 per cent of the high school women.

It was hypothesized that women high in fear of success would perform better in a non-competitive situation, whereas those low in fear of success would show better performance in a competitive situation. For each subject, the number of items attempted and the number of items completed correctly on both the competitive and non-competitive tasks were changed to standard scores. Then, a comparison between the two tasks was made for both the number of items attempted and the number of items correct. This comparison was made for each subject.

All Ss were divided into two groups, High and Low Fear of
Success, based on the degree of M-s present in the
responses to the 3 projective cues. Subjects who received
a score of 2 on at least one of the 3 stories were classified
as High M-s; subjects with scores of 0 on all 3 stories were
included in the Low group. Subjects with scores of 1 on any
of the 3 stories were eliminated from the comparisons.
Performance on the competitive and non-competitive tests was
then compared to the degree of fear of success present. The
percentages of the Ss in each grade and school group who per-
formed as expected are given in Table II. Performance in non-
competitive and competitive conditions was not related to the
degree of fear of success imagery expressed in the stories
$(X_1^2 = .09, p > .05)$.

TABLE II

PERCENTAGE OF SUBJECTS AT EACH GRADE
LEVEL AND SCHOOL BACKGROUND WHO PERFORMED
AS EXPECTED ON THE COMPETITIVE AND
NON-COMPETITIVE TASKS

	Grade Level	
School Background	Grade 11	University
Public	61	50
Private	43	47

A comparison of strong and mild fear of success stories
was also made. A story was considered strong if it had been
assigned a score of 2 and mild if it had received a score of 1.
Mild stories were largely positive in tone except for some
anxiety or concern over the success.

No differences in the number of strong and mild fear of success stories were present between public and private school women in grade 11. However, in the university group, 85 per cent of the private school women, who told fear of success stories, told at least one strong story as compared with 37.5 per cent of the women from coeducational schools (X_1^2=9.44, p<.005). In addition, women from public school wrote significantly fewer strong stories in university than in high school (X_1^2=9.93, p<.005). Twenty-seven per cent of university women, who wrote fear of success stories, told at least one strong story compared with 94 per cent of the high school women. Performance on the competitive and non-competitive tasks was compared to the kind of fear of success stories told, but no significant relationship was found between performance and the type of story written.

No relationship was found between presence or absence of fear of success and the scales of the SRD questionnaire. The correlations between the SRD measures and performance on the competitive and non-competitive tests were also insignificant. A consistent finding, though, was the positive relationship of the expectancy estimates to performance on the Word Generation and Scrambled Words tasks (r_{93}=.21, p<.05, and r_{93}=.25, p<.02, respectively). Correlations also demonstrated that performance on the Scrambled Words task was positively related with performance on the Word Generation test (r_{93}=.69, p<.001), results which were reported in Horner (1968).

When correlations were performed on particular groups for all the variables, certain trends emerged from the data. A greater number of significant relationships between SRD measures and expectancy, SRD and performance, and SRD and fear of success was found for college $\underline{Ss}$ than for high school $\underline{Ss}$ (X_1^2=3.93, p<.05). Expectancy estimates on the Word Generation task were negatively related to the job and parental power scales of the SRD measure (r_{39}= -.36, p<.05, and r_{39}= -.39, p<.05, respectively). This expectancy estimate was also related to the total SRD measure for university students private school backgrounds (r_{18}= -.50, p<.05). Therefore, university students with low expectations of their performance are likely to score high on the sex-role differentiation measure; that is, these students are more likely to sex-type than are students with high expectations of performance.

Another interesting relationship involved fear of success and the SRD scales. It was hypothesized that women high in fear of success would sex-type to a greater degree than women low in fear of success as measured by the SRD scales. The hypothesis was supported in part. College women's fear of success scores on the Ann story were significantly related to the parental lower scale of the SRD

measure (r_{39}=.35, p <.05). For college students from co-educational high schools, the total fear of success score was correlated with the parental authority scale (r_{21}=.52, p <.02), and reflected a definite trend towards a relationship with the total SRD measure (r_{21}=.39, p <.07). The data from this group also showed a relationship between fear of success scores on the Mary cue and parental discipline scale of the SRD (r_{21}=.44, p <.05). In addition, a relationship between the fear of success scores on the Phyllis story and the peer relations scale was found for college women with private school backgrounds, (r_{18}=.45, p <.05).

Some evidence was provided for a relationship between fear of success and expectancy estimates of performance. College students' fear of success stories to the Ann cue for both public and private school university students were negatively related to expectancy estimates on the Scrambled Words test (r_{39}= -.37, p <.05). Subjects with low performance estimates told stories high in fear of success, while Ss with high estimates told stories with little or no fear of success imagery. Finally, performance on the Scrambled Words test was associated with the SRD score for university students. Subjects with high scores on the Scrambled Words test obtained a low total SRD score, whereas Ss with low performance scores obtained a high SRD measure (r_{39}= -.31, p <.05).

Several other items in the questionnaire which dealt with mother's occupation and daughter's vocational goals, and

the importance of attaining these goals to the satisfaction of the subject in later life were investigated. Since most of the mothers were housewives, it was difficult to assess whether a relationship existed between a woman's desire for further education or responsible vocation and the fact that her mother worked outside the home. Therefore, a comparison was made between the mother's educational level and her daughter's goals, but no relationship was found.

From the findings of Farmer and Bohn (1970), it seemed possible that women with high M-s would be less likely to choose an occupation that was traditionally viewed as male-dominated than if these women were low M-s. Although the results did not reach statistical significance, there was a small degree of evidence for some trend in that direction (X_1^2=1.82, p <.15). The relationship of fear of success to factors most important in selecting a job and to attributes necessary in getting along in the world was looked at but no trends emerged. Most $\underline{Ss}$, regardless of level of M-s, indicated that their goals were important, at least, but that they still could be happy if they did not reach them. The two primary factors in job selection were enjoyment in doing the type of work and financial security, respectively. Good character was chosen as being the most important attribute in getting along in the world; the second choice was friends.

Subjects high in fear of success were expected to underestimate their scores on the performance tasks, while those

low in fear of success were expected to make significantly more accurate estimations of performance. Since the estimates of performance tended to cluster around values 3 and 4 (fair and not too well) of the 6 available categories, only the data of the $\underline{Ss}$ who made extreme estimates were included in an analysis. Data from $\underline{Ss}$ whose responses clumped in the middle range had been tested but did not yield any significant findings., Given the extreme estimates, a high estimate was defined as choices of 1 or 2 (very well and well); low estimates were defined as choices of 5 or 6 (poorly and very poorly). A X^2 analysis demonstrated that for scores above the mean, $\underline{Ss}$ high in fear of success made a significantly greater number of lower expectancy estimates than $\underline{Ss}$ low in fear of success on both performance tasks combined ($X_1^2=6.52$, p $<.05$). Application of the Fisher Exact Test to the estimates for each test separately showed significantly lower expectancy estimates of performance made by $\underline{Ss}$ high in fear of success on both the Scrambled Words test and the Word Generation test, p $<.003$ and p $<.026$, respectively. Because the relationship of fear of success to the expectancy estimates for $\underline{Ss}$' scores below the means could be confounded by the tendency to make lower estimates for lower scores, only scores above the mean were selected for analysis.

TABLE III

NUMBER OF HIGH AND LOW ESTIMATES OF PERFORMANCE
ON SCRAMBLED WORDS AND WORD GENERATION TASKS FOR
SUBJECTS HIGH AND LOW IN FEAR OF SUCCESS

Fear of Success Imagery	Estimates of Performance	
	High	Low
High	2	5
Low	12	1

TABLE IV

NUMBER OF HIGH AND LOW ESTIMATES ON
SCRAMBLED WORDS TASK FOR SUBJECTS HIGH AND
LOW IN FEAR OF SUCCESS

Fear of Success Imagery	Estimates of Performance	
	High	Low
High	1	3
Low	9	1

TABLE V

NUMBER OF HIGH AND LOW ESTIMATES OF PERFORMANCE
ON THE WORD GENERATION TASK FOR
SUBJECTS HIGH AND LOW IN FEAR OF SUCCESS

Fear of Success Imagery	Estimates of Performance	
	High	Low
High	1	2
Low	3	0

In order to test the second part of the expectancy-performance hypothesis, $\underline{Ss}$' performance scores were compared to their expectancy estimates--high, medium and low, and then divided into two groups, accurate or inaccurate estimations of performance. A medium expectancy (3 and 4) was considered

an accurate estimate of performance if the test score fell
within one standard deviation (SD) above or below the mean
score of the group. A high expectancy (1 and 2) was regarded
as an accurate performance estimate if the score fell above
one SD above the mean. Low expectancies (5 and 6) were con-
sidered accurate if the score fell below one SD below the
mean. The performance estimates of the groups were then com-
pared with fear of success and a X^2 analysis performed on the
data. Sixty-three per cent of the Ss with low M-s accurately
estimated their performance as compared with 44 per cent of Ss
with high M-s ($X_1^2 = 5.16$, p $<$.05). When an analysis was done
with scores above the means only, the relationship of fear of
success to accuracy of performance estimates held firm
($X_1^2 = 10.05$, p $<$ .005).

TABLE VI

NUMBER OF ACCURATE AND INACCURATE ESTIMATES OF
PERFORMANCE MADE BY SUBJECTS WITH
HIGH AND LOW FEAR OF SUCCESS

Fear of Success Imagery	Type of Performance Estimates	
	Accurate	Inaccurate
High	31	38
Low	63	37

TABLE VIII

NUMBER OF ACCURATE AND INACCURATE ESTIMATES OF
PERFORMANCE MADE BY SUBJECTS WITH HIGH AND LOW FEAR OF
SUCCESS FOR SCORES ABOVE THE MEAN

Fear of Success Imagery	Type of Performance Estimates	
	Accurate	Inaccurate
High	13	20
Low	30	14

DISCUSSION

Significant differences between college women with high and low M-s were found in relation to their high school background. University women with private (non-coeducational) backgrounds wrote significantly more fear of success stories than women with public (coeducational) backgrounds. Women with high M-s tended to underestimate their performance on certain tasks, whereas women with low M-s made significantly more accurate estimations of their performance on the same tasks. In addition, women of college age with high fear of success sex-typed more frequently than their counterparts in high school or than women low in fear of success as evidenced by their high scores on the Sex-Role Differentiation measure. Finally, there was no significant relationship between the degree of fear of success and performance in competitive and non-competitive conditions.

The five hypotheses put forward in this thesis will be considered in order followed by a discussion of some additional findings that pertain to the study.

The hypothesis that women from non-coeducational high schools (grade 11) would give fewer fear of success responses to projective cues than women from coeducational high schools was not confirmed. Both groups told approximately the same number of fear of success stories to the cues. However, the data strongly supported the second hypothesis; women in first year college with a private school background told significantly

more fear of success stories to projective cues than both their counterparts from coeducational schools and girls in attendance at private schools. Fear of success also increased significantly from high school to university for women from single-sex schools. Yet it remained unchanged over the same period of time for women from public schools.

What distinctive features about the university environment would lead to the arousal of the motive to avoid success in private school women but not in public school women? Women from private schools are not accustomed to competing with males in an academic situation and have had relatively little experience in interaction with males in an academic atmosphere. In high school, academic life had been independent of social life. The fact that they cannot be separate now may provide a conflict situation for these women. Therefore, women who would ordinarily perform very well without any second thoughts may now hesitate to demonstrate their ability in the new academic situation.

Some private schools foster a rather traditional view of male and female roles and although academic success is encouraged, these schools may simultaneously impress society's expectations upon their students and reinforce a traditional role model. University life involves change for both private and public school women. However, the transition from a private school to college probably demands a greater adjustment from a student than does a public school. Much more emphasis

is placed upon discipline and rules in private schools;
some rules must be followed in coeducational institutions
as well, but the atmosphere is generally more relaxed.
Given the more strict environment of a private school, women
who are outspoken may be discouraged and negatively rein-
forced for displaying this kind of behaviour trait. Frankness,
especially with regard to academics, is accepted in college
but these women may not be prepared for it once they reach
university. In this study, the public and private schools were
quite different from each other. The private school was more
structured and disciplined; students wore uniforms and were
encouraged to show respect to their teachers. On the other
hand, a wider range of behaviours was accepted for public
school students and a more lenient approach taken toward these
students.

The arousal of the motive to avoid success in private
school women may be a result of several factors, only one of
which is the introduction of mixed-sex competition to academic
life. It would be most interesting to compare a private co-
educational institution as well as other private schools with
various philosophies of education to the schools in this study
with regard to fear of success.

Women in coeducational high schools did not tell signi-
ficantly more fear of success stories than women in private
high schools. The fact that these women have been confronted

with male competitors since elementary school may have given
them an opportunity to accept this and to resolve any conflict
that may have developed as a result of mixed-sex competition
so that it is no longer a contributing factor to the arousal
of M-s. Furthermore, almost all of the women from this
secondary school go on to university as a matter of course;
thus, very few would face the decision to marry or choose a
career in the near future. Therefore, it may be that for
these grade 11 girls, conflicting decisions are far enough in
the future that anxiety about success and M-s are not yet
aroused. Certainly, some of these women are already aware of
and may have experienced the conflicts which exist between
academic success and popularity. However, as the negative
consequences of these conflicts are not immediate, M-s is not
yet strongly aroused.

Another factor that may account for the low incidence
in fear of success among the public school women is the nature
of the cue itself. Whereas most of the private school women
appeared to take the cue seriously, some of the grade 11 public
school girls asked if this were a project for women's libera-
tion. It is quite easy for a subject to give a socially
acceptable response to any of the cues even if anxiety about
the situation is aroused. In order to ensure the validity of
the data, a measure of fear of success and a scoring system
must be developed so that subject could not easily predict the
purpose of the measure.

The inclusion of a projective cue (Mary) which described a more typical feminine activity (fund-raising for charity) was an attempt at obtaining some further information regarding the conditions which arouse M-s. Significantly, more fear of success stories were told to the Ann cue than to the Mary cue, but no differences were found in a comparison of Mary and Phyllis stories. A greater number of fear of success stories were told to the Ann cue than to the Phyllis cue, though the differences were small.

Presumably, as fund-raising position is accepted as a feminine undertaking and should evoke less fear of success than a situation involving a male-dominated occupation like a physician. This presumption was supported with regard to the Ann cue but not to the Phyllis cue. At the same time, the fact that the fund-raising situation included public recognition of the achievement could be sufficient cause for M-s to have been aroused as much as it was.

Scoring the Mary stories for fear of success was somewhat complicated by the nature of the cue. In a situation describing charitable work, the idea of accepting help from others is implied in the story itself. The fact that Ss wrote stories in which success was achieved with the help of others could not be taken as evidence for fear of success. These stories were not scored as showing fear of success. Therefore, in this case, fear of success was confounded by the nature of the situation, described in the cue.

Clearly, the Ann cue evoked the greatest number of fear of success stories. High school and especially university students can easily identify with or imagine a character such as Ann and thus find it simple to write a story about her. These students are probably acquainted with doctors, either through friends of the family or through their own contacts. Similarly, many of their mothers have most likely engaged in fund-raising activities. Some of the students have raised money themselves such that Mary as well is the familiar type of person to them. On the other hand, Phyllis, a television producer, is a more distant, less accessible figure who is probably not as familiar to the _Ss_ as Ann and Mary are. Therefore, it is easier for _Ss_ to raise Phyllis up on a pedestal and to think of her occupation as an ideal or as a dream in which many _Ss_ would like to share, but have not thought about it realistically. The motive to avoid success would not be aroused in someone who regarded Phyllis in this way.

In an examination of the kind of stories written by _Ss_, some of the results were similar to Kimball's findings (1972). No differences in the number of strong and mild stories were found between public and private school groups, although private university women told a greater number of strong stories than college women from public schools. This pattern followed the number of fear of success stories told altogether. The mild-strong distinction seems to share many of the characteristics of Luce's (1973) realistic-unrealistic categories.

From grade 11 to college, there was an increase in the number
of activity away stories for public school Ss (60 per cent to
95 per cent) and an increase in the number of denial stories
for private school women over the same period of time (12 per
cent to 26 per cent). Activity away stories described women
who engaged in certain kinds of activities other than those
pertaining to their field. However, as Kimball found, very few
activity away stories fell into a mild-realistic category,
where the successful woman does not leave the field but makes
time for other activities and does not work as hard at her job
or at school. Most activity away stories involved leaving the
entirely.

The absence of any relationship between fear of success
and performance in competitive and non-competitive situations
represents a failure to replicate Horner's (1968) findings
with college women. The findings of this present study are
similar to Kimball's (1972) results which also failed to find
that fear of success related to performance. One of the factors,
which Kimball attributed to the failure to replicate Horner's
results, was the necessary division of subjects on the basis
of presence or absence of fear of success instead of more
extreme scores. Even though extreme scores were used in the
present study (subjects with scores of 2 on at least one story
and 0 on all three stories), no fear of success-performance
relationship was found.

Perhaps, the competitive condition was not perceived as being very different from the non-competitive condition. In the high school groups, the Scrambled Words test was administered in class, with at least 12 students in each group. Because of the difficulty in obtaining subjects at a certain time slot, the groups at the university level tended to be much smaller. An average number of students who wrote the Scrambled Words test was 3 compared to 12 in high school. The instructions for the Scrambled Words test also appeared to create a greater impact on the subjects than the instructions for the Word Generation task. Upon hearing that the first task was a test of general intelligence, many subjects reacted with "oh" and "ah." Their attitudes toward this test could have been transferred to the Word Generation test, especially since the exercise was difficult and timed.

Although none of the subjects expressed any negative reaction in the non-competitive condition, many of them inquired whether their responses to the Word Generation test needed to be given orally and recorded on tape. The presence of the tape recorder may have created some anxiety which countered the non-competitive nature of the task.

The hypothesis which purported that women high in fear of success would make a significantly greater number of lower expectancy estimates than women low in fear of success was confirmed such that 71 per cent of women with high M-s made low estimates of performance compared with 8 per cent of women

with low M-s. In addition, women low in fear of success gave
significantly more accurate estimations of performance than Ss
high in fear of success. As expectancy estimates are good
predictors of performance (Tyler, 1958; Battle, 1965; Crandall,
1965), those persons who report low expectancies tend to per-
form more poorly than persons who give high estimates. Because
a person is afraid of success, he or she is concerned about the
consequences of success and is likely to assume a strategy of
behaviour that will ensure a secure position for this person.
By playing his or her abilities down and by expecting little,
a lack of success is almost guaranteed.

It appears that women with low M-s base their expectancy
estimates on internal cues on their own knowledge of their
ability, as evidenced by their accurate performance estimates.
On the other hand, Ss high in fear of success are more likely
to utilize external cues, to depend on the reactions of others
or on the environmental situation rather than trusting their
own judgment of their abilities in order to evaluate their
performance. As Veroff (1969) hypothesized, people high in
fear of success have mastered social comparison but not auto-
nomous competence and are likely to doubt their own competence
in achievement situations.Therefore, their estimates tend to
be inconsistent, as they are based on more fluctuating stan-
dards. This often leads to a discrepancy between actual per-
formance and expectancy estimates. In this study, the perfor-
mance scores of Ss high in fear of success were above the mean

for all groups. Yet, their expectancy estimates did under-estimate their performance and did not accurately reflect their scores.

Although the expectancy-performance hypothesis was supported by the data, some caution must be taken in inter-preting the results. The power of the expectancy measure was seriously limited by some methodological difficulties present in the study. First, since the responses of an unusually large percentage of the Ss tended to clump in the middle range (3 and 4) with expectancy estimates of fair performance mostly, these responses could not be included in an analysis. There-fore, only the estimate reports of Ss who fell into the two extreme categories were used (1 and 2; 5 and 6). These Ss, however, represented merely 22 per cent of the total sample.

The expectancy estimate categories were initially designed to meet the requirements of an ordinal scale. Yet, in order to be able to test the second part of the expectancy-performance hypothesis, these categories had to be considered as representing a rough interval scale. Certainly, the develop-ment of a more precise expectancy measure which has taken these and other problems into consideration would be a valuable aid to future research of this kind.

The high correlations for university subjects between some of the SRD scales and performance, SRD and fear of success and SRD and expectancy estimates supports the idea that these women are at a stage of life where sex-role demands concern

them. They are beginning a period in their lives where they will be expected to make decisions about such important events as marriage, career and graduate school, which will certainly have greater bearing upon their lifestyles in the long run than any decisions they had made beforehand. They are concerned about what society expects from them and how they should meet these expectations.

Of all the SRD scales, high scores on the parental power, parental authority, and parental discipline scales were more often related to low expectancy estimates on the Word Generation test, high fear of success scores on all cues, specifically the Ann cue, and low performance on the Scrambled Words test. It appears that Ss who perceived differences in the roles of their parents, especially with respect to power, are most likely to give low expectancy estimates and to score high on the fear of success cues.

The positive relationship of expectancy estimates to performance on both Scrambled Words and Word Generation tests provided additional evidence for the predictive power of expectancy estimates. As in Battle's (1965), Feather's (1963) and Tyler's (1958) experiments, the height of expectancy of success was related to performance in this study. Therefore, those who report low expectancies would tend to perform more poorly than Ss who give high estimates of success. Lambert found that girls who sex-typed were less likely to do well academically than girls who did not. Given the relationship

of high SRD to low expectancy estimates, and the expectancy-performance relationship, his conclusions are supported in this study.

An association that was found for private school women between the peer relations SRD scale and the fear of success score on the Phyllis cue suggests that women who have different attitudes toward their male and female peers may wish to avoid success if they find themselves in competition with male peers. It is interesting that this relationship involved university subjects with private school backgrounds who, not having been given a chance to interact with men in academic situations in the past, have had comparatively little opportunity to learn how they behave in such situations and, consequently, perceive them as being different.

Although the SRD-performance and SRD-fear of success correlations were more frequent among university women than high school women, the generalizability of these results to other populations must be carefully considered. Thirty-two (19.6 per cent) of a total of a possible 163 correlations were significant. The interpretation of these relationships is somewhat limited by the fact that 5 per cent of the correlations can be significant by chance. However, the correlational patterns do indicate that relationships exist which are not determined by chance alone; but without replication of these results in a further study, one cannot generalize from the outcome of these correlations to other populations.

One other factor which may have prevented a more definite SRD-fear of success relationship from emerging was the nature of the questionnaire itself. Since Lambert's SRD measure was initially constructed for and administered to children 10 to 16 years of age, many of the items on the questionnaire were inappropriate for Ss who participated in the present study, especially the college women. Several of the items were also ambiguous and led to differing interpretations on the part of the subjects. Because they did not relate to the items, some Ss did not treat the questionnaire seriously, especially in the grade 11 public school group. Other Ss found it difficult to respond accurately to items that were designed for younger age groups. The development of an appropriate questionnaire that directly measures the attitudes of Ss of these age groups would be a useful tool for any future research in the area of attitudes toward sex-role.

The other items in the questionnaire did not reveal any relationship between mother's occupation and daughter's vocational goals, or between fear of success and factors in job selection. However, the responses to these items proved quite interesting.

Because of the very small number of reported working mothers in the sample, the relationship between a daughter's desire for further education and the fact that her mother worked outside the home was impossible to assess. Since

most high school and university Ss in the study stated that
they wished to go on to university or to complete their
degree, it was also difficult to determine whether their
mothers' educational level was related to their goals.
Furthermore, most of the mothers were reported to have com-
pleted high school or, at least, some years of college. The
mothers in this sample are a comparatively well-educated
group. The fact that most of the women in the study indicated
that they would go to university or pursue a degree is influ-
enced by more than their mothers' educational status. These
women have grown up in an upper-middle class environment where
education is highly valued and children are encouraged and
expected to continue their schooling.

Regardless of the level of M-s, most women felt that
their goals were quite important, but that they could be
reasonably happy if they did not reach them. Most women chose
enjoyment in the type of work and financial security as most
important factors in job selection, and good character and
friends as the two most essential qualities in getting along
in the world. The responses of women with high and low M-s
were first analyzed with regard to the nature of the factors
they selected as most important in job choice or in living,
whether these factors reflected internal capabilities or
external sources of reinforcement. Certain categories in
both items were designated as external factors, such as
encouragement of parents and friends, people your family

knows, money, in contrast to internal factors such as type of
abilities or aptitudes, brains, hard work and education.
Initially, it was presumed that women high in fear of success
would choose a job because of the external influences from
parents or friends rather than because she had the ability
for it and that external rewards, such as money and friends,
were more important for getting along in the world than her
own talents and achievements through hard work. No such
relationship emerged. Yet, the fact that most women felt
good character, friends and security more important than
brains and education, and that the failure to reach their
goals would not affect their happiness, is consistent with
the stereotype of a woman as being concerned with social
adeptness rather than with achievement. It would be in-
teresting to compare the responses of men on the same ques-
tions to the answers of the women in this sample.

In the present study, the motive to avoid success was
aroused in first year university women who had been educated
at private, non-coeducational institutions during their high
school years. M-s was not related to performance in competitive
and non-competitive conditions, but it did show definite
association with expectancy estimates of performance and with
scores on several of the SRD scales. As M-s was not aroused
in college women who had attended public high schools, one of
the factors that may account for the difference in M-s is the
educational environment and educational philosophy of the

private school. M-s is most likely aroused when a woman is
confronted by conflicting decisions, e.g., marriage and
career. For first year college students these decisions
are not immediate. If the private school environment acce-
lerates the arousal of M-s in women who have attended them
such that anxiety about the consequences of success is a
concern to them before it is to other women, then this
finding will have broad implications for the future education
of women.

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APPENDIX A

GENERAL INFORMATION QUESTIONNAIRE

****

QUESTIONNAIRE

INSTRUCTIONS: Please answer the following questions to the
                 best of your knowledge.

1. Name _____1. Age _____

3. Birth date _____4. Sex: M_____F_____

5. How many children are there in
      your family?   _____ Brothers_____Sisters _____

   How many children are older
      than you?   _____ Brothers_____Sisters _____

   How many children are younger
      than you?   _____ Brothers_____Sisters _____

6. Are you living at home with your family? Yes____No____

   Are you boarding at school?   Yes_____No_____

   --Other (please specify) _____

   _____

7. Marital Status: Single ____Unattached____Going Steady____

   --Other (please specify) _____

8. What is your father's occupation? (If your father is
      retired or deceased, what was his most recent full-time
      occupation?)_____

9. What was the highest level of schooling that your father
      attained? _____(Indicate degrees or
      diplomas earned if appropriate) _____

10. What is your mother's occupation? _____

11. Is she paid for her work? _____

12. If she is employed, what percentage of her time does she
      devote to it? Full time____Part-time_____Irregular___

13. What was the highest level of schooling that your mother
      attained? _____(Indicate degrees or
      diplomas if appropriate) _____

14. What was your grade average last term? _____

15. What is your major interest in school? (What subject
      interests you most?)_____

16. Do you enjoy school? _____

17. What are your present educational goals? How far do you
    intend to continue your education? _____

    How long have you had this desire? _____

18. What would you like to do (e.g., job) after finishing
    your education? _____

19. How certain are you now that you will be able to attain
    this goal if you are still interested in it?_____

20. How many times in the past two years have you changed
    your mind about your job choice? _____

21. How important do you think the attainment of your job
    goals will be to your satisfaction in later life?
    (Check the one that fits best).

    (1) the most important thing _____

    (2) next in important only to my family_____

    (3) pretty important, but I still could be reasonably
        happy if I did not reach them _____

    (4) my goals are secondary to other interests
        in life _____

    (5) not important at all _____

    (6) other _____

22. Which two of the following factors were most important in
    your choice of a job goal? (Place a "1" beside the
    most important and a "2" beside the second).

    (1) financial security _____

    (2) enjoyment in doing the type of work _____

    (3) special aptitudes for the job _____

    (4) encouragement of friends _____

    (5) encouragement of parents _____

    (6) other (specify) _____

23. Indicate which two of the following things you think are most important in getting along in the world. (Place a "1" beside the most important and a "2" beside the second).

(1) good character _____

(2) people your family knows _____

(3) brains _____

(4) money _____

(5) hard work _____

(6) good luck _____

(7) appearance _____

(8) friends _____

(9) education _____

(10) not being afraid _____

(11) other (specify) _____

APPENDIX B

VOCABULARY TEST FROM THE WECHSLER ADULT INTELLIGENCE SCALE

****

INSTRUCTIONS: Examiner says, "I want you to tell me the meaning of some words. Let us start with "winter;" what does "winter" mean? This same method of presentation is used for all words. The examiner always begins with the word "winter" unless the subject appears to be much below in verbal ability. After five consecutive failures the test is discontinued.

WORD LIST

1.	Bed	21.	Terminate
2.	Ship	22.	Obstruct
3.	Penny	23.	Remorse
4.	Winter	24.	Sanctuary
5.	Repair	25.	Matchless
6.	Breakfast	26.	Reluctant
7.	Fabric	27.	Calamity
8.	Slice	28.	Fortitude
9.	Assemble	29.	Tranquil
10.	Conceal	30.	Edifice
11.	Enormous	31.	Compassion
12.	Hasten	32.	Tangible
13.	Sentence	33.	Perimeter
14.	Regulate	34.	Audacious
15.	Commence	35.	Ominous
16.	Ponder	36.	Tirade
17.	Cavern	37.	Encumber
18.	Designate	38.	Plagiarize
19.	Domestic	39.	Impale
20.	Consume	40.	Travesty

APPENDIX C

THEMATIC APPERCEPTIVE TEST FOR FEAR OF SUCCESS IMAGERY

****

INSTRUCTIONS

You are going to see a series of sentences and your task is to tell a story that is suggested to you by each sentence. Try to imagine what is going on in each situation. Then tell what the situation is, what led up to the situation, what the people are thinking and feeling and what they will do. Write as complete a story as you can--a story with plot and characters.

You will have twenty seconds to look at a sentence and then six minutes to write your story about it. From experience with other students, we know that this is plenty of time to write your story. Write your first impressions and work quickly. I will keep time and tell you when to finish your story and to get ready for the next sentence.

There are no right or wrong stories or kinds of stories, so you may feel free to write whatever story is suggested to you when you look at a sentence. Spelling, punctuation and grammar are not important. What is important is to write out as fully and as quickly as possible what is going on in each situation.

Notice that there will be one page for writing each story which follows the page on which the sentence is written. I will tell you when to turn again to start writing. After six minutes, I will tell you turn to the next sentence. I will use this procedure for all of the sentences. If you need more space for writing any story, use the reverse side of the previous page-- the one on which the sentence was written. Do not turn to the next page until I tell you to do so.

CUES

1) After first term finals, Anne finds herself at the top
of her medical school class.

2) For the past year, Phyllis has been working on a new
television station. Finally, CITY-TV is scheduled to
start broadcasting next month. Phyllis is named as one
of the executive producers of the station.

3) For a number of months, Mary has been chief fund raiser at
the University for the Hospital Fund. This year, a new
record was set for the amount of money collected. As a
result, the organization has called a special meeting of
all its members to honor Mary and to present her with an
award.

4) Margaret and Ken have been goind steady for a few months.
Now it seems as if they are going to break up.

Each cue was presented separately during the actual experiment
and the order of presentation was counterbalanced across subjects.

A page like this followed each of the three cues.

1. What has led up to the situation? What happened in the past?

2. How does _____feel? What is she thinking?

3. What will happen in the future? What will _____do?

NOTE: This page was 14" in length for the experiment.

APPENDIX D

SCRAMBLED WORDS TEST

****

INSTRUCTIONS

Your performance on the following task will be a measure of general intelligence. This particular task is a test of your facility with words. We have an idea of how well people at your school level should do on this kind of test and would like to see how you do in comparison with them.

On the following pages are a number of common words with the letters scrambled. Try to make words (no plurals or proper nouns) and write them in the blanks. For example:

YOB   <u>boy</u>

ESY   <u>yes</u>

We are also interested in how you think you will do. Before beginning the test, answer the question:

How well do you think you will do on this test?

a) <u>very well</u> b) <u>well</u> c) <u>fair</u> d)<u>not too well</u> e)<u>poorly</u> f)<u>very poorly</u>

_____   ____   ____   _____   _____   _____

You will have two minutes for each page. If you find some words difficult, go on to the next. You are not expected to complete all the words, but do the very best you can. <u>Do not start</u> until given the signal to do so, and go on to the next page when and <u>only when</u> you are told to do so.

NUDRIG   ————

UORY   ————

NEGRE   ————

OLOSCH   ————

THIGS   ————

EKMA   ————

RONHT   ————

LPHE   ————

TREN   ————

SACEU   ————

PNUO   ————

LODG   ————

LPAPE   ————

RYEDA   ————

COTA   ————

PYPHA   ————

DIBR   ————

DRNUO   ————

TERTEB   ————

TROSH   ————

HLIDC   ————

RESTIS   ————

DFIN   ————

KROC   ————

SYWALA   _____

EGALR   _____

ORWK   _____

ORLFO   _____

RELCA   _____

LAMLS   _____

BOLW   _____

UATOB   _____

TBHO   _____

ANHD   _____

SOLCE   _____

NOSSEA   _____

NMAY   _____

AMWR   _____

YLERA   _____

LEASEP   _____

JNIO   _____

TCHWA   _____

RATFEH   _____

RAHE   _____

CAPEL   _____

NIDM   _____

NAWT   _____

NUDSO   _____

AMYLIF _____

WHSI _____

TAGER _____

HADTE _____

OVEM _____

IEKL _____

RAMTET _____

HROU _____

BIGNR _____

OCNE _____

REDO _____

LITLS _____

ROPWE _____

GNYUO _____

NAEOL _____

WOLFER _____

KCQUI _____

CARHE _____

WITA _____

EVRY _____

TORFN _____

TKEA _____

UJTS _____

TWESE _____

KMLI	_____	NOWDIW	_____
KEPSA	_____	EHTN	_____
MOWNA	_____	IYCT	_____
NORGST	_____	DARPI	_____
HINTK	_____	FRAI	_____
NIPLA	_____	IRHC	_____
TIWH	_____	YRCRA	_____
ETERST	_____	NADST	_____
RIREV	_____	ENOP	_____
HECA	_____	RIVDE	_____
EHVA	_____	NIDHEB	_____
NOMAG	_____	VOEL	_____

ADLG _____

REVSE _____

TASE _____

HPIS _____

LIVSER _____

SEHUO _____

YHTE _____

FENTO _____

HWNE _____

RYTSO _____

NUDARO _____

HEFSR _____

LGNO _____

SIRTF _____

WEHER _____

NIGAA _____

ADKR _____

RIGNSP _____

LOYN _____

GILTH _____

NWOKN _____

ROME _____

WGRO _____

TRELTE _____

APPENDIX E

WORD GENERATION TEST

****

PROCEDURE

The experimenter greeted the subject, told her to have a seat and to turn to the first page of the booklet on the desk, and follow the instructions given. The experimenter then left the room and returned about twenty-five minutes later. The first page of the booklet instructed the subject to turn on the tape recorder in front of her. On the tape recorder were the following instructions:

> Read along silently as the instructions are read aloud. We are interested in how longer words are associated with shorter words that are contained in them and would like to find out to what extent this phenomenon occurs. Three words will be presented one at a time. Try to make as many words using the master word. For example:

> If the master word were WASHINGTON, possible smaller words would be WING, TIN, AS, WASH. The word, NOON, is not acceptable because there is only one "o" in the master word. Any words except proper nouns are acceptable.

> We are also interested in how you think you will do. Before beginning, please answer the following question: "How well do you think you will do on the following words:

a)<u>very well</u> b)<u>well</u> c)<u>fair</u> d)<u>not too well</u> e)<u>poorly</u> f)<u>very poorly</u>

_____ ____ ____ _____ ____ _____

> Please leave the tape recorder running. Now turn to the first page and begin. Do not turn to the second page until the recorder tells you to do so.

At the end of five minutes the voice on the tape recorder interrupted and said, "Stop; please turn to the next page and begin." After five more minutes the tape recorder again instructed the subject to turn to the next word. After another five minutes the recorder instructed the subject to stop and leave the booklet on the desk.

MASTER WORDS

1. GENERATION

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

                                    (+ 22 more spaces)

2. TRANSIENCE

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

                                    (+ 22 more spaces)

3. DEGRADATION

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

                                    (+ 22 more spaces)

Each master word appeared on a separate page during the actual experiment.

APPENDIX F

SEX-ROLE DIFFERENTIATION

QUESTIONNAIRE

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PART II

We would like to know how suitable certain jobs are for boys and girls when they become adults. Circle '7' if you think the job is quite suitable, circle '1' if it is not suitable, and a number between '1' and '7' if it is only partly suitable. The higher the number you circle the more suitable the job seems to you. Do this for boys and girls without missing any scales.

JOBS	BOYS WHEN THEY ARE ADULTS	GIRLS WHEN THEY ARE ADULTS
1. medical doctor	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. cashier in a restaurant	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. bus driver	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. librarian	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. elementary school teacher	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. cook	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. clerk in a store	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. scientist	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. prime minister of Canada	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. usher in a movie theatre	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. principal of a school	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. a judge	1 2 3 4 5 6 7	1 2 3 4 5 6 7

PART III

This part of the questionnaire deals with the kinds of
things your mother and father do around the house. If your
father <u>often</u> does the shopping, for example, then circle '7'
on the father's scale. If he <u>never</u> does the shopping, then
circle '1'. If he shops some of the time, circle a number
between '1' and '7' depending on <u>how often</u> he shops. Then
tell us about your mother for this item. Do not miss any items
or scales.

	<u>FATHER</u>	<u>MOTHER</u>
1. does the shopping	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. gets father's breakfast on work days	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. repairs things around the house	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. cleans up the house after visitors leave	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. does the evening dishes	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. moves heavy furniture	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. looks after the children in the evening and on weekends	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. does the family laundry	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. drives the family car	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. helps the children with their school work	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. writes excuse notes when children are absent from school	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. visits relatives	1 2 3 4 5 6 7	1 2 3 4 5 6 7
13. talks with the neighbors	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	FATHER	MOTHER
14. goes to meetings and clubs	1 2 3 4 5 6 7	1 2 3 4 5 6 7
15. goes out with his or her friends	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16. answers the telephone when both are at home	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17. scolds and punishes the children when they do not behave	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18. threatens or warns the children	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19. sees to it that the children do their homework	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20. tells the children what they can and cannot do	1 2 3 4 5 6 7	1 2 3 4 5 6 7
21. explains to the children what is expected of them and why	1 2 3 4 5 6 7	1 2 3 4 5 6 7
22. finds out when you do something you should not have done	1 2 3 4 5 6 7	1 2 3 4 5 6 7
23. sees to it that the children do their errands	1 2 3 4 5 6 7	1 2 3 4 5 6 7
24. makes you feel guilty or bad when you do something you should not have done	1 2 3 4 5 6 7	1 2 3 4 5 6 7
25. whose punishment or disapproval you dislike or fear the most	1 2 3 4 5 6 7	1 2 3 4 5 6 7
26. takes the children places	1 2 3 4 5 6 7	1 2 3 4 5 6 7
27. enjoys and takes time to talk with the children	1 2 3 4 5 6 7	1 2 3 4 5 6 7
28. notices when the children are unhappy and tries to cheer them up	1 2 3 4 5 6 7	1 2 3 4 5 6 7
29. does things with the children	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	FATHER	MOTHER
30. makes you feel that what you do is important	1 2 3 4 5 6 7	1 2 3 4 5 6 7
31. helps you with things when you are having trouble with it	1 2 3 4 5 6 7	1 2 3 4 5 6 7
32. has the most to say about how the children are to be punished	1 2 3 4 5 6 7	1 2 3 4 5 6 7
33. has the most to say about where to go on family outings	1 2 3 4 5 6 7	1 2 3 4 5 6 7
34. has the most to say about what jobs are to be done around the house and who is to do them	1 2 3 4 5 6 7	1 2 3 4 5 6 7
35. has the most to say about how much allowance the children will get	1 2 3 4 5 6 7	1 2 3 4 5 6 7
36. has the most to say about whom to have into the house	1 2 3 4 5 6 7	1 2 3 4 5 6 7
37. has the most to say about what you will wear	1 2 3 4 5 6 7	1 2 3 4 5 6 7

PART IV

We are interested in how boys and girls your age behave with other people. Circle one number on each scale. Number '7' means <u>often</u>. '1' means <u>never</u>, and numbers between '1' and '7' mean <u>sometimes</u>. The higher the number your circle, the more often boys or girls do what you are describing.

	<u>BOYS YOUR AGE</u>	<u>GIRLS YOUR AGE</u>
1. do what their parents say	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. try hard to please the teacher	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. help parents with household chores	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. tell parents where they are going	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. come home when they are supposed to	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. ask their parents for money	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. wear what they want to school	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. tell their parents when they think the parents are wrong	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. pick their own friends	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. decide for themselves what they want to be when they become adults	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. stick up for their brothers and sisters	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. obey older sisters	1 2 3 4 5 6 7	1 2 3 4 5 6 7 7
13. help younger brothers and sisters	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. keep secrets which their friends tell them	1 2 3 4 5 6 7	1 2 3 4 5 6 7

		BOYS YOUR AGE	GIRLS YOUR AGE
15.	share things with boys and girls their age	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16.	tell younger brothers and sisters what to do	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17.	tell off girls your age	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18.	swear in front of boys	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19.	tell girls your age what to do	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20.	tell boys your age what to do	1 2 3 4 5 6 7	1 2 3 4 5 6 7