

## Impact of Fear of Success and Sex-Role Attitudes on Women's Competitive Achievement

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A study of 91 college-aged dating couples compared the impact of sex-role attitudes and Horner's measure of fear of success on women's achievement. As predicted, women with traditional attitudes performed significantly better on a verbal task when working as a team with their boyfriend than when working in individual competition against the boyfriend; nontraditionalists showed an opposite pattern. A similar interaction of fear of success and condition failed to reach statistical significance. Some evidence was found that women who combine traditionalism and high fear of success may be most affected by variations in achievement settings. Data did not support Horner's prediction that boyfriends' attitudes affect women's fear of success. Further, fear of success was not correlated with women's own sex-role attitudes, career aspirations, college grades, SAT scores, or self-ratings of "intelligence." In contrast, sex-role traditionalism was associated with significantly lower career aspirations, lower SAT verbal scores, and lower self-ratings of "intelligence." Sex-role attitudes thus appear to have greater impact than fear of success on women's achievement both in the laboratory and in daily life.

Horner's (1970, 1972) theory of "fear of success" provides a new approach to understanding problems of women's achievement. Horner suggests that many women are in conflict about intellectual and professional achievement. Success—especially in traditionally masculine fields—can be a mixed blessing for women. Although such success brings the attainment of a desired goal, it may also lead to negative outcomes, such as social rejection or loss of femininity. As a result, bright women may actually have a fear of success.

Despite the popularity of Horner's theory, Tresemer (1974) concludes that it is largely unsubstantiated by research. Most studies have been limited to testing Horner's prediction that fear of success is more prevalent

among women than men. Following Horner, women's fear of success has typically been assessed by coding stories written to a single verbal cue depicting a woman's outstanding success in a masculine field, such as, "After first term finals, Anne finds herself at the top of her medical school class." Men respond to an identical cue with a male protagonist (e.g., "John"). Horner (1970) reported a striking sex difference: 65% of college women but only 9% of college men showed fear of success in their stories. Later research has, however, failed to replicate this finding. In 22 studies reviewed by Tresemer (1974), the median rate of fear of success was 47% for women and 43% for men. In over half the studies, fear of success was actually more common among men than women.

More important in testing Horner's theory are studies of the effects of fear of success on actual achievement behavior. Horner predicted that competitive situations would impair the intellectual performance of women who fear success. In her initial study (1968, 1970), Horner found that college women with fear of success performed better on a verbal skill task when working alone than in mixed-sex competition. Women who did not fear success showed an opposite pattern. After

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This research was supported by a doctoral dissertation grant from the Department of Psychology and Social Relations of Harvard University to the author, and by a National Science Foundation grant to Zick Rubin, Harvard University. Special thanks are due Zick Rubin, Matina Horner, Joseph Pleck, and Charles Hill for their important assistance at various stages of this research, and to Barry Collins and Jacqueline Goodchilds for their helpful comments on an earlier draft of this manuscript.

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reviewing the few fear of success studies that have included behavioral measures, Condry and Dyer (1976) conclude that "there is little support for the contention that Horner's measure differentiates women who will do well or poorly in mixed-sex competitive situations."

The present study had two main objectives. First, given the inconsistent results of studies using Horner's measure, this study assessed the usefulness of sex-role attitudes as an alternative predictor of women's achievement behavior. Second, this study attempted to clarify the impact of mixed-sex competition on women's performance by distinguishing types of competition that might facilitate as well as impair the performance of women who fear success.

#### *Sex-Role Traditionalism*

The question of whether a measure of sex-role attitudes might be as good a predictor of performance as Horner's projective measure has not been investigated. According to Horner (1970, 1972), fear of success is based on specific sex-role concerns, such as fear of loss of femininity. Earlier studies (e.g., French & Lesser, 1964; Houts & Entwisle, 1968) have shown that sex-role attitudes can mediate the relationship of females' achievement motivation and performance. It seems plausible that sex-role traditional women might perform much like women who fear success, and there is some evidence that fear of success may be more prevalent among college women with traditional sex-role orientations (Alper, 1974; O'Leary & Hammack, 1975). A demonstration that fear of success and sex-role attitudes are in some way distinct or that the projective measure is uniquely able to predict achievement behavior would do much to affirm the validity and usefulness of Horner's measure. The present study compares the relationship of fear of success and sex-role attitudes to women's performance in both noncompetitive and competitive achievement settings.

#### *Competitive Achievement*

Fear of success is conceived as a latent motive that hinders performance only when aroused by some aspect of the situation. Hor-

ner singled out competition as most likely to arouse fear of success. This study hypothesized that competition per se is not the crucial factor. Rather, the possible violation of sex-role standards associated with some forms of competition is of prime importance.

A basic tenet of traditional sex-role ideology is the norm of male intellectual and occupational superiority. Mead (1949) argues that American males derive their self-esteem in part by outperforming females. Bernard (1973) emphasizes that women are taught to want to "look up to" their husbands, a stance facilitated by the fact that traditionally men are not only taller but also older, better educated, and have higher earnings and higher occupational status. College women who find themselves in academic competition with men may worry about jeopardizing their femininity, especially if they are excelling. Concerns about preserving at least an illusion of male superiority may affect women's achievement behavior.

Possible violations of the norm of male superiority should be most likely in situations of individual competition, where a woman competes directly against a man and where her level of performance will be made public. According to Horner (1970), negative outcomes might be further increased if the competitor were an "important" man, such as a boyfriend. Not all mixed-sex competition threatens sex-role standards, however. In a situation of team competition, where a woman works with a partner to outperform another team and where her own individual score will not be made public, negative consequences should be minimized. Team competition might be even more acceptable if the woman's teammate were a boyfriend, so that her achievement could be viewed as helping a loved one, a behavior consistent with the traditional feminine role.

It was predicted that fear of success and sex-role traditionalism would affect women's performance in similar ways. In a team-competition condition, high fear of success and traditional attitudes were expected to enhance performance; in an individual-competition condition, high fear of success and traditionalism were expected to decrease perform-

ance. In other words, type of competition would interact with fear of success and also with sex-role attitudes.

Ways in which these two personality variables might jointly affect women's behavior were also examined. Recently, Alper (1974) has argued that sex-role traditionalists and liberals do not represent motivationally homogeneous groups. She suggests that an additional distinction between women who are in conflict about femininity and those who are not in conflict may be useful. For instance, Alper speculates that in Horner's original study, those low-fear-of-success women who performed well when competing may have held liberal sex-role attitudes. This study provides a direct comparison of the behavior of four groups of women who are either liberal or traditional in their attitudes and who, as reflected in Horner's measure of fear of success, are either experiencing conflict about femininity or not.

Finally, the present study investigated the effects of fear of success and sex-role attitudes on achievement behaviors outside the laboratory as measured by college grades, SAT scores, and career aspirations.

## METHOD

### *Participants*

Participants were members of 91 college-aged dating couples who were taking part in a 2-year study of dating relationships.<sup>1</sup> Students were recruited for the larger project from four different colleges in the Boston area. The 91 couples had been "going with" their current partner for an average of 14 months. The modal couple was a sophomore woman dating a junior man. The mean age was 20.0 years for women and 21.2 for men. Students were paid for their participation.

The grade-point average for both men and women was approximately B. Forty-five percent of the women had grades of B+ or better. In this respect, they were comparable to Horner's (1968, 1970) sample in which 40% of the women were honors students. Fewer than 10% of the women in this study had grades of C or lower. About 65% of the women and 70% of the men planned on some graduate education (master's degree or higher). SAT scores were available for 84 women. Their mean quantitative score was 595, and their mean verbal score was 613. In short, the sample consisted of relatively able young women for whom professional careers were generally a realistic possibility.

### *Procedure*

*Experimental sessions.* In the summer of 1972, students attended two sessions conducted by a female experimenter. At Session 1, measures of fear of success and of performance in a noncompetitive situation were obtained. Students came to one of six administrations of Session 1 with their dating partner but were seated separately in the small auditorium. Students first wrote stories to five verbal cues.<sup>2</sup> The single fear of success cue came third. For women, the cue read, "Diane has just received word that she was one of three students in the state to get a perfect score on her LSAT (Law School Admissions Test.)" For men, the same cue with the name "Tom" was used. After completing the stories, students worked individually on the timed scrambled words task used by Horner (1968). They were told that their performance would be taken as an accurate measure of their ability but that results would be completely confidential. Students did not expect to find out their own or their partner's score. Instructions and timing for both the verbal cues and the scrambled words task were identical to those employed by Horner (1968) and were designed to create a neutral (nonarousing) testing condition.

About a month later, couples returned for Session 2 and were randomly assigned to either an individual-competition or team-competition condition. Five separate administrations of each condition were run. All students were administered the verbal facility task used by Horner. Scores on this task and the scrambled words task from Session 1 are highly correlated.<sup>3</sup> Participants in both the team and individual conditions worked individually on the task and were seated identically, next to their partner but with one seat intervening so they could not read their partner's responses. The only difference between conditions was the instructions (both oral and written) about how the task would be scored. In the individual-competition condition, members of the couple were told that their scores would be di-

<sup>1</sup> Participants for this study came from a larger sample of 231 couples taking part in a longitudinal study of dating relationships conducted by Zick Rubin and his colleagues at Harvard University. The sample has been described more fully in Peplau (1973).

<sup>2</sup> Because of growing publicity about the "Anne" medical student cue, Horner has advocated use of other cues depicting women succeeding in nontraditional fields. The "Diane" cue was developed by Horner and used at her suggestion (Horner, Note 1). The four other cues used in this study (e.g., "With her wedding day only a month away, Carol is full of anticipation") cannot be scored for fear of success using Horner's (1968) scheme.

<sup>3</sup> Horner (1968) reports the overall correlation of the scrambled words task and the verbal facility task for males and females combined to be  $r = .67$ ,  $p < .001$  (p. 68).

rectly compared. Tests would be scored immediately, and at the end of the session they would be told their own score and the score of their dating partner. In the team-competition condition, students were told they would receive only a single team score based on their own and their partner's joint performance. In addition, they were told that they and their dating partner had been paired with another couple team. At the end of the session, they would receive their own team score and the score of the competing team.

After completing the verbal facility task, students indicated how well they thought they had done, how important it was to them to do well, how much they liked the task, and how well they would like to have done. They also estimated the number of words they thought they had made. To determine if students were familiar with Horner's work, additional open-ended questions inquired about the purpose of the study, why it was important to have couples participate in the research, and whether they had ever participated in or read about similar research.<sup>4</sup> At the close of Session 2, a debriefing was held in which the purpose of the study was discussed.

*Scoring fear of success.* The law school cue was scored for fear of success imagery according to Horner's (1968) criteria. Fear of success was scored as present if any fear of success imagery was found or absent if none was found. (The terms *high* and *low* are used interchangeably with *present* and *absent*.) A male and female rater scored each story independently. Coders were in agreement on 86% of the women's stories and on 88% of the men's stories. In cases of disagreement, stories were discussed and a joint resolution reached for the final score.

*Questionnaire measures.* As part of the larger study of dating relationships, both members of each couple had independently completed identical versions of a 40-page questionnaire. Included were several measures of sex-role attitudes. A 10-item sex-role traditionalism scale asked the extent of agreement or disagreement with statements such as, "Women could run most businesses as well as men could" and "In marriage, the husband should take the lead in decision-making." Coefficient alpha for the scale based on responses of 91 couples was .83 for women and .81 for men. Another question asked students to rank their personal preference for four marriage options: remaining single or having a marriage in which the wife has a full-time career, works part-time, or is a full-time homemaker. Additional questions assessed support for the goals of the women's movement and students' personal career aspirations.

## RESULTS

The majority of women responded positively to the cue about Diane's outstanding achievement. Fear of success was present in the stories of only 30% of women, and in 44% of the stories men told about Tom's achievement. These rates of fear of success

differ from those reported by Horner but are consistent with results of 22 studies reviewed by Tresemer (1974). No significant relationship was found between fear of success and any measure of sex-role attitudes. Women high on fear of success had a mean sex-role traditionalism score of 2.5 compared with a mean of 2.4 for women low on fear of success. High-fear-of-success women were just as favorable to the goals of the women's movement (mean 4.8) as low-fear-of-success women (mean 4.6). Several checks for curvilinearity also failed to find a systematic relationship between fear of success and sex-role attitudes. Additional analyses investigated whether fear of success was more frequent among women whose attitudes and career goals were discrepant. Results indicated that fear of success was not more prevalent among traditional women who wanted a career or among liberal women who wanted to be full-time homemakers than it was among women with more congruent attitudes and goals. (Similar analyses found no significant relationships between men's fear of success and their sex-role attitudes or achievement behavior.)<sup>5</sup>

### *Noncompetitive Achievement*

All women performed a verbal-skill task in a noncompetitive setting. Mean scores classified both on fear of success and sex-role traditionalism (split at the median) are presented in Table 1. A 2 × 2 unweighted means

<sup>4</sup> Three students, one male and two females, indicated that they had learned about a Thematic Apperception Test story-writing procedure in a psychology class. Only one female student alluded to Horner's work. None of the women indicated in their responses that they saw a connection between the story writing and the intellectual tasks. The fact that students were participating in a longitudinal project, had already filled out several questionnaires, and took part in several other experiments during the summer sessions may have made the purpose of this study less obvious.

<sup>5</sup> Since a sizable proportion of men in this sample showed fear of success, it was possible to examine the impact of fear of success on men's performance. Analyses similar to those reported for women found no significant relationship between men's fear of success or their sex-role traditionalism and their performance in any condition. A discussion of the men's performance is found in Pleck (in press).

analysis of variance indicated a Fear of Success  $\times$  Traditionalism interaction,  $F(1, 87) = 5.6, p < .02$ . In the noncompetitive condition, women who combined high fear of success and traditional attitudes were the highest scoring group, scoring over 10 words better than women with nontraditional attitudes or low fear of success. A Scheffé test for post hoc comparisons between means (Keppel, 1973) indicated that of the four groups of women, only the high-fear-of-success traditionalists differed significantly from other groups in mean performance scores ( $p < .01$ ).

Horner (1968, 1970) viewed performance in a noncompetitive condition as indicative of between-subjects differences in initial ability. Consequently, she used change scores from noncompetitive to competitive conditions to test predictions about fear of success. The present results indicate that a noncompetitive setting may not provide a baseline ability measure and may, in fact, enhance the performance of traditional high-fear-of-success women. If these women were truly higher in ability, we might expect them to have higher college grades or SAT scores than other women. No evidence was found, however, that traditional high-fear-of-success women score higher on any of these measures of performance outside the laboratory. Only one significant relationship emerged: Sex-role traditionalism was negatively correlated with SAT verbal scores ( $r = -.22, p < .05$ ), lending further support to the possibility that noncompetitive settings facilitate performance for traditional women. Horner's baseline interpretation of noncompetitive performance seems dubious, and hence her use of change scores is questionable. It seems more reasonable to view noncompetitive and competitive settings as distinct achievement ecologies and to analyze performance in the two settings separately.

#### Competitive Achievement

At Session 2, women performed in either a team-competition or individual-competition condition. Table 2 presents mean scores for women in these two conditions classified by fear of success and sex-role traditionalism. A  $2 \times 2 \times 2$  unweighted means analysis of vari-

TABLE 1  
MEAN NUMBER OF WORDS PRODUCED ON SCRAMBLED WORDS TASK IN THE NONCOMPETITIVE CONDITION (SESSION 1)

Traditionalism <sup>a</sup>	Fear of Success	
	Low	High
Liberal	46.2 (35)	40.1 (12)
Traditional	43.9 (28)	56.3 (16)

Note. Number of women in each cell is given in parentheses.  
<sup>a</sup>Scores on the 10-item sex-role traditionalism scale were split at the median.

ance indicated no main effects for condition, fear of success, or traditionalism. The prediction of a Fear of Success  $\times$  Condition interaction was not supported. Although there was a tendency for high-fear-of-success women to perform better than low-fear-of-success women in the team condition ( $M = 41.9$  vs. 40.6) and to perform worse in the individual condition ( $M = 36.3$  vs. 38.8), the interaction was not significant,  $F(1, 83) = 1.8, p = .18$ . The only significant finding was the predicted Traditionalism  $\times$  Condition interaction,  $F(1, 83) = 15.3, p < .001$ . In the team condition, traditionalists scored higher than liberals ( $M = 43.9$  vs. 38.5); in the individual condition, traditionalists scored lower than liberals ( $M = 34.4$  vs. 40.7). No other interactions approached significance (all  $F$ s  $< 1$ ).

Although the analysis of variance found no significant effects for fear of success, inspection of scores in Table 2 suggests that those women who combine sex-role traditionalism and fear of success may be most affected by condition, performing worse than other

TABLE 2  
MEAN NUMBER OF WORDS PRODUCED ON VERBAL FACILITY TASK AT SESSION 2 BY FEAR OF SUCCESS, SEX-ROLE TRADITIONALISM, AND TYPE OF COMPETITION

Type of competition	Traditionalism <sup>a</sup>	
	Liberal	Traditional
Individual		
Low fear of success	41.1 (18)	36.4 (14)
High fear of success	40.2 (6)	32.4 (9)
Team		
Low fear of success	38.6 (17)	42.6 (14)
High fear of success	38.5 (6)	45.3 (7)

Note. Number of women in each cell is given in parentheses.  
<sup>a</sup>Scores on the 10-item sex-role traditionalism scale were split at the median.

women in the individual condition and better than other women in the team condition. A Scheffé test for post hoc comparisons indicated that within the individual condition, high-fear-of-success traditionalists performed significantly worse than low-fear-of-success liberals ( $p < .05$ ), though not worse than the two other groups of women. Within the team condition, performance of high-fear-of-success traditionalists did not differ significantly from that of other women ( $p > .05$ ).

#### *Evaluation of Performance*

Women were quite accurate in estimating how well they had done on the verbal facility task. The correlation between actual number of words created and the woman's estimate of how well she did ( $r = .62, p < .001$ ) and how many words she thought she had made ( $r = .71, p < .001$ ) were sizable. A  $2 \times 2 \times 2$  unweighted means analysis of variance of type of competition, fear of success, and traditionalism was performed for each response measure. Mirroring the pattern of actual performance, traditionalists evaluated their performance more positively in the team condition, and liberals rated their performance higher in the individual condition; the Traditionalism  $\times$  Condition interaction was significant,  $F(1, 83) = 4.4, p < .05$ , for how well women thought they did. A similar interaction was found for ratings of liking for the task; traditionalists enjoyed team competition more, and liberals enjoyed individual competition more,  $F(1, 83) = 4.5, p < .05$ . Two measures of competitiveness, how well the woman wanted to perform and how strongly she wanted to do better than her opponent, were affected by condition but not traditionalism. All women showed a greater desire to do well in team competition than in individual competition,  $F(1, 83) = 5.2, p < .05$ . Similarly, women indicated greater desire to outperform their opponent in the team than individual condition,  $F(1, 83) = 11.1, p < .01$ . Ratings of how important it was to do well were unaffected by condition or traditionalism. Finally, no significant main effects of fear of success were found on any response measure, nor was there an interaction of

fear of success and either condition or traditionalism.

#### *Other Correlates of Fear of Success and Traditionalism*

Extensive questionnaire data available for couples provided an opportunity to compare the relationship of fear of success and sex-role attitudes to characteristics of the woman and of her dating partner. Fear of success did not relate to any measure of the woman's ability or achievement goals outside the laboratory, including college grades, SAT scores, attitudes toward having a career, or plans for graduate school. While sex-role traditionalism did not relate to grades or SAT math scores, it was correlated with lower SAT verbal scores ( $r = -.22, p < .05$ ), less interest in a career ( $r = -.45, p < .001$ ), and lower educational aspirations ( $r = -.22, p < .05$ ). Self-ratings showed a similar pattern. Traditionalism was associated with evaluating the self lower on "intelligence" ( $r = -.24, p < .05$ ), but higher as a "desirable marriage partner" ( $r = .28, p < .05$ ). Sex-role traditionalism was also correlated significantly with other measures of conservatism, such as higher frequency of church attendance, less permissiveness toward premarital sex, less support for the goals of the women's movement, and higher scores on a 10-item scale of authoritarian submission.

The data provided no support for Horner's (1970, 1972) prediction that fear of success is related to characteristics of a woman's dating partner. Women who fear success were no more likely to be dating traditional men, nor were their boyfriends more likely to oppose the women's movement. Boyfriends of women with high and low fear of success were equally likely to prefer a career wife or a full-time homemaker. It may be that characteristics of the dating partner are less important than the mere fact of having a boyfriend. Since all women in this sample were in dating relationships, it was not possible to test this notion. Horner also predicted that fear of success would be less prevalent in relationships where the male's intellectual superiority is clear. No relationship was found between the woman's fear of success and her

boyfriend's grades, SAT scores, or differences between his scores and hers. Women's subjective ratings of their boyfriends' "intelligence" also failed to relate to fear of success. Nor was there a relationship between the woman's fear of success and her boyfriend's fear of success. In contrast, there was considerable matching in couples on sex-role traditionalism ( $r = .48, p < .001$ ). Women with liberal attitudes were significantly more likely to date men who support the goals of the women's movement ( $r = .42, p < .001$ ), prefer a career wife ( $r = .41, p < .001$ ) and are liberal on other measures.

#### DISCUSSION

This study examined the effects of fear of success, sex-role attitudes, and competition on women's intellectual performance. The clearest finding is the significant link between women's sex-role attitudes and their performance both in the laboratory and in their daily lives. Women with liberal attitudes have higher educational and career aspirations, rate themselves as more "intelligent," and in fact have higher SAT verbal scores. Traditional and liberal women differ in the type of achievement setting that facilitates high performance: Traditional do better in noncompetitive situations or in team competition; liberals do better in individual competition. Interestingly, traditionals and liberals do not differ in grades in college. This suggests that when women set a personal goal such as completing college, liberals and traditionals are capable of equally high levels of performance. Traditionals and liberals may, however, structure their college experience differently. The data indicate, for example, that traditionals are significantly more likely to major in "feminine" fields such as nursing or education. It is possible that traditionals may attempt to avoid direct academic competition, for instance, by selecting large, impersonal classes.

#### *Do Women Fear Success?*

Results of this study provide only limited support for Horner's theory. Outside the laboratory, fear of success was not related to women's educational plans or to measures of

achievement, such as SAT scores or college grades. Horner's prediction that women with fear of success date men who disapprove of achieving women was not supported. In a laboratory setting, fear of success had no independent effect on behavior. Some evidence was found, however, that among women with traditional sex-role attitudes, fear of success may affect performance. When working non-competitively, traditional women with fear of success perform significantly better than all other women. When working in individual competition, traditional women with fear of success tend to perform worse than other women. These data support Alper's (1974) suggestion that women's achievement behavior is affected by both sex-role orientation and conflict about femininity. Perhaps when Horner (1968) conducted her original study in 1965 the majority of women she tested held traditional sex-role attitudes. (She did not actually assess this, of course.) During the past decade, there has been considerable change in sex-role attitudes. Today perhaps only women who maintain traditional beliefs about the feminine role are affected by fear of success.

The data clearly indicate that women high on Horner's measure do not have a broad fear of achievement. Although women with high and low fear of success may differ in the kind of setting that facilitates maximum performance, an image of high-fear-of-success women as intellectually disabled by achievement conflicts is unwarranted. Nor do women high on Horner's measure have a generalized fear of mixed-sex competition. Working as part of a mixed-sex team does not impair their performance, although working in individual competition against a boyfriend may. What fear of success appears to represent is a particular sensitivity to the sex-role implications of achievement settings and a concern that achievement behavior be manifested in sex-role-appropriate ways.

#### *Fear of Success Versus Sex-Role Attitudes*

In this study as in others, the effects of fear of success are small and elusive. Sex-role attitudes emerge as a more substantial and consistent determinant of women's per-

formance. It is unclear whether the limited impact of fear of success is due to methodological weaknesses or to conceptual difficulties. A serious problem of Horner's measure is its uncertain reliability (Condry & Dyer, 1976). Low reliability could explain both the weak effects of fear of success on performance and the failure of the measure to relate to questionnaire responses.

Although it is currently fashionable to view women as in conflict, ambivalent, or anxious about achievement, such conflict models (Horner, 1970; Bardwick, Douvan, Horner, & Gutman, 1970) may be inadequate. An alternative view worthy of more attention is a theory of sex-typed achievement (e.g., Stein & Bailey, 1973). This perspective proposes that achievement motivation and behavior are channeled into sex-role-appropriate domains. Traditionally, the proper achievement domain for women has been the area of social skills associated with homemaking or "feminine" careers such as nursing. The present data are consistent with a sex-typed model of achievement. Women who adhere to traditional sex-role beliefs do differ in career goals from women who espouse less traditional attitudes. Further, traditional women achieve at their highest level in a noncompetitive or team setting, situations that may be viewed as compatible with traditional femininity. Liberal women show a different pattern, excelling in a more masculine condition of individual competitive achievement.

It appears that Horner's measure is of limited usefulness. The popularity of Horner's theory is based in part on the belief that fear of success has significant impact on women's lives and professional careers. At present, there is little evidence to support this assertion. Speculations about the effects of fear of success outside the laboratory must be made most cautiously. Researchers concerned with women's achievement might do well to emphasize sex-role attitudes rather than fear of success and to investigate alternative theories of women's achievement.

## REFERENCE NOTE

1. Horner, M. S. Personal communication, May 1972.

## REFERENCES

- Alper, T. G. Achievement motivation in college women: A now-you-see-it-now-you-don't phenomenon. *American Psychologist*, 1974, 29, 194-203.
- Bardwick, J. M., Douvan, E., Horner, M. S., & Gutmann, D. *Feminine personality and conflict*. Belmont, Calif.: Brooks-Cole, 1970.
- Bernard, J. *The future of marriage*. New York: Bantam, 1973.
- Condry, J., & Dyer, S. Fear of success: Attribution of cause to the victim. *Journal of Social Issues*, 1976, 32, 63-84.
- French, E. G., & Lesser, G. S. Some characteristics of achievement motive in women. *Journal of Abnormal and Social Psychology*, 1964, 68, 119-128.
- 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 basic inconsistency. In J. M. Bardwick, E. Douvan, M. S. Horner, & D. Gutzmann (Eds.), *Feminine personality and conflict*. Belmont, Calif.: Brooks-Cole, 1970.
- Horner, M. S. Toward an understanding of achievement-related conflicts in women. *Journal of Social Issues*, 1972, 28, 157-176.
- Houts, P. S., & Entwisle, D. R. Academic achievement effort among females: Achievement attitudes and sex-role orientation. *Journal of Counseling Psychology*, 1968, 15, 284-286.
- Keppel, G. *Design and analysis: A researcher's handbook*. Englewood Cliffs, N.J.: Prentice-Hall, 1973.
- Mead, M. *Male and female*. New York: Dell, 1949.
- O'Leary, V. E., & Hammack, B. Sex-role orientation and achievement context as determinants of the motive to avoid success. *Sex Roles*, 1975, 1, 225-234.
- Peplau, L. A. *The impact of fear of success, sex-role attitudes and opposite-sex relationships on women's intellectual performance*. Unpublished doctoral dissertation, Harvard University, 1973.
- Pleck, J. Male threat from female competence. *Journal of Clinical and Consulting Psychology*, in press.
- Stein, A. H., & Bailey, M. M. The socialization of achievement motivation in females. *Psychological Bulletin*, 1973, 80, 345-366.
- Tresemmer, D. Fear of success: Popular but unproven. *Psychology Today*, 1974, 7, 82-85.

(Received September 25, 1975)