PERCEPTIONS OF MALE AND FEMALE SUCCESS IN SEX-LINKED OCCUPATIONS IN RELATION TO THE SEX OF SUBJECT AND THE STANCE OF SPOUSE: IMPRESSIONS OF CONFLICTS, CONSEQUENCES, AND ATTRIBUTIONS

Stanley Stacy

A Thesis

in

The Department

of

Psychology

Presented in Partial Fulfillment of the Requirement
for the Degree of Master of Arts at
Concordia University
Montréal, Quebec, Canada

March, 1976

ABSTRACT

STANLEY STACY

PERCEPTIONS OF MALE AND FEMALE SUCCESS IN SEX-LINKED OCCUPATIONS IN RELATION TO THE SEX OF SUBJECT AND THE STANCE OF SPOUSE: IMPRESSIONS OF CONFLICTS, CONSEQUENCES, AND ATTRIBUTIONS

Subjects were presented with four paragraphs portraying successful males or females in masculine and feminine occupations, with a supportive or non-supportive spouse. In responding to each cue, subjects rated the character on possible conflicts and consequences related to the success, and on the importance of causal attributions. Results revealed a highly significant Sex of Cue by Stance of Spouse effect, indicating that a woman was seen as more dependent on her husband's attitude about her career than a man on his wife's attitude. In contrast to males, females differentiated the roles for the sexes, perceiving a family commitment for women and a career commitment for men. Consistent with previous findings, the sex-appropriateness of the job was considered important for men. However, occupational stereotypes were not seen as so constricting for women. Results were discussed in terms of sex roles and social learning theory.

Acknowledgments

I wish to express my appreciation to the students and teachers of Dawson College (Soja Cowan, Phyllis Ross, and Susan Burstein) and of Marianopolis College (Robert Moir), who made this study possible.

I am deeply indebted to Dr. Dorothy Haccoun, who, with patience, enthusiasm, and clarity of thought, has encouraged and guided me throughout the planning and writing of this thesis.

I also wish to express my sincerest gratitude to Dr. Tannis Maag for her assistance, and faith, in the completion of this thesis.

Table of Contents

List of Tables

List of Figures

Since the publication of The Achievement Motive in 1953 by McClelland, research has attempted to define the determinants of achievement behavior. The standard method of studying this motivation has been to present TAT pictures to subjects and elicit a short written story, which is then scored for achievement imagery according to standard criteria set forth by McClelland. Results from these studies yielded a theory of achievement motivation, but it pertained only to males. The few results collected on female subjects were not consistent with the existing theory, or with the findings for men, or even with one another.

The early studies revealed that women responded differently from men to attempts to arouse achievement motivation. Field (1951) found that females did not respond to references to intelligence and leadership as did the males, but to references to social acceptance. Veroff, Wilcox, and Atkinson (1953) found that both sexes produced more achievement imagery to a male stimulus figure than to a female stimulus figure, indicating that the male figure is a more powerful elicitor of achievement imagery. A similar finding is reported by Lesser,

Krawitz, and Packard (1963). In addition, these authors discovered that the high-achieving girls produced more imagery in response to a female cue, whereas the lesser achieving girls produced more imagery in response to a male cue. It was suggested that the discrepancy between these two groups may have been due to their perceptions of the strivings and behaviors relevant to the different sexes. French and Lesser (1964) explored the relevance of goals, and found that some women valued intellectual striving and responded with increased motivation to the cue stressing this kind of achievement, but other women more traditionally feminine in their goals responded with greater motivation to the cue stressing social and marital success.

Studies of sex-role stereotypes (e.g. McKee and Sherriffs, 1957; Sherriffs and McKee, 1957; McKee and Sherriffs, 1959; Rosenkrantz, Bee, Vogel, Broverman, and Broverman, 1968) provide some insight into the reasons that females and males differ in achievement motivation. Traits assigned to men by both sexes include logical, aggressive, dominant, independent, and stubborn. Traits assigned to women by both sexes include sociable, gentle, sympathetic, and submissive, none of which concern achievement in society's sense. Furthermore, women think that

men want to restrict them from characteristics which are considered masculine. In other words, women seem to feel that they must adhere to the feminine stereotype in order to be accepted by men. However, masculine traits are more valued and more socially desirable than feminine traits. In line with this, it was demonstrated that men are regarded significantly more favorably than women by both sexes, and indeed, that this view is especially held by women. Also, women's self-descriptions emphasized their unfavorable characteristics much more than did men's. Since the self-concepts of men and women are similar to their respective stereotypes, women presumably see themselves in an inferior position.

The fact that these stereotypes are widely held means that their influence is most likely reflected in society. If masculine traits are more highly valued, then it is reasonable to predict that women would want to assume these traits for themselves to some degree. Here is the conflict: women may want to be aggressive and achieving, but they have been reinforced for passivity and motherhood. Angrist (1972) points out that the learning of adult sex roles is primarily occupation-directed for males and family-directed for females, and

the traits appropriate to each sex are instrumental to these goals.

In an attempt to clarify the inconsistency in female responses to achievement situations, Horner (1968, 1970, 1972a, 1972b, 1973, 1974) gave sentence leads to subjects, and classified the stories written according to the presence or absence of "fear of success" imagery, instead of the more complex "need achievement" scoring system. Women responded to "After first term finals, Ann finds herself at the top of her Medical School class." Men responded to the same lead, with John as the successful figure. With this method, Horner found that 62% of the women wrote "fear of success" stories, but only 10% of the men did so. She thus penned the label "Motive to Avoid Success" to explain her results. This motive was conceptualized as "a latent, stable personality disposition acquired early in life in conjunction with standards of sex-role identity" (1972a, p. 159). The important factors determining the strength of the motive were considered to be the individual's expectations or beliefs about the nature and likelihood of consequences of success, and the value of these consequences to the individual. Horner concluded that many women fear

success because of the fear of social rejection or loss of femininity.

Subsequent studies using Horner's methodology supported the existence of the "fear of success" phenomenon. Women, including secretaries and law students, continued to produce a high rate of fear imagery in response to the female cue (Schwenn, 1970; Watson, 1970; Prescott, 1971; Robbins and Robbins, 1973; Alper, 1973; Hoffman, 1974). There was also evidence of an increasing rate of fear imagery from men in response to male cues (Prescott, 1971; Robbins and Robbins, 1973; Hoffman, 1974). The content of the two sexes' stories differed, however, in that the women told of social rejection while the men questioned the value of the success itself.

The global nature of Horner's conclusions makes it imperative to define the variables contributing to the preponderance of "fear of success" stories. In a cross-sex design, subjects responded to a cue with a stimulus figure of the opposite sex as well as to one of the same sex. Robbins and Robbins (1973) found that both men and women gave about 46% fear imagery to the male cue, but there was a difference between the sexes in response to the female cue. Women gave 48% fear imagery, while men

gave 60% fear imagery. Spence (1974) reported similar percentages. Alper (1973) found a 50% rate by women in response to a male cue, but she also found contrarily that men gave less fear imagery (62%) than women (89%) to a female cue. Feather and Raphelson (1974), using Australian college students, reported that both sexes produced a lower rate to a male cue (20 - 30%) than to a female cue (50%). Similar percentages were obtained from adolescent subjects (Monahan, Kuhn, and Shaver, 1974).

The general finding here is that both sexes produce more "fear of success" for a female figure than for a male. This suggests that the procedure is not tapping an individual's Motive to Avoid Success, but rather a knowledge of stereotypes concerning appropriate achievements for the sexes and a realistic appraisal of the consequences of socially inappropriate behavior. Horner has acknowledged the importance of sex-role standards, but still maintains the trait theory of personality as the basis for her results. The cross-sex comparison studies suggest, however, that a theory of social learning may be more applicable here.

Another line of investigation in[redacted]e variables affecting "fear of success" was to change the success

situation in some way. Hoffman (1974) gave several variations in addition to the original cue. In the first case, she took success out of the highly masculine area of Medical School and placed it in the more sexually neutral area of Child Psychology Graduate School. In the second case, the success was not made public, and in the third case, the success was made slightly less competitive or extreme by placing Ann in the top range of the class rather than at the top. This also served to reduce the aspect of compulsive perfectionism inherent in such a standing. Hoffman's results, however, yielded no significant differences between these cues. All groups showed a high rate of "fear of success", women responding to female figures and men responding to male figures. Since this was not a cross-sex design, the interaction of cue and subject could not be ascertained.

Alper (1973, 1974) also took Ann's success out of the masculine field of medicine, putting her simply at the top of her class, and found that female subjects responded with only 50% "fear of success" stories as compared with the earlier 89%.

Feather and Simon (1975) altered the success situation by giving "top of Teacher's College class"

and "top of Nursing School class" in addition to the original Medical School cue. These three fields were considered to be sexually neutral, feminine-dominated, and masculine-dominated respectively. Although there was little evidence of interactive influences involving occupations, the authors interpreted the main effects as reflecting the subjects' occupational stereotypes. Thus, the person who succeeded at Nursing School was seen as less powerful, more polite and obedient; and more feminine, corresponding to the female stereotype.

Subsequently, Feather (1975) attempted to make sex-role stereotypes especially salient by using a range of occupations varying in status and masculine dominance, and portrayed a male and female competing for the job. It was concluded that sex-role stereotypes were indeed important factors influencing subjects' responses. The results indicated that reactions to female and male success (and failure) in an occupation depended on the perceived appropriateness of the occupation for the sex concerned. Success was more positively evaluated if it was consistent with societal conceptions about the sex role. There was some contrasting evidence, however, to suggest that women succeeding in masculine jobs were not

negatively evaluated, but seen as happy about their achievement.

The effect of altering the success situation has produced varying results, as did the cross-sex studies, and further supports the notion that Horner's stable personality disposition is not sufficient to account for all these findings. What appears to be happening is not necessarily attributable to a female subject's Motive to Avoid Success, but rather to the subject's learned attitudes about sex-appropriate occupations and behavior, and the consequences of violating social norms. Thus the subject's response is situation specific, and may reflect his or her own attitudes, but cannot be assumed to project his or her own motives.

Another line of investigation into the variables affecting "fear of success" was to change the character in the lead. Horner's original statement was unembellished and subjects gave the details. By controlling some of the salient aspects, it should be possible to determine what factors are most important.

Spence (1974) presented subjects of both sexes with one of three cues. In the first, a married woman whose children were in school goes to Medical School with the

encouragement of her husband, then finds herself at the top of the class. In the second, a single girl graduates from college, goes to Medical School and finds herself at the top of the class. In the third, a single man graduates, goes to Medical School, and finds himself at the top of the class. Spence found a significant difference in cues for all subjects. In addition, she used both the projective technique of eliciting stories and an objective questionnaire, and concluded that the direct responses on the latter were more valuable in ascertaining particular information about attitudes and expectations. Looking at the content of the negative themes and at the responses to the questionnaire, several points were evident. Of primary importance was the conflict between career and family obligations. Both the married woman and the single woman cues elicited many responses involving a career limitation, in that the woman would quit the job or only work part time, but the single man cue did not. Also of interest was the more positive regard for the married woman and the greater acceptance of her success. This was probably due to the fact that she combined career and family, first fulfilling the woman's role which then allowed her to pursue other

roles. The single woman was seen as unhappier and less likely to get married, which suggests that since she was not pursuing the appropriate goals for a female, she would not find satisfaction and fulfillment.

The additional variable that Spence introduces here is the supportive husband. He seems to make a difference in subjects' perceptions of the situation, since his supportive stance essentially refutes any conflict within the marriage on account of the wife's career success. The opinion of male peers and boyfriends was cited as an important factor in the Motive to Avoid Success in college women (Horner, 1970; Schwenn, 1970; Horner, 1972a; Horner, 1972b). It was found that some of the girls working toward careers were involved with men who encouraged and even expected them to strive for achievement in masculine areas. On the "fear of success" measure, however, these girls scored either high or low, indicating that their behavior did not correlate with their projected motivation, but rather with their boyfriends' attitudes. This suggests that the stance of the spouse is an important variable to consider in estimating the effects of success on an individual.

The problem, then, is to assess more fully the

phenomenon labelled "fear of success." There is sufficient cause to doubt its global nature and sufficient reason to reject it as an underlying personality trait manifested mainly by women. The cross-sex studies demonstrated that men show just as much fear imagery as do women in response to a female figure succeeding in a masculine-dominated field. The parallel was also demonstrated: that both sexes show a reduced rate of fear imagery in response to a male figure succeeding in a masculine-dominated field. Furthermore, the various alterations of the success situation suggested that subjects were responding at least in part to occupational stereotypes. It seems that these responses are learned from the social environment, and that the "fear of success" imagery, while certainly revealing conflict, is not necessarily projected by a person's own motivations. The conflict is perceived to be present in the stimulus character, and is congruent with deviations from socially appropriate behavior.

The purpose of this study is to determine the effect on social perceptions of placing successful

characters of both sexes in sex-linked occupations, and varying the stance of the spouse. Indications from previous research point to the importance of the attitudes of a woman's husband or boyfriend on perceptions of conflict. The findings of both Horner and Spence suggest that a woman whose career efforts are encouraged by a significant figure experiences reduced conflict and reduced fear of negative consequences. This study has introduced a new manipulation by portraying a successful character with either a supportive or a non-supportive spouse. It is expected that greater conflict and more negative consequences will be perceived for an individual who lacks the approval of his/her partner.

The apparent importance of a husband's opinion to a woman also provides evidence to suggest that a woman is more influenced by her spouse than is a man. The various "fear of success" stories link a woman's success with social rejection, and male rejection in particular. In addition, the traditional feminine stereotype depicts a woman as submissive, and research indicates that women think they must adhere to this stereotype in order to be accepted by men. These findings lead to the hypothesis that a female stimulus character will be seen as more

dependent on the attitude of her husband than the male figure on the attitude of his wife. In other words, the woman lacking her husband's support will be perceived as experiencing greater conflict and more negative consequences than the man in the same situation, but the woman possessing her husband's support will be seen as less conflict-ridden than her male counterpart.

Previous research (Feather and Simon, 1975; Feather, 1975) has indicated that sex-appropriate occupations may be an important factor in perceived conflict for successful individuals. However, the status and masculine dominance of several jobs have only been explored, and no comparisons have been made using jobs matched on these characteristics. The present study has attempted to control for the status and the importance of occupations, as well as the degree of sex-association. Furthermore, the attempt has been made to present a reasonable, rather than extreme, achievement in order to provide a more real life situation and control for responses to inferred perfectionism. In this way, systematic comparisons might be made of various conflicts and consequences perceived for the sexes.

Feather's results lead to the hypothesis that greater conflict will be seen for characters who violate the sex norms, as in the case of the man succeeding in a feminine job. On the other hand, he also points out that a woman succeeding in a masculine job was not seen in negative terms. If so, then it is expected that male, and not female, stimulus figures will be perceived as experiencing greater conflict when crossing the sex-role boundary.

Spence (1974) has emphasized the conflict between the family and the career, and much of the "fear of success" literature has cited this in discussing women's ambivalence about successful achievement. The present study has attempted to make this issue especially salient by eliciting responses to show the anticipated movement away from or toward the job and family. If the traditional sex roles are functioning, then it is expected that successful women will be seen to move away from the job and toward the family. Men, on the other hand, have traditionally been associated with a career and have not been described as experiencing this conflict. It is therefore expected that they will be seen to move in the direction of the

successful job without necessarily neglecting family commitments.

Feather and Simon (1975) investigated causal attributions of success, but without controls for status and masculine dominance in the occupations. They found that ability was seen as a more important cause of male success than female success, particularly in medicine. Also, hard work was seen as most important as a cause of success in medicine, followed by teaching, and then nursing. This is the order of masculine dominance, and perhaps status, which may mean that ability and hard work are seen as more important in a masculine occupation or a high status job. The present study permits an examination of attributions--ability, effort, and luck--as a function of sex-association of jobs without a possible confounding of status.

Method

Pilot Study

The goal of the pilot study was to obtain occupations which would be used in the stimulus conditions of the major study. In order to do this, it was necessary to

determine the perceived status and masculine or feminine dominance of various occupations. A list of 29 occupations was given to 15 male and 15 female undergraduate university students (see Appendix A). They rated each job on 6-point scales for (a) the importance (1 = not important; 6 = very important), (b) the degree of association with either women or men (1 = most associated with women; 6 = most associated with men), and (c) the status (1 = low status; 6 = high status). Analysis of these data revealed that there was substantial agreement between males and females on the ratings for sex-association (r = .91) and for status (r = .91) of occupation. Therefore, ratings were combined for all subjects. The masculine stimulus conditions chosen were police detective and electronics engineer, with mean masculine dominance ratings of 5.4 and 5.1, respectively. The feminine-dominated occupations were executive secretary ($\bar{X}$ = 2.0) and psychiatric social worker ($\bar{X}$ = 2.6). The detective and the secretary were matched for status ($\bar{X}$'s = 3.1 for both), as were the engineer and the social worker ($\bar{X}$ = 4.1 and $\bar{X}$ = 4.0 respectively). It should be noted that no high status feminine-dominated occupations were found in the list, and consequently such professions as law

and medicine were necessarily excluded. The chosen jobs had ratings of importance above the mean.

Subjects

Subjects were 50 male and 50 female CEGEP students in Montreal. They ranged in age from 17 to 28 years, with a mean age of 18.71.

Materials

The materials in this study consisted of booklets, each containing four different paragraphs describing an individual's successful accomplishment in the four chosen occupations (see Appendix C). Half of the female subjects and half of the male subjects received versions presenting women as lead characters, and the remaining subjects received versions presenting men. The spouse of the lead character was also described: in two of the situations the spouse was supportive of the individual in his/her job, and in the other two situations the spouse was not supportive. The order of presentation of characters was randomized, and the situations involving support and non-support were balanced. For example, one subject might respond to a booklet containing descriptions of Mary,

the executive secretary whose husband was annoyed that she accepted an advanced position; Ann, the social worker whose husband agreed she should become involved in her job; Jane, the police detective whose husband thought her job worthwhile; and Susan, the electronics engineer whose husband complained that she spent too much time on the job.

Following each stimulus paragraph was a set of questions pertaining to the individual and his/her success (see Appendix D). These questions were derived from Horner's (1968, 1970, 1972a, 1972b, 1974) criteria for scoring "fear of success," from Spence's (1974) content categories and questionnaire, and from Feather and Simon's (1975) rating scales of impressions of personality, consequences, and causal attribution.

The Conflict Scale consisted of items tapping areas of possible conflict: how pleased the person was with the success; how likely that the person felt too much time was spent with the job; how guilty the person felt; how lonely the person felt; how likely that the person wanted more social life; how likely that the spouse was jealous; how happy the person was.

The Consequences Scale consisted of items designed to measure anticipated movement away from or toward the family and job: how likely the person will spend more (and less) time with the family (and job); how likely that the marriage will break up; how likely that the person will quit the job.

The Attribution items measured the degree to which subjects attributed success to the person's ability, effort, and luck.

Subjects rated each question on a 7-point scale. In the cases where greater conflict was indicated by a score of 1, the ratings were reversed when analyzing the results (i.e., items 1, 6, 8, 10, and 11 in Appendix D). In this way, a higher score consistently stood for greater perceived conflict or more negative consequences.

Also included in this booklet was a front page on which each subject wrote his/her age, sex, and parental occupation(s), and on which were written instructions (see Appendix B).

Procedure

Subjects were tested by the Experimenter in groups in their regular class sessions. Booklets were distributed,

instructions from the front page were read aloud, and subjects were cautioned not to discuss the contents with their classmates until all testing was completed. Subjects finished after approximately 15 minutes, and all booklets were collected.

Results

Data were analyzed using 2 x 2 x 2 x 2 Analyses of Variance with Sex of Cue (male or female) as factor A, Sex of Subject (male or female) as factor B, Sex of Occupation (masculine or feminine) as factor C, and Stance of Spouse (support or non-support) as factor D, with repeated measures on the last two factors (Winer, 1971).

Conflict

Total Conflict Score. The Total Conflict Score consists of the sum of the ratings for items 1-8, so that the range of means is from a minimum of conflict (8) to a maximum (56). To determine the degree of relationship between each item and the Total Conflict Score, Spearman Rank Order Correlation Coefficients

were calculated. Overall, the individual items each correlated significantly with the Total Conflict Score, $p < .001$. Correlations ranged from rho = .363 to rho = .743, with an average rho = .595 (Hays, 1963).

A significant main effect was obtained for Sex of Occupation, F (1, 96) = 6.65. $p < .05$, indicating that subjects perceived greater conflict for those holding a feminine job ($\bar{X}$ = 25.19) as opposed to a masculine job ($\bar{X}$ = 23.64). A highly significant effect for Stance of Spouse, F (1, 96) = 146.18, $p < .001$, shows that any person who does not have the spouse's support in his/her job is perceived as experiencing greater conflict ($\bar{X}$ = 27.88) than a person whose spouse is supportive ($\bar{X}$ = 20.96).

The Sex of Cue by Stance of Spouse interaction, shown in Figure 1, was also found to be significant, F (1, 96) = 9.67, $p < .01$. Newman-Keuls tests (Winer, 1971) showed these differences between male and female cues: women were seen to have significantly greater conflict ($\bar{X}$ = 28.71) in a non-support situation than men ($\bar{X}$ = 27.05), but significantly less conflict in a support situation ($\bar{X}$ = 20.01) than men ($\bar{X}$ = 21.91). Thus the hypothesis was supported.

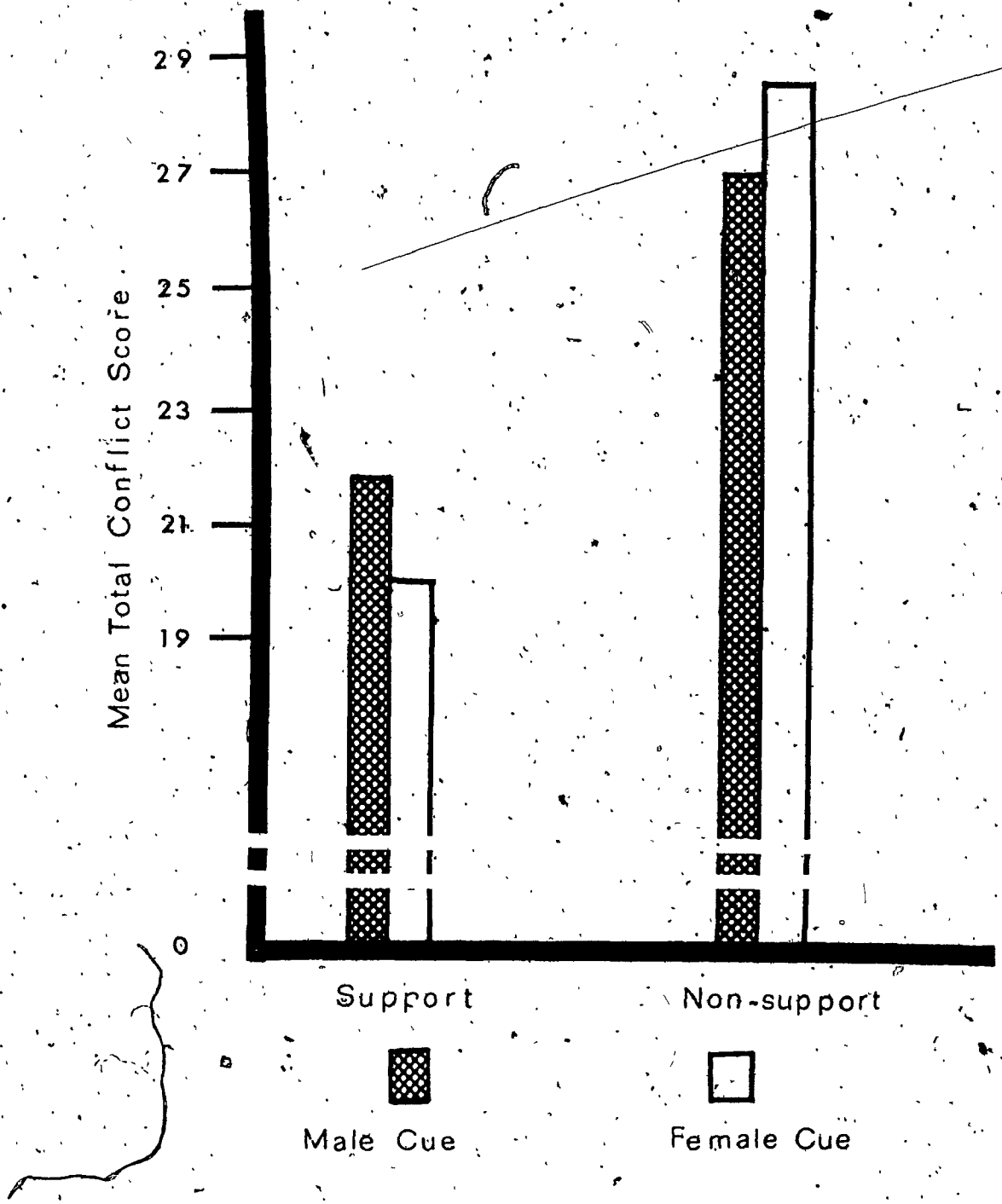

Figure 1. Mean Total Conflict Score for male and female cues in support and non-support situations. (High scores indicate greater conflict)

A significant Sex of Cue by Sex of Occupation interaction, F (1, 96) = 8.29, $p < .01$, is shown graphically in Figure 2. Post-hoc tests[1] on this interaction revealed that subjects saw greater conflict for a man in a feminine job ($\bar{X}$ = 26.12) than in a masculine job ($\bar{X}$ = 22.84), but that no difference in conflict was perceived between masculine and feminine jobs when held by a woman ($\bar{X}$ = 24.45 and $\bar{X}$ = 24.27). This result was also consistent with the hypothesis.

A significant triple interaction involving Sex of Subject by Sex of Occupation by Stance of Spouse is shown in Figure 3, F (1, 96) = 3.95, $p < .05$. Newman-Keuls tests revealed that the interaction was due to the fact that, whereas male subjects saw greater conflict for those holding a feminine job ($\bar{X}$ = 22.60) than those holding a masculine job ($\bar{X}$ = 19.82), this difference was significant only in the support condition, while female subjects saw greater conflict for those in a feminine as opposed to a masculine job, which was significant only in the non-support condition ($\bar{X}$ = 29.16 versus $\bar{X}$ = 26.44).

---

[1]All post-hoc tests are Cicchetti's modification of the Tukey (a) test (Winer, 1971; Cicchetti, 1972) unless otherwise specified. Level of significance is at least .05.

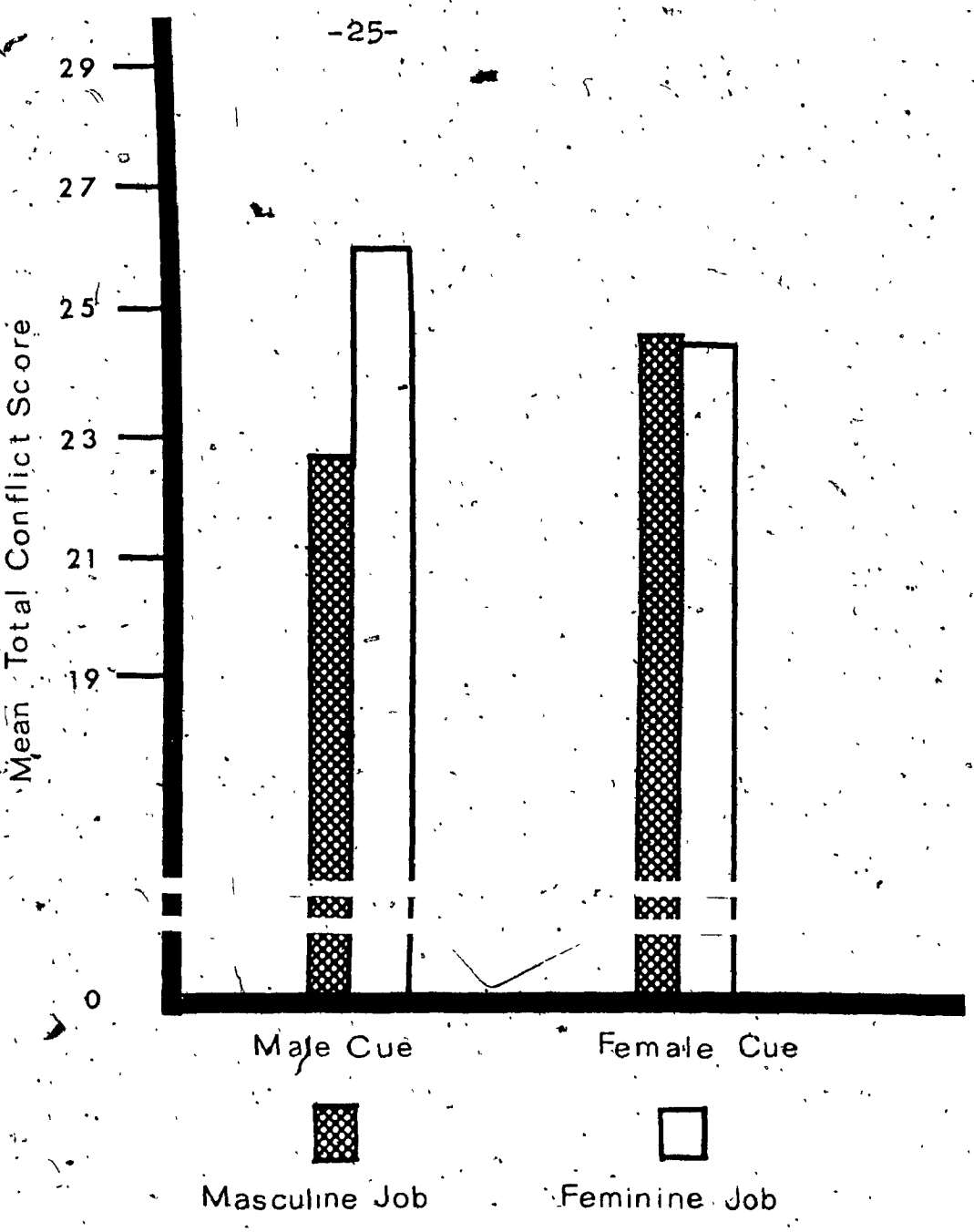

Figure 2. Mean Total Conflict Score for male and female cues in masculine and feminine occupations. (High scores indicate greater conflict)

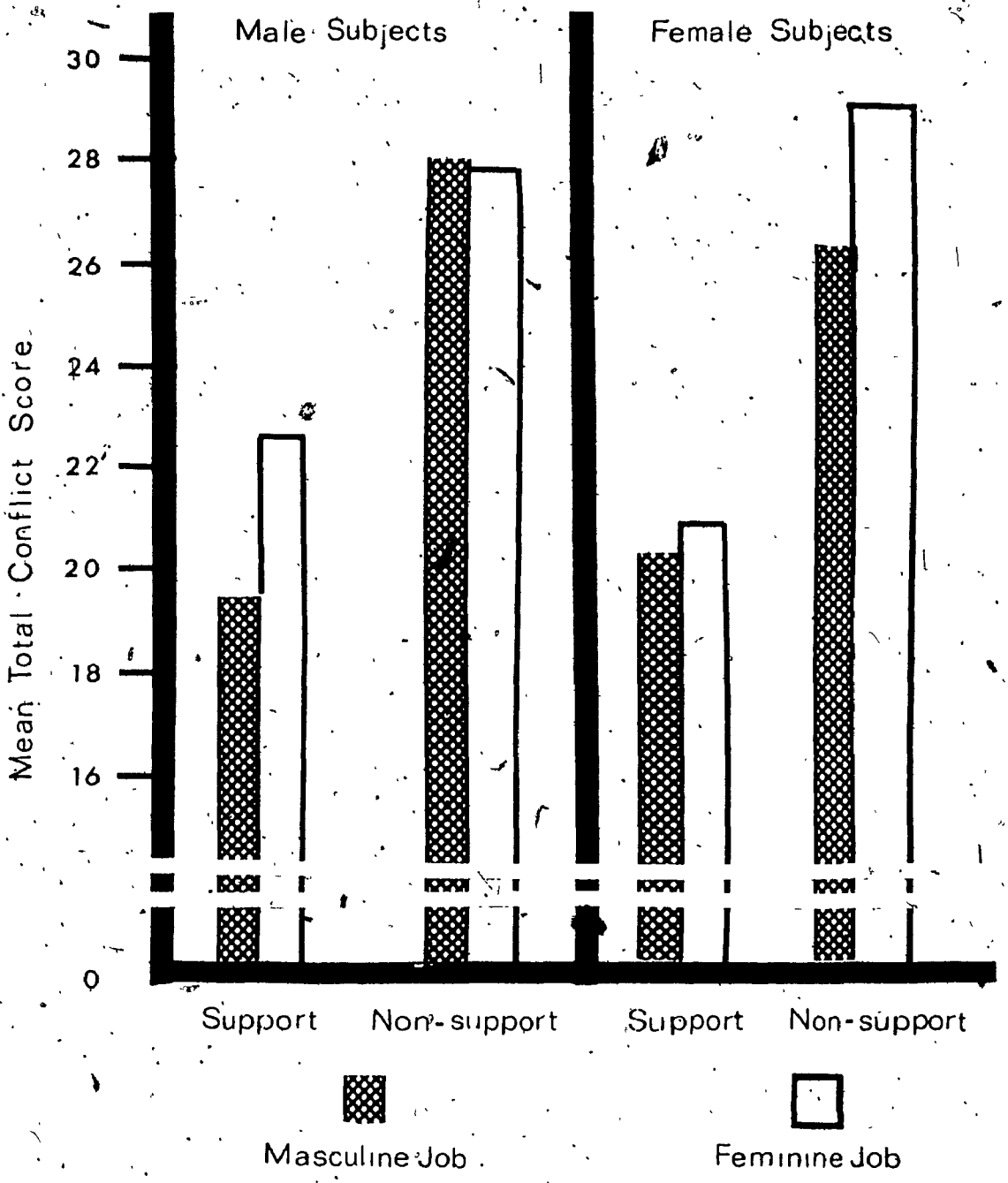

Figure 3. Mean Total Conflict Score for male and female subjects for masculine and feminine occupations and support and non-support situations. (High scores indicate greater conflict)

Analyses of individual items on the Conflict Scale. For each item on the Conflict Scale, the range of conflict extends from a minimum score of 1 to a maximum score of 7. Since these items were designed to tap different possible sources of conflict, analysis of the results, presented in Table 1, permits the identification of the perceived areas of conflict.

Significant findings regarding guilt about achievement show that those in a feminine occupation were seen as experiencing greater guilt ($\bar{X}$ = 2.70) than those in a masculine occupation ($\bar{X}$ = 2.30). Furthermore, a man with a feminine job was perceived as more likely to feel guilty ($\bar{X}$ = 2.96) than either a man with a masculine job ($\bar{X}$ = 2.22) or a woman with a feminine job ($\bar{X}$ = 2.44). All characters lacking their spouses' support were perceived as feeling greater guilt ($\bar{X}$ = 2.90) than those who enjoyed approval ($\bar{X}$ = 2.10). In addition, a woman was seen as less likely to feel guilty ($\bar{X}$ = 1.85) than a man ($\bar{X}$ = 2.36) in the support context.

The person without the spouse's support was also seen as significantly lonelier ($\bar{X}$ = 3.56 versus $\bar{X}$ = 2.46). A man in a feminine job was seen as more likely to feel lonely ($\bar{X}$ = 3.25) than a man in a masculine job

Table 1

Summary of Analyses of Variance

for Individual Items and Total Conflict Score

Source	df	F values						
		job time	guilty	lonely	family time	spouse	happy	Total
Cue(A)	1					* 4.64		
Subject(B)	1							
A x B	1						* 5.66	
Job(C)	1		* 6.62					* 6.65
A x C	1	* 3.95	* 4.79	** 7.38				** 8.29
B x C	1							
Spouse(D)	1	*** 15.88	*** 29.94	*** 64.46	** 7.40	*** 225.91	*** 50.75	*** 146.18
A x D	1		* 5.22	* 4.10	** 7.40		* 4.37	** 9.67
B x D	1							
C x D	1							
A x C x D	1			* 5.11				
B x C x D	1	* 4.32						* 3.95
A x B x C	1							
A x B x D	1							
A x B x C x D	1	* 4.60						

Note. Items 1 and 5 are not shown as there were no significant results. Appendix D contains questionnaire items.

* $p < .05$
** $p < .01$
*** $p < .001$

($\bar{X}$ = 2.78). The significant Sex of Cue by Stance of Spouse interaction was apparently due to a cross-over effect, whereby the woman was seen as the loneliest in a non-support situation ($\bar{X}$ = 3.70), but as the least lonely in a support situation ($\bar{X}$ = 2.31).

This same effect was demonstrated in the case of happiness, with the woman in a non-support situation seen as most unhappy ($\bar{X}$ = 3.33), but as happiest when in the support context ($\bar{X}$ = 2.25). Of interest is the significant finding that a successful woman was perceived as unhappier by female subjects ($\bar{X}$ = 3.15) than by male subjects ($\bar{X}$ = 2.43).

Consequences

Total Consequences Score. The Total Consequences Score consists of the sum of the ratings of negative consequences for items 9-14, so that the range of means extends from a minimum of 6 to a maximum of 42. To determine the degree of relationship between each item and the Total Consequences Score, Spearman Rank Order Correlation Coefficients were calculated. Overall, each item correlated significantly with the Total Consequences Score, $p < .001$. Correlations ranged from rho = .177 to rho = .707, with an average rho = .553.

A significant main effect for Stance of Spouse, F (1, 96) = 19.98, $p < .001$, revealed that more negative consequences were anticipated for the person who lacks the support of his/her spouse ($\bar{X}$ = 19.14) than for the person whose spouse is supportive ($\bar{X}$ = 17.07). The Sex of Cue by Stance of Spouse interaction, shown in Figure 4, was also found to be significant, F (1, 96) = 4.41, $p < .05$. Consistent with the hypothesis, post-hoc tests revealed that the interaction was due to the fact that significantly more negative consequences were expected for the woman in a non-support situation ($\bar{X}$ = 19.92) than for a man ($\bar{X}$ = 18.37), or for a woman in a support situation ($\bar{X}$ = 16.87). In addition, there was a significant Sex of Cue by Sex of Subject interaction, shown in Figure 5, F (1, 96) = 7.59, $p < .01$. Post-hoc tests revealed that the interaction was attributable to the fact that female subjects expected significantly more negative consequences when given female cues ($\bar{X}$ = 19.58) than was the case either when female subjects were given male cues ($\bar{X}$ = 17.23) or when male subjects were given female cues ($\bar{X}$ = 17.21).

Analyses of individual items on the Consequences Scale. For each item, ratings of negative consequences

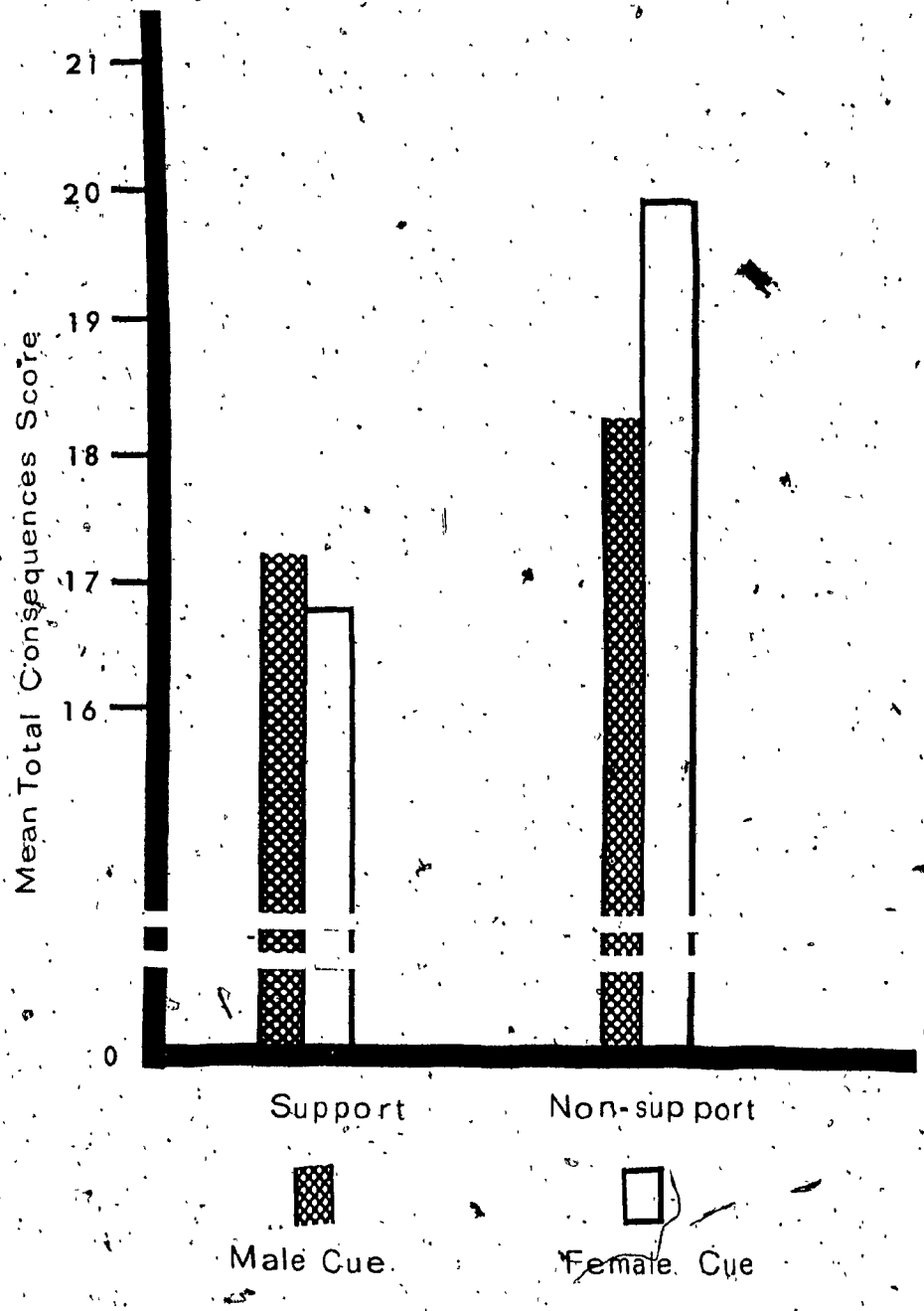

Figure 4. Mean Total Consequences Score for male and female cues in support and non-support situations. (High scores indicate more negative consequences)

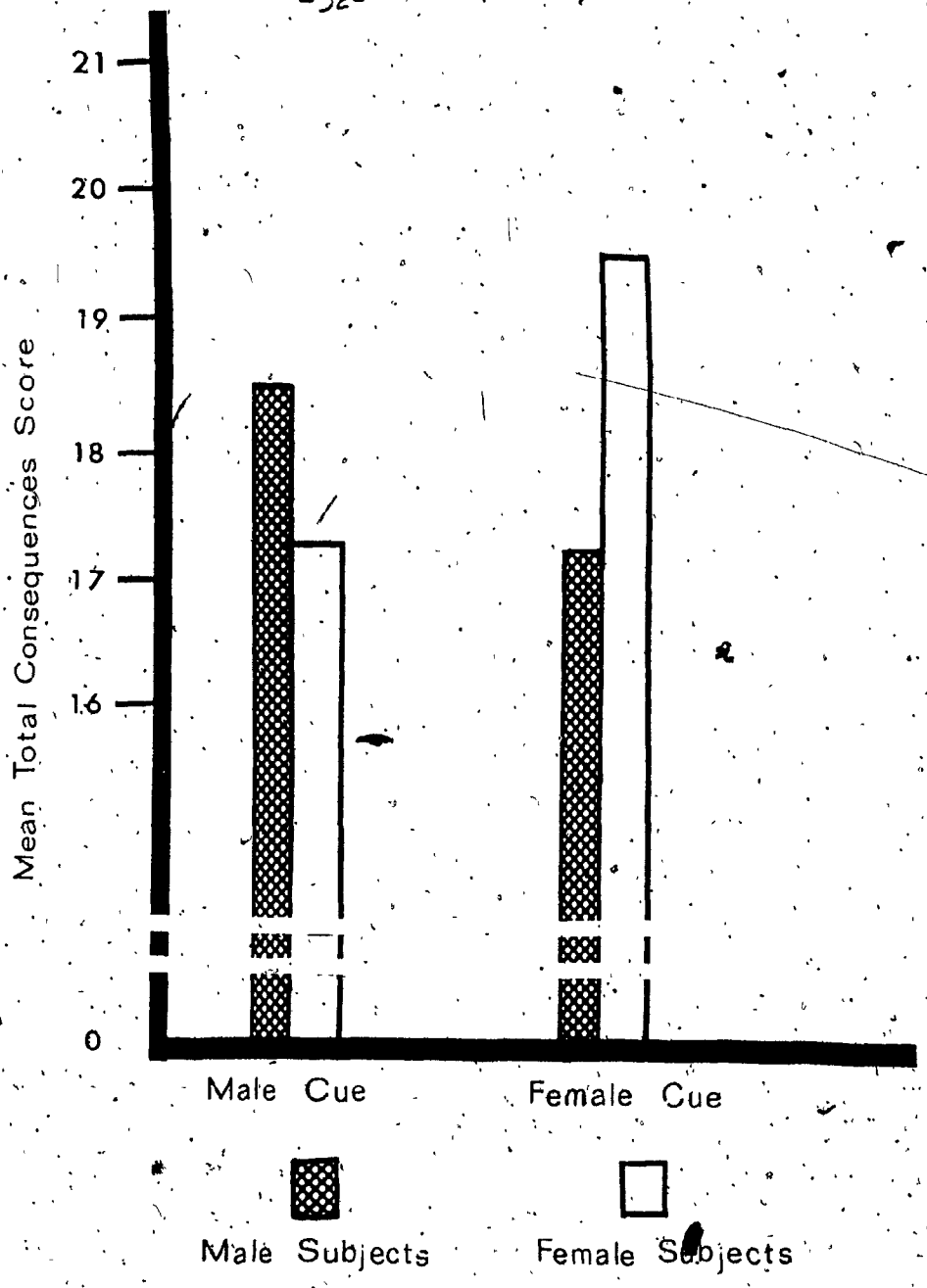

Figure 5. Mean Total Consequences Score for male and female subjects to male and female cues. (High scores indicate more negative consequences)

range from a minimum score of 1 to a maximum score of 7. Table 2 shows the significant items involved in perceived consequences. The major focus here is the movement toward either a family orientation--thus rejecting the success--or a career orientation. The consistent Sex of Cue by Sex of Subject interaction demonstrates that women perceive a clear family orientation for women and a career orientation for men. Female subjects saw women as more likely to spend more time with the family and less time with the job. Furthermore, these female subjects envisioned men as more likely to spend more time with the job and less time with the family. In contrast, male subjects neither demonstrated these views nor discriminated between the sexes with respect to orientation. In fact, they had greater expectations than the female subjects of successful women moving away from family commitments.

Examination of the issue of marriage dissolution reveals a significant Stance of Spouse effect. Subjects saw the person without support as more likely to suffer a marriage break-up ($\bar{X} = 4.67$) than a person with spouse approval ($\bar{X} = 2.60$). Also significant was the Sex of Subject by Sex of Occupation by Stance of Spouse

Table 2

Summary of Analyses of Variance

for Individual Items and Total Consequences Score

Source	df	F values						
		less on job	more on job	less family	more family	couple split	quit job	Total
Cue(A)	1							
Subject(B)	1							
A x B	1	* 3.70	* 3.72	** 6.27	** 4.88			*** 7.59
Job(C)	1						** 4.08	
A x C	1							
B x C	1		** 4.01					
Spouse(D)	1			*** 11.32	*** 8.01	**** 161.18	**** 20.31	**** 19.98
A x D	1				* 3.81		** 4.65	** 4.41
B x D	1							
C x D	1							
A x C x D	1							
B x C x D	1			** 4.33		*** 9.78		
A x B x C	1							
A x B x D	1							
A x B x C x D	1							

Note. Appendix D contains questionnaire items.

* $p < .06$
** $p < .05$
*** $p < .01$
**** $p < .001$

interaction, and Newman-Keuls tests revealed that female subjects saw a broken marriage as more likely to occur in a feminine occupation ($\bar{X}$ = 2.86) than in a masculine occupation ($\bar{X}$ = 2.32) when the spouse was supportive, and more likely to occur in a masculine occupation ($\bar{X}$ = 4.98) than in a feminine occupation ($\bar{X}$ = 4.42) when the spouse was not supportive. Male subjects made no such distinctions.

Examination of the issue of leaving a successful job also discloses a significant Stance of Spouse effect, and the person lacking his/her partner's support was seen as more likely to quit the job ($\bar{X}$ = 2.78 versus $\bar{X}$ = 2.04). The interaction of this effect with the Sex of Cue was significant, and Newman-Keuls tests revealed that a woman in a non-support situation ($\bar{X}$ = 2.99) was seen as more likely to quit the job than a man ($\bar{X}$ = 2.56). A significant main effect of Sex of Occupation indicates that a person in a feminine job ($\bar{X}$ = 2.56) was thought more likely to quit than a person in a masculine job ($\bar{X}$ = 2.24).

Attribution

Table 3 presents the mean attribution scores for each of the three attribution factors. The higher the

Table 3

Mean Attribution Scores and Summary of Analysis of Variance for Ability, Effort, and Luck in relation to Sex of Cue, Sex of Subject, Sex of Occupation, and Stance of Spouse

Condition	Attribute		
	Ability	Effort	Luck
Sex of Cue			
male	5.82	6.06	3.76
female	6.02	6.36	2.98
F	F < 1	4.92 *	8.09 **
Sex of Subject			
male	5.91	6.31	3.39
female	5.92	6.12	3.34
F	F < 1	F < 1	F < 1
Sex of Occupation			
masculine	6.05	6.40	3.10
feminine	5.78	6.03	3.64
F	6.11 *	13.70 ***	15.03 ***
Stance of Spouse			
support	5.94	6.22	3.30
non-support	5.89	6.21	3.44
F	F < 1	F < 1	F < 1

Note. Higher scores indicate greater importance.
* $p < .05$
** $p < .01$
*** $p < .001$

mean, the greater the perceived importance to the person's success. It can be seen that, although differences exist, the perceived importance of each determinant is consistent across variables. Also noteworthy is the fact that effort is highly rated, ability slightly less so, and luck is only moderately rated, indicating the relative perceived importance of these determinants to success.

The results yielded a significant Sex of Occupation effect, F (1, 96) = 6.11, $p < .05$, for ability, indicating that ability is seen as more important to success at a masculine job ($\bar{X}$ = 6.05) than at a feminine job ($\bar{X}$ = 5.78).

For effort, a significant Sex of Cue effect was found, F (1, 96) = 4.92, $p < .05$, indicating that hard work and effort are perceived as more important to a woman's success ($\bar{X}$ = 6.36) than to a man's success ($\bar{X}$ = 6.06). A significant difference was also found for Sex of Occupation, F (1, 96) = 13.71, $p < .001$, revealing that hard work and effort are considered to be of greater importance in a masculine job ($\bar{X}$ = 6.40) than in a feminine job ($\bar{X}$ = 6.03). It should be noted that the two feminine occupations which were combined in the analysis differ significantly on this particular item, t = 4.14,

df = 99, $p < .01$. Effort is seen to be of greater importance for the psychiatric social worker ($\bar{X} = 6.39$) than for the executive secretary ($\bar{X} = 5.67$). Since the former has the same mean rating as the masculine occupation, it can be seen that the effect of Sex of Occupation is due to the lesser importance of effort attributed to the secretary.

With regard to luck, a significant effect for Sex of Cue was found, F (1, 96) = 8.09, $p < .01$, revealing that luck is seen to be of lesser importance for a woman ($\bar{X} = 2.97$) than for a man ($\bar{X} = 3.76$). However, a significant effect for Sex of Occupation was also found, F (1, 96) = 15.03, $p < .001$, indicating that luck is seen to be of greater importance in a feminine job ($\bar{X} = 3.64$) than in a masculine job ($\bar{X} = 3.09$). Furthermore, a distinction is made between the two feminine jobs here, in that luck is considered to be of greater importance to the success of the secretary ($\bar{X} = 4.60$) than of the psychiatric social worker ($\bar{X} = 2.68$), $t = 7.45$, df = 99, $p < .01$.

Discussion

A major contribution of the present study was the identification of the Stance of Spouse effect. Horner had emphasized the male peers' opinions in relation to a woman's achievement strivings, and Spence had shown that a woman's success was more favorably received when her husband's support was made known. The current findings indicate that a supportive spouse is seen to reduce conflicts, regardless of the sex of the stimulus character. More complex and of greater interest is the finding that women are seen to benefit more from the support of their husbands than men do from their wives. However, women are seen as suffering more than men when they lack that support.

One interpretation of this effect is that women are considered more passive and dependent in a marital relationship, and more readily influenced by their husbands. In this way, they are encouraged by support, but deflated by opposition to their strivings. Men, on the other hand, might be seen as less influenced by, and more autonomous from, their wives' opinions, and so be seen as less likely to experience conflict because of disagreement, and

less likely to be encouraged by support. This interpretation is more plausible when considered in the light of recent social changes. Although now granted the liberty by much of society to pursue achievement goals, a woman may still be insecure in this relatively new role. In such a case, a husband's support would give energy to her motivation, but his disapproval of her career attempts would serve to undermine her tenuous determination. For a man, however, the question of insecurity has no bearing, since his role has always been defined in terms of work and achievement.

It is noteworthy that the present investigation found, with one exception, that there was no difference in the way that the sexes perceived the situations of successful people. The finding that the same conflicts could be identified by both male and female subjects indicates that studies of this kind are tapping social stereotypes, and not an individual's projected motives. These stereotypes concerning sex-appropriate behaviors are learned through a socialization process, and provide models for attitudes and role expectations.

If social perceptions are important, then violation of the designated roles should be seen as bringing about

conflict, because it is a deviation from the social norm. The results of the present study support this notion with regard to occupation, but only in the case of the male in a feminine job. In fact, a woman may succeed in a masculine occupation without being considered socially inappropriate, guilty, lonely, or likely to quit the job. This is particularly striking in view of previous research which maintained that such success was inconsistent with the feminine stereotype, and was perhaps at the root of the "fear of success" phenomenon. However, it is consistent with research that shows that females are permitted greater sex deviation than males (Seyfried and Hendrick, 1973).

It is possible that this attitude is a result of the Woman's Liberation Movement which has helped to create an atmosphere conducive to achievement strivings for women. The trend toward equal opportunities means that previously male-dominated areas, such as medicine, have opened up for the interested female. For the men, however, no such campaign has changed their range of permissible achievements, and it remains a social aberration for a man to hold a female-dominated occupation.

The implications of the recent change in sex-appropriate behavior are several. Firstly, it means that a woman does not "fear success" in a masculine occupation, and so should not be prevented from pursuing her goals on the basis that unconscious fears will interfere with her performance. Secondly, it demonstrates that beliefs of this kind are a result of social learning, and by their nature they are changeable. The more it becomes a part of the social structure for a woman to be a police detective, the more such a concept becomes accepted. Thirdly, it suggests that a Men's Liberation Movement might have some success in altering views regarding appropriate male behavior.

It was mentioned earlier that there was one exception to the uniform perceptions of the male and female subjects. This exception involves the display by females of a family orientation for women and a career orientation for men. Males, however, demonstrated no such orientations. From these results, two questions arise: Why, if social learning accounts for their perceptions, do the male subjects differ from the female subjects here? Why do the female subjects show such a marked sex-role adherence only in this instance?

One possible explanation concerns the traditional roles whereby a woman was dedicated to the family and a man to the job. More recently, a woman has been expected to combine the two functions, a difficult juggling of commitments. This has perhaps made females more aware of roles. Men, on the other hand, are not confronted with this dilemma, and therefore do not perceive any differentiation. This family versus career dilemma may be the focus, as Spence suggests, of females' ambivalence about successful achievement. If so, then only with respect to issues relevant to movement away from the job and toward the family would females show a sensitivity to sex roles, and differentiate themselves from males.

At this point the results approach Horner's definition of "fear of success," where a female subject perceived a female character as rejecting success. The only other instance concerns the finding that female subjects saw women as unhappier than did male subjects. However, the present study fails to indicate that a successful woman was seen as any more lonely, guilty, desirous of social life, or more likely to quit her job than a successful man. The suggestion from these

results is that Horner's Motive to Avoid Success is not a functioning force, and that a more accurate appraisal of the situation might be found in the dual role conflict.

Finally, this study clarifies attributions regarding success on the job. Feather and Simon found that ability was seen as a more important cause of male success than female success. The present study does not replicate this effect, but finds that ability is considered more important in a masculine occupation than in a feminine occupation. Although status was matched for the masculine and feminine occupations, there may be other negative associations with traditional feminine jobs. Further investigation is needed to clarify the subtle elements responsible for this effect.

The other attribution items reveal that effort is a more important cause, and luck is a less important cause, of a woman's success than a man's success. These results support the much quoted adage that a woman must work twice as hard as a man to attain the same achievement, and it appears that she cannot count on luck to

help her. In view of the upward fight that most women are facing for equal opportunities, this perception is most likely a social reality. With regard to occupations, this is the only instance where the executive secretary is separated from the others, and luck is seen as more important and effort as less important to success in this field. Although matched for status and undifferentiated in other ways, it can be observed that executive secretary lacks the professional tone that electronics engineer, police detective, and psychiatric social worker possess, even though the situation presented a person taking over the business. It is possible that a secretarial stereotype has been evoked involving the typical female compliance and dependence. In this traditional view, a woman does not need effort, but relies on luck to succeed. The fact that the other feminine-dominated occupation is not perceived in this way suggests that our society may be on its way to breaking down constricting sexual stereotypes.

In conclusion, this study points up some determinants of social perceptions of achievement motivation. It also reflects social changes that have recently occurred,

particularly with regard to the expanded freedom for women in careers. However, if these changes are to continue in the direction of an equalization of sex roles and a choice of one's own commitments, there must be some kind of reinforcement for the individuals, or benefit to society, in order to insure their permanency.

Research might be constructed with the aim of increasing social acceptance of deviations from conventional roles, and more specifically, achievement strivings for women. In addition, efforts might be directed toward early socialization processes, to educate children without building in the restrictions of stereotypes. This could be done through modelling of various behaviors or through media presentation. Due to the relatively slow process of change, however, it will undoubtedly take several generations to make this a social reality.

References

Alper, T. G. The relationship between role orientation and achievement motivation in college women. Journal of Personality, 1973, 41, 9-31.

Alper, T. G. Achievement motivation in college women. American Psychologist, 1974, 29, 194-203.

Angrist, S. S. The study of sex roles. In J. M. Bardwick (Ed.), Readings on the Psychology of Women. New York: Harper & Row, 1972.

Cicchetti, D. V. Extension of multiple-range tests to interaction tables in the analyais of variance. Psychological Bulletin, 1972, 77, 405-408.

Feather, N. T. Positive and negative reactions to male and female success and failure in relation to the perceived status and sex-typed appropriateness of occupations. Journal of Personality and Social Psychology, 1975, 31, 536-548.

Feather, N. T. and Raphelson, A. C. Fear of success in Australian and American student groups: Motive or sex-role stereotype? Journal of Personality, 1974, 72, 190-201.

Feather, N. T. and Simon, J. G. Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions, and perceived likelihood of different consequences. Journal of Personality and Social Psychology, 1975, 31, 20-31.

Field, W. F. The effects of thematic apperception upon certain experimentally aroused needs. Unpublished doctoral dissertation, University of Maryland, 1951.

French, E. G. and Lesser, G. S. Some characteristics of the achievement motive in women. Journal of Abnormal and Social Psychology, 1964, 68, 119-128.

Hays, W. Statistics for Psychologists. New York: Holt, Rinehart, and Winston, 1963.

Hoffman, L. W. Fear of success in males and females. Journal of Consulting and Clinical Psychology, 1974, 42, 353-358.

Horner, M. S. Sex differences in achievement motivation and performance in competitive and non-competitive situations. Unpublished doctoral dissertation, University of Michigan, 1968.

Horner, M. S. Femininity and successful achievement: A basis inconsistency. In J. Bardwick, E. M. Douvan, M. S. Horner, and D. Gutmann (Eds.), Feminine personality and conflict. Belmont, California: Brooks-Cole, 1970.

Horner, M. S. The motive to avoid success and changing aspirations of college women. In J. Bardwick, (Ed.), Readings on the Psychology of Women. New York: Harper and Row, 1972. (a)

Horner, M. S. Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 1972, 28, 157-175. (b)

Horner, M. S. The measurement and behavioral implications of fear of success in women. In J. W. Atkinson and J. O. Raynor (Eds.), Motivation and Achievement. Washington, D. C.: V. A. Winston and Sons, 1974.

Horner, M. S. and Walsh, M. R. Causes and consequences of existing psychological barriers to self-actualization. Annals of the New York Academy of Sciences, 1973, 208, 124-130.

Lesser, G. S., Krawitz, R. N., and Packard, R. Experimental arousal of achievement motivation in adolescent girls. Journal of Abnormal and Social Psychology, 1963, 66, 59-66.

McClelland, D. C., Atkinson, J. W., Clark, R. A., and Lowell, E. L. The Achievement Motive. New York: Appleton-Century-Crofts, 1953.

McKee, J. P. and Sherriffs, A. C. The differential evaluation of males and females. Journal of Personality, 1957, 25, 356-371.

McKee, J. P. and Sherriffs, A. C. Men's and women's beliefs, ideals, and self-concepts. American Journal of Sociology, 1959, 64, 356-363.

Monahan, L., Kuhn, D., and Shaver, P. Intrapsychic versus cultural explanations of the "fear of success" motive. Journal of Personality and Social Psychology, 1974, 29, 60-64.

Prescott, D. Efficacy-related imagery, education, and politics. Unpublished honors thesis, Harvard University, 1971.

Robbins, L. and Robbins, E. Comment on: Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 1973, 29, 133-137.

Rosencrantz, P., Bee, H., Vogel, S., Broverman, I., and Broverman, D. Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.

Schwenn, M. Arousal of the motive to avoid success. Unpublished junior honors thesis, Harvard University, 1970.

Seyfried, B. and Hendrick, C. When do opposites attract? When they are opposite in sex and sex-role attitudes. Journal of Personality and Social Psychology, 1973, 25, 15-20.

Sherriffs, A. C. and McKee, J. P. Qualitative aspects of beliefs about men and wo[illegible] Journal of Personality, 1957, 25, 451-464.

Spence, J. T. The thematic apperception test and attitudes toward achievement in women. Journal of Consulting and Clinical Psychology, 1974, 42, 427-437.

Veroff, J., Wilcox, S., and Atkinson, J. The achievement motive in high school and college age women. Journal of Abnormal and Social Psychology, 1953, 48, 108-119.

Watson, R. Female and male responses to the succeeding female cue. Unpublished manuscript, Harvard University, 1970.

Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill, 1971.

Appendix A

OCCUPATIONS PRESENTED IN PILOT STUDY

Occupations

Parent
Executive secretary
Public relations director
Professional tennis player
Social director of hotel chain
Bank vice-president
Psychiatric social worker
Novelist
Gardener
Police detective
Advertising researcher
High school teacher
Cook
Computer programmer
Interior decorator
Lawyer
Homemaker
Vocational counselor
Domestic worker
Violinist
Insurance agent
Negotiator
Child care worker
Electronics engineer
Gynecologist
Clothing designer
Head of historical society
Hair stylist
Sex symbol

Appendix B

INSTRUCTIONS

Instructions

This is a study which requires your imagination. You are going to read about 4 people in different situations, and we are interested in what you think about them. After reading a description, take a few moments to visualize the person. There is not much information, but imagine what the person might be like, or think of someone you know in a similar situation. Then, turn the page and answer the questions. There are no right or wrong answers. Just rely on your first impressions, and feel free to give whatever answers you think are most appropriate. Be sure to answer each question, and try to work quickly.

There is a page at the end of the questions on which you may make any comments you have about the people or their situations.

Appendix C

STIMULUS PARAGRAPHS

Stimulus Paragraph

Rick (Susan) is an electronics engineer who is especially interested in communication satellites. He (she) has been intensively studying the work in this area, and hopes to make a significant contribution. His wife (her husband) encourages his (her) devotion to his (her) job. Rick (Susan) has just received a letter saying that he (she) has been awarded a government contract for his (her) new design.

Rick (Susan) is an electronics engineer who is especially interested in communication satellites. He (she) has been intensively studying the work in this area, and hopes to make a significant contribution. His wife (her husband) complains that he (she) spends too much time on his (her) job. Rick (Susan) has just received a letter saying that he (she) has been awarded a government contract for his (her) new design.

Stimulus Paragraph

Bob (Ann) was committed to his (her) goal of becoming a psychiatric social worker, and was highly motivated to do well. His wife (her husband) agreed that he (she) should become very involved in this job. Recently, Bob (Ann) has had to devote a great deal of attention to some difficult cases. As a result of the excellent handling of these cases, Bob (Ann) has been recognized by the Director of the Clinic, and given additional authority.

Bob (Ann) was committed to his (her) goal of becoming a psychiatric social worker, and was highly motivated to do well. His wife (her husband) did not want him (her) to become over-involved in this job. Recently, Bob (Ann) has had to devote a great deal of attention to some difficult cases. As a result of the excellent handling of these cases, Bob (Ann) has been recognized by the Director of the Clinic, and given additional authority.

Stimulus Paragraph

John (Jane) is a police detective and his wife (her husband) thinks that what he (she) is doing is worthwhile. John (Jand) feels strongly that doing a good job is important. For several weeks, he (she) had been working on a difficult case, and finally uncovered the evidence that led to some long-sought convictions. For this achievement, John (Jane) is awarded the Medal of Honour.

John (Jane) is a police detective, and his wife (her husband) does not think that what he (she) is doing is worthwhile. John (Jane) feels strongly that doing a good job is important. For several weeks, he (she) had been working on a difficult case, and finally uncovered the evidence that led to some long-sought convictions. For this achievement, John (Jane) is awarded the Medal of Honour.

Stimulus Paragraph

Bill (Mary) is the executive secretary for the Head of a nation-wide company. He (she) knows everything about the business, and cares a great deal about his (her) work. The head of the company suddenly became ill, and was in the hospital for several weeks. Bill (Mary) was chosen to be the temporary director. His wife (her husband) was glad that he (she) accepted this position.

Bill (Mary) is the executive secretary for the head of a nation-wide company. He (she) knows everything about the business, and cares a great deal about his (her) work. The head of the company suddenly became ill, and was in the hospital for several weeks. Bill (Mary) was chosen to be the temporary director. His wife (her husband) was annoyed that he (she) accepted this position.

Appendix D

QUESTIONNAIRE

Questionnaire: Conflict Scale

1. How pleased is he (she) with his (her) accomplishment?
   (1 = not at all pleased; 7 = very pleased)

2. How likely is it that he (she) feels that he (she) is spending too much time on his (her) job?
   (1 = very unlikely; 7 = very likely)

3. How likely is it that he (she) feels guilty about his (her) success?
   (1 = very unlikely; 7 = very likely)

4. How lonely is he (she)?
   (1 = not at all lonely; 7 = very lonely)

5. How likely is it that he (she) wants more social life?
   (1 = very unlikely; 7 = very likely)

6. How likely is it that he (she) feels he (she) spends enough time with his (her) family?
   (1 = very unlikely; 7 = very likely)

7. How likely is it that his wife (her husband) is jealous of his (her) success?
   (1 = very unlikely; 7 = very likely)

8. How happy is he (she)?
   (1 = very unhappy; 7 = very happy)

Questionnaire: Consequences Scale

9. How likely is it that he (she) will spend less time on his (her) job?
(1 = very unlikely; 7 = very likely)

10. How likely is it that he (she) will spend more time on his (her) job?
(1 = very unlikely; 7 = very likely)

11. How likely is it that he (she) will spend less time with his (her) family?
(1 = very unlikely; 7 = very likely)

12. How likely is it that he (she) will spend more time with his (her) family?
(1 = very unlikely; 7 = very likely)

13. How likely is it that his (her) marriage will break up?
(1 = very unlikely; 7 = very likely)

14. How likely is it that he (she) will quit his (her) job?
(1 = very unlikely; 7 = very likely)

Questionnaire: Attribution

15. Was ABILITY a cause of his (her) success?
(1 = not important; 7 = very important)

16. Was HARD WORK AND EFFORT a cause of his (her) success?
(1 = not important; 7 = very important)

17. Was LUCK a cause of his (her) success?
(1 = not important; 7 = very important)