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## *Fear of Failure*

### *The Psychodynamic, Need Achievement, Fear of Success, and Procrastination Models*

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If at first you don't succeed, you're about average.  
—Fortune cookie proverb

In a society focused on achievement and success, the possibility of failure is often minimized or denied. Nevertheless, the very nature of a competitive society is that success can only be attained by a few. Although many individuals strive for success, others behave in ways that minimize the risk of failure, even at the cost of attaining success. The concept of fear of failure has been investigated from widely different perspectives, resulting in an enormous literature. This chapter focuses on four perspectives: (1) the psychodynamic conceptualization of fear of failure; (2) fear of failure as viewed by the need achievement literature; (3) fear of failure versus fear of success; and (4) fear of failure as an antecedent of academic procrastination. Each perspective has used different ways of assessing fear of failure and has conceptualized a specific model. Gender differences, and, when applicable, racial differences are reviewed, as is the research on fear of failure according to each model. Finally, each section provides implications for intervention.

#### PSYCHODYNAMIC VIEWS OF FEAR OF FAILURE

The psychodynamic literature has examined the concept of fear of failure from the perspective of inhibitions in intellectual pursuits and underachievement. This literature, which is quite limited in scope, has been labeled "the psychodynamics of flunking out" (Hendin, 1972). The focus is on understanding

the motivations of individuals who fail or withdraw from academic pursuits despite sufficient ability, intelligence, or preparation to succeed. Fear of failure is consistently regarded as originating in early (preoedipal) relationships with parents.

### *Psychometric Scales and Assessment*

Psychodynamic theorists describing fear of failure have not used psychometric scales to assess this concept. Hendin (1972) mentions use of projective tests as an "independent check on the data derived from the interviews" (p. 132), but this is the only mention of any systematic assessment in the literature, and the results of these tests are not reported. Nevertheless, the Thematic Apperception Test (TAT), which is based on psychodynamic principles, forms an important component of assessment in subsequent models of fear of failure which are discussed later on.

### *Research*

In general, data on psychodynamic models of fear of failure have been obtained from case studies. Hellman (1954) describes the nonempirical nature of these observations when she states (p. 259): "the observations I shall be discussing here have not been collected systematically with the intention of doing research on the subject. They have been gained, as we usually gain material in psychoanalytic work, from cases which have come to us by chance, at intervals of several years." Hellman studied three children with intellectual inhibitions in great detail. She observed their mothers to present similar patterns: a close bond between them and their child, intense anxiety about losing this close relationship, and denial of this anxiety.

Using a similar case study approach, Hendin (1972) interviewed 15 male college students with academic difficulties yet with the intelligence to perform well in college. Students were seen twice a week over the course of several months in the context of short-term therapy. From these interviews, the author described an in-depth presentation of three cases which exemplify some of the themes of academic failure. These themes indicate that the students' failure often represented a means of coping with conflicting messages from parents about success and a way of maintaining ties with parents via conflict. "With fathers who often are afraid of their son's potency, and with mothers who constrict them, these students are the victims of families that have encouraged them to pursue goals they did not really want them to achieve" (Hendin, 1972, p. 131).

Thus, the psychodynamic theory of fear of failure has been developed from comprehensive observations and interviews with a small number of cases. The lack of controls (e.g., comparisons with individuals who are achieving well) and the small sample size should be kept in mind during the following review of the literature.

### *Model*

Baker (1979) presents a theory of the development of fear of failure as the result of pathological family relations in which the child's failure comes to play an important function. According to Baker, the parents' role is to provide the child with empathic encouragement so as to minimize the child's frustrations and maximize self-esteem. Parents who cannot accept their child's shortcomings or who are highly critical will rear a child with little self-esteem and unrealistic personal standards. This child will have an unrealistic or *grandiose* sense of self. The combination of low self-esteem and high demands for performance results in failure or *narcissistic injury*. Poor self-esteem causes the child to search for external sources of evaluation. Any failure experienced by such a narcissistically vulnerable child will result in either rage or avoidance. Rather than engage in the repeated effort or trial and error necessary for academic achievement, the child begins to avoid studying and instead engages in activities with more pleasurable outcomes. By not studying, the grandiose self is kept intact: "if an exam is flunked, it is only due to lack of study, not due to the lack of ability; if, however, it is passed without study, it is doubly delicious, providing a good grade and 'confirming' magical powers of brilliance" (Baker, 1979, p. 422). Furthermore, the child avoids studying to prevent competition and thus direct comparison with the parent.

### *Gender Differences*

Most psychodynamic theorists recognize the prevalence of fear of failure among women and focus on origins of this fear specifically from the perspective of female development. According to Kanefield (1985b), conflicts about achievement and fear of failure are prevalent in girls whose mothers are ambivalent about their daughter's independence. The mother in this case needs the presence of a daughter to maintain her sense of adequacy, and she may feel intensely threatened as her daughter matures and thus obviates the need for a protective caretaker. Rather than respond to her own maturity with pleasure, the girl associates mastery with anxiety, fear of abandonment, loss of love, or retaliation. Thus, females are prone to associate competitive or independent behaviors with loss of parental approval and interpersonal abandonment. "In this way, the desire to be loyal to the mother emerges as a major motivation for girls to postpone or undermine their accomplishments and individuation" (Kanefield, 1985b, p. 350).

Women's undermining of success as a solution to fears of retaliation by the mother has been termed *masochism* by psychodynamic theorists (Freud, 1957; Horney, 1967; Kanefield, 1985b). Yuen and Depper (1987) state: "Fear of failure may be a form of masochism, in that the constant sense of inadequacy which underlies fear of failure is, in one sense, a perpetuation of pain and suffering" (p. 31). The masochist pursues defeat rather than pleasure and is "... consumed by self-centered suffering" (Yuen & Depper, 1987, p. 31). Rather than accomplish

success and thus symbolically risk surpassing their mothers, women devalue success or perceive themselves as worthless. The alternative involves triumphing over parents with terror about retaliation and loss of affiliation (Kanefield, 1985b). Kanefield states:

In response to these social and psychological dilemmas, a woman takes the only recourse: she sabotages her accomplishments, devalues or disowns her achievements, or views herself as inadequate in spite of her activities to the contrary. Thus, she assuages her guilt for abandoning her mother, extricates herself from responsibility for her mother's rage, envy, or emptiness, excuses her mother's inappropriate dependency, and perpetuates the masquerade that she lacks what is essential for independent achievements. She remains loyal to her mother, but sacrifices her self-esteem. (pp. 358-359)

In contrast, boys are encouraged to enter into rivalry with their fathers in order to disidentify with their mothers. Consequently, Kanefield (1985b) argues that males do not have the fears of competition that females do.

Women's conflicts about achievement have also been interpreted as representing *penis envy* (Chessick, 1984; Kanefield, 1985b). Among current psychodynamic writers, the concept of penis envy does not connote women's actual wish for a penis but instead the desire for power, status, and independence awarded to men in our society. Given the devaluation of women in our culture and the restrictions and limitations placed on them, this results in women's denigration of their accomplishments, withdrawal from competition, work inhibitions, and feelings of fraudulence in their achievements (Kanefield, 1985b). It will also result in women's lowered self-esteem and in oversensitivity to the opinions of others rather than personal values (Chehrizi, 1984).

Finally, there has been discussion in the psychodynamic literature about women's achievement conflicts in light of women's relational ties. Notman, Zilbach, Baker-Miller, and Nadelson (1986) describe how women's self-esteem is tied to relations with others. Self-esteem is thus enhanced when women feel connected to others and receive feedback about such connectedness. In contrast, men's self-esteem is characteristically tied to feelings of personal accomplishment. Since our society regards achievement as an individual rather than a collective attribute, men are less likely to experience achievement-related conflicts than are women. Kanefield (1985a) has similarly described boys as wishing to achieve, motivated by their desire to separate from the mother. Girls, on the other hand, are fearful of achieving because of threats of isolation, and consequently they engage in self-defeating behaviors in order to maintain interpersonal relationships.

### Intervention

There has been little focus in the psychodynamic literature on intervention specifically for fear of failure. Baker (1979) emphasizes the need to select an appropriate treatment goal for individuals who display fear of failure. Rather than focusing on improved academic performance or a successful career, the therapist should investigate developmental factors, particularly those related to

the client's poor self-esteem. Because of the origins of poor self-esteem and lack of separation from parents in the preoedipal years, the prognosis for recovery is not considered good. Furthermore, the clients' difficult and ambivalent relationships with parents can result in poor transference during the therapeutic process, including rage, lack of interest in therapy, and increased failure in school or career. This in turn may result in the therapist feeling helpless, frustrated, and antagonistic toward the client (Baker, 1979).

### Summary

The psychodynamic model of fear of failure has been based on intensive case observations rather than controlled research. Overly critical parental child-rearing practices result in an individual who has poor self-esteem, is sensitive to external sources of evaluation, and avoids activities with the potential of failure. Women with mothers who encouraged dependence and who feared maturity in their daughters will come to associate achievement with negative interpersonal consequences and possible retaliation by others. Interventions for fear of failure have a poor prognosis due to the long-standing nature of this phenomenon and the client's inability to form a good transference relationship.

### FEAR OF FAILURE VERSUS NEED ACHIEVEMENT

During the 1950s and 1960s there was a tremendous proliferation of research on achievement motivation. In these postwar decades, the emphasis on genetic determinants of behavior decreased, and the focus on environmental influences of behavior escalated. Government programs were established to increase technical and academic skills, and individuals were sought out who had the motivation and ability to profit from these programs. Personal striving and competition with others were viewed as exemplary. Yet only a fraction of individuals can achieve success in a society that rewards individual rather than group achievement. Although the bulk of the research focused on the achievers, a few researchers began to examine those who chose to avoid the possibility of failure.

### Models

The most widely cited theory of achievement motivation is that by McClelland, Atkinson, Clark, and Lowell (1953). They view achievement motivation as a stable trait, so that the high achiever is likely to strive for success in almost any situation that can be interpreted as achievement related, or as involving standards of excellence. Conversely, the low achiever tends to avoid achievement-related situations. This theory views achievement as a drive, with the individual motivated to reduce arousal and frustration through performance. The research to develop this theory was funded by the navy, and therefore subjects usually consisted of enlisted men. Thus, much of the achievement

motivation literature used male subjects and military tasks (such as rifle shooting). McClelland *et al.* are concerned with the societal implications of achievement rather than effects on individuals.

Atkinson and Feather (1966) regard achievement as the combination of two motives: hope of success and fear of failure. Hope of success corresponds to achievement motivation as conceptualized by McClelland *et al.* (1953). Fear of failure is the motive to avoid a negative incentive and is operationally defined as test anxiety. When fear of failure exceeds hope of success, the individual will choose activities that are so easy or so difficult that they minimize anxiety about failure. Atkinson and Feather view achievement as dependent on a variety of factors in the individual, such as perceptions of task difficulty, attributions about success and failure, and level of anxiety.

Both these theories view fear of failure and the motive to achieve as opposites. Thus, a great deal of the research literature that focuses on low achievers is reviewed later, since these are viewed as individuals high on the motive to avoid failure.

A third theory views achievement motivation and fear of failure as independent factors (Birney, Burdick, & Teevan, 1969). These researchers examined TAT stories for evidence of avoidance of fearful situations. They found such stories to contain central figures who were adjusting to some threat that had appeared by itself (i.e., that was not the figure's fault) and that was blocking achievement. When subjects underwent a failure task and were then given a TAT task, they increased such threat imagery, which was termed *hostile press*. By including external threats (e.g., court trials, attack, injury) in TAT stories designed to elicit achievement themes, individuals were avoiding failure for the figures in their stories by introducing insurmountable but legitimate barriers to success. Even though individuals in these stories fail as the result of barriers, this constitutes objective, rather than subjective or devaluative, failure (Teevan & Smith, 1975). According to this model, individuals can score high on both need achievement and fear of failure—they may have high achievement goals and yet indicate barriers to such goals in their TAT imagery. Birney *et al.* also view fear of failure as related to affiliative needs and as reflecting avoidance of either a lowered self-estimate or a lowered evaluation by others.

### *Psychometric Scales and Assessment*

#### *TAT Imagery*

McClelland *et al.* (1953) felt that the way to assess motivation was through the use of fantasy. They modified the Thematic Apperception Test (TAT) for experimental investigation by administering the TAT scenes in a group setting and projecting them onto a screen. Subjects were asked to write stories about each scene and had specific instructions intended to ensure a complete plot (e.g., Who are the persons? What has led up to the situation? What is being thought? What will happen?)

In order to arouse the achievement motive, McClelland *et al.* (1953) pre-

ceded the TAT with a 12-minute anagrams test. Subjects were told that they were taking a test which indicated level of intelligence, which had been used during the past war to assess officer candidates, and which demonstrated whether an individual had leadership capacity. The anagrams test also allowed the experimenter to manipulate success and failure by the use of artificial norms with which students could compare their scores. McClelland *et al.* used this procedure under relaxed (the importance of the test was de-emphasized), neutral (the test was not described as important nor unimportant), achievement-success (the test was described as important, and norms were low), achievement-failure (the test was described as important, and norms were high), and achievement-success-failure conditions (the test was described as important, the norms provided for an initial test were low so that subjects were led to believe they would succeed, and then norms provided for the actual battery were high so that subjects would receive low scores).

Scoring of the TAT which followed this anagrams test incorporated an elaborate and standardized procedure that included various types of achievement imagery, instrumental activity, obstacles or blocks to achievement, nurturance, and affective states (McClelland *et al.*, 1953). It became apparent that some subjects seemed to avoid achievement in their stories based on TAT scenes, or else they described characters in their stories who displayed negative emotional reactions in competitive situations. The authors referred to such responses as characterizing fear of failure.

#### *Hostile Press Imagery*

Birney *et al.* (1969) developed a scoring system specifically for TAT imagery which they felt demonstrated hostile press, the tendency to describe the central figure as adjusting to some external threat that was blocking achievement. They categorized three types of threats: (1) "legitimate demands," such as warnings or information that precluded achievement; (2) "exercise of judicial power," including arrest or reprimands from authority figures; and (3) "catastrophes," such as physical injury or impending death. In scoring hostile press, the experimenter looks for such evidence as reprimands for personal action, legal retaliation for actions, or hostile conditions that impede well-being. Furthermore, since Birney *et al.* presumed fear of failure to be associated with a need for affiliation, responses indicating deprivation of affiliative ties are also included in the hostile press scoring system.

Administration of the TAT is time consuming, and the scoring requires considerable training. There have also been criticisms of its test-retest reliability (e.g., Krumboltz & Farquhar, 1957). In her review entitled "To Dispel Fantasies about Fantasy-based Measures of Achievement Motivation," Entwisle (1972) criticized the psychometric properties of TAT-based scoring systems of achievement motivation. She argued that test-retest reliability rarely exceeds .40 and thus that the predictive validity of these systems for school achievement and career success is limited. Females and individuals with high IQ scores and high socioeconomic status wrote more words per story, and such productivity pre-

dicts school grades more than scoring of achievement motivation (Entwisle, 1972). Nevertheless, the TAT is the predominant method of assessing need achievement and fear of failure in nearly all of the research that follows.

#### *Goal-Setting and Risk-Taking Behavior*

According to Atkinson (1957), individuals high in fear of failure will choose tasks that are either so easy that success is guaranteed or so difficult that no one could succeed at them. In contrast, the individual high on need achievement will choose tasks of moderate difficulty on which there is maximum challenge. Furthermore, whereas high achievers will increase goals as they master tasks, individuals high on fear of failure will remain with easy tasks despite success or with difficult ones despite failure. This concept, termed *goal-setting behavior* (Atkinson, Bastian, Earl, & Litwin, 1960), *risk-taking behavior* (Hancock & Teevan, 1964), or *level of aspiration* (Birney et al., 1969), has been demonstrated repeatedly using such tasks as a ring-toss game (Atkinson & Feather, 1966), shuffleboard performance (Atkinson et al., 1960), and placement of bets (Hancock & Teevan, 1964). Generally, individuals are asked to estimate their performance preceding each trial. Whereas high achievers tend to take moderate risks, individuals high in fear of failure behave in seemingly irrational ways by moving to harder odds after failure or easier odds after success. According to Hancock and Teevan (1964), this is so the individual high in fear of failure can reduce the amount of anxiety present due to continued success or failure. Because of the consistency with which this effect is demonstrated, goal-setting or risk-taking behaviors have been used to assess achievement and fear of failure (Birney et al., 1969).

#### *Mehrabian's Self-Report Scale of Achieving Tendency*

In 1968, Mehrabian developed a self-report scale that measures the motive to achieve relative to the motive to avoid failure, based on Atkinson's (1957) model. The 38 items assess both positive feelings aroused by success and negative feelings aroused by failure. In order to incorporate research related to the achievement motive, items assessing the motive to achieve include independence in personal relationships, delay of gratification, future perspective, preference of moderate-risk situations, and preference for activity involving competition. Items assessing the motive to avoid failure include affiliation with others, immediate gratification, present perspective, preference for high- or low-risk situations, and preference for activity involving cooperation and chance (Mehrabian, 1968). The scale is scored by summing all items, with a high score indicating high motive to achieve and low motive to avoid failure. Thus, the motives to achieve and to avoid failure are viewed as direct opposites; it is not possible to be high on both. Mehrabian's scale has a test-retest reliability of approximately .75 and is not correlated with social desirability. The scale is negatively correlated with test anxiety. Because the scale correlates significantly with gender, separate male and female norms have been developed to account for females' lower achieving tendency (Mehrabian & Bank, 1978).

#### *Other Self-Report Scales*

Finally, some researchers have used the Debilitating Anxiety Scale of Alpert and Haber's (1960) Achievement Anxiety Test, which assesses anxiety in achievement-related situations, and the Achievement Scale of the Edwards Personal Preference Schedule (Edwards, 1959), which measures the number of times subjects chose achievement-related statements compared with other statements in a forced-choice format. Macdonald and Hyde (1980) factor analyzed both self-report and projective measures of need achievement, fear of failure, and fear of success. Their results indicated that a primary factor on which several self-report measures loaded accounted for about 10 percent of the variance and was termed "anxiety." Grade point average could be significantly predicted by scores on self-report measures of achievement, including the Debilitating Anxiety Scale (for both genders) and the Edwards Need Achievement Scale (for females).

#### *Research*

In comparison to the vast amount of research on need achievement, relatively little research has specifically investigated fear of failure. Much of the research on fear of failure was conducted by Richard Teevan, and is summarized by Birney et al. (1969). They describe a variety of studies designed to test the validity of the hostile press scoring system for fear of failure.

When male college students were asked to volunteer for a dart-throwing task that emphasized achievement, students high on hostile press were less likely to volunteer. On the other hand, when the same task was described in more affiliative terms (the task was important to the instructor), there was no difference in volunteer rates of students high and low on hostile press. When male high school students were asked to participate in a rifle-shooting task, students high on hostile press were more likely to set unrealistic levels of aspiration and to express displeasure with the task. Male high school students high on hostile press made more "irrational" (extremely risky) choices on a mathematical probability task. Birney et al. (1969) conclude that individuals high in hostile press are avoiding failure rather than approaching success.

What happens in situations (such as the school setting) in which individuals high on hostile press cannot avoid tasks measuring achievement? Birney et al. (1969) predict that one effective way to avoid failure is to succeed. In fact, research cited by the authors indicates that male elementary, high school, and college students high in hostile press do have higher grades than students low in hostile press. The authors conclude that students high on fear of failure use a number of strategies to avoid failure. If they have a choice about participation in achievement situations, they will choose not to participate. If they are forced into an achievement situation, they will do what they can not to fail, even if that also means not succeeding. If the only way not to fail is to succeed, they will work hard to succeed.

Individuals high on fear of failure are externally oriented in their definitions of success and failure. Birney et al. (1969) review research indicating that indi-

viduals high in hostile press are more influenced by the opinions of "expert" others, show greater conformity to peers, are more willing to give up recognition for achievement in exchange for a secure place in a group, cooperate rather than compete with others, and are more likely to join protest groups on college campuses. Whereas individuals high on need achievement compare themselves to an internal standard of excellence, individuals high on hostile press look to other people for evaluation (Birney *et al.*, 1969). Nevertheless, comparison with others may be anxiety producing for the individual high on fear of failure. Based on this research, Birney *et al.* (1969) predict that high hostile press individuals would prefer comparisons with noncomparable groups, prefer imprecise rather than precise measures of performance, reject responsibility, and seek social support rather than perform alone.

In sum, Birney *et al.* (1969) state:

As long as the self-estimate is kept vague, it remains unclear whether a performance confirms it or disconfirms it. We would therefore expect a person who is fearful of a self-estimate loss to avoid situations which promise to increase the precision of the self-estimate. It is true that one decreases the chances of success as well as failure, but a person who is particularly fearful of a loss in self-estimate may prefer to forego the opportunity of raising his self-estimate in order to ensure that there be no loss. (p. 211)

The concept that individuals will protect self-estimate even if this means failure has also been elaborated by Covington and Omelich (1979). Their research has indicated that students and teachers often have conflicting ideas about achievement. Teachers reward effort, yet students feel they lose face when they try and then fail. Thus, students may increase their positive self-image when risking failure by not studying—the very condition that teachers punish most severely. This is particularly important in the case of potential public shame (Brown & Weiner, 1984). Effort reduces guilt, but it also increases the possibility of feelings of incompetency in cases of failure. Covington and Omelich (1984) state (p. 159): "Although high effort may reduce the negative affect association with noncompliance to a work ethic, it also implies that the cause of failure is low ability, a realization that leads to shame and humiliation." Thus, students struggle to balance effort and competency without impeding self-worth.

### Gender Differences

Most of the research on fear of failure used only male subjects. Furthermore, it is questionable whether dart-throwing and rifle-shooting tasks are relevant in arousing achievement motivation in females. Yet gender differences in achievement motivation were apparent from the results of the earliest studies (e.g., McClelland *et al.*, 1953). Achievement imagery in females did not seem to be aroused by tasks stressing intelligence and leadership that aroused such imagery in males. On the other hand, females' scores under neutral conditions (when the task was described as unimportant) were as high as those of males under conditions of arousal. This gender difference was ignored rather than examined, with early studies selecting only male subjects from coeducational schools and colleges.

In 1973, Stein and Bailey reviewed the literature on achievement motivation in order to identify factors specific to women's pattern of achievement. First, they argue that leadership and intelligence are qualities that women are not socialized to value as much as men are. In fact, females place greater value on and have higher personal standards of performance for tasks that are labeled feminine or neutral rather than masculine (Stein, Pohly, & Mueller, 1971). Specifically, social skill and avoidance of social rejection are sources of achievement motivation for females (Stein & Bailey, 1973). For example, girls are more likely to seek contact during a failure situation than are boys (Zunich, 1964). Women competing against others report less confidence, lower goals, and less expectancies for success than women working alone (House, 1974). In contrast, there are no significant differences on these variables between men working alone and men competing against others. In sociological studies of coalition forming (Bond & Vinacke, 1961), males tend to use "exploitative" strategies (such as playing competitively), whereas females use "accommodative" strategies (such as displaying concern for the welfare of others). Females scoring high on the motive to avoid failure on Mehrabian's scale improved their performance when responsibility for the task was assigned to the group as opposed to themselves; males high on the motive to avoid failure did not show this pattern (Mehrabian, 1968). Hoffman (1972) has discussed the tendency for women to "sacrifice brilliance for rapport" (p. 135) to reflect women's greater affiliative needs. Stein and Bailey disagree with the notion that women are more affiliation oriented and men more achievement oriented. They point out that social arousal leads to *achievement* imagery, not *affiliative* imagery, in women, and thus social performance is related to achievement striving, possibly because females have been reinforced for engaging in social activities more than males have.

Second, Stein and Bailey (1973) review gender differences in characteristics related to achievement that could account for women's achievement patterns. Females are more anxious about failing in academic situations than are males, and females score higher on measures of test anxiety. Furthermore, anxiety is negatively related to achievement and to learning. Although male and female college students have similar course grades, females expect to receive lower grades than do males (Battle, 1966; Erkut, 1983). Girls tend to be overly cautious when choosing tasks on which they expect to succeed, whereas boys tend to be risk takers, choosing tasks of undue difficulty (Veroff, 1969, in Stein & Bailey, 1973). Finally, women are rated as less competent even when performing in identical ways to men. When raters are asked to evaluate identical products that are attributed either to males or females, they rate the product more negatively when they are led to believe it is by a woman, whether the product is a professional article (Goldberg, 1968), a work of art (Pheterson, Kiesler & Goldberg, 1971), the credentials of potential faculty members (Fidell, 1970), or the ability of physicians (Feldman-Summers & Kiesler, 1974).

Third, Stein and Bailey (1973) review developmental differences in the socialization of achievement patterns of males and females. During the early school years, females achieve well in the academic arena. Even by first grade, however, boys prefer repeating previously failed tasks, whereas girls prefer

repeating tasks on which they have been successful. Boys are also less dependent on peers and adults for assistance and approval than are girls, and girls are more likely to withdraw from a threatening situation (Crandall & Rabson, 1960). By adolescence, the value of academic pursuits decreases for females, career aspirations are less clear than are those of males, and parents and peers place a greater focus on the social accomplishment of females (Stein & Bailey, 1973). Females are more likely to assume responsibility for failure than are males at all grade levels, but this difference increases during adolescence (Crandall, Karkovsky & Crandall, 1965). Whereas male high school underachievers tend to have a history of underachievement from grade school on, female high school underachievers tend to have superior levels of achievement until junior high school, when achievement begins to decrease (Shaw & McCuen, 1960).

A fourth factor identified by Stein and Bailey (1973) to account for women's achievement patterns is that feminine sex-role stereotypes such as dependency, nonassertiveness, and nonaggressiveness are in conflict with achievement motivation as it is traditionally defined. How, then, do women cope with the dissonance of achievement? According to Stein and Bailey, women may do this in a variety of ways. They may view achievement as more appropriate for men than for women. Female underachieving students tend to produce more achievement imagery when presented with stimuli (pictures or stories) containing men than women, whereas the reverse is true for female students rated as achievers (Lesser, Krawitz, & Packard, 1963). A second strategy is to receive vicarious satisfaction through the achievements of husband or children. Women tend to value the accomplishments of their spouses more than their own accomplishments, particularly if they adhere to the traditional feminine role (Lipman-Blumen, 1972, in Stein & Bailey, 1973). Third, they may value achievement more than traditional female activities, which have lower status in our society. Thus, they may view achievement as compatible, rather than incompatible, with femininity. High school females who perform well in school define achievement as more gender appropriate than do females who perform more poorly in school (Lesser, Krawitz, & Packard, 1963). Fourth, they may choose a traditionally feminine career and achieve within that career. Fifth, they may conceal their accomplishments from others or reduce effort (this will be discussed more fully in the following section on fear of success). Finally, they may compensate for achievement by expanding equal effort to appear physically attractive and to engage in domestic activities. Clearly, achievement is less directly rewarding and more conflict laden for women than for men.

A number of studies have focused on gender differences in attributions following success and failure on achievement-related tasks. Women tend to be more external in their attributions for both success and failure (this contradicts the research cited earlier by Crandall *et al.*, 1965, which found women to take responsibility for failure) by perceiving the causes for their performance to be due to task difficulty or luck (Bar-Tal & Frieze, 1977; Erkut, 1983; Feather, 1969). In contrast, men are more likely to cite internal attributions such as ability and effort for their performance. In this same study, women were also less confident about success and felt more inadequate during the task than were men. This

tendency of women to externalize has been interpreted as reflecting women's powerlessness in a sexist society (Frieze, Whitley, Hanusa, & McHugh, 1982). Other research has found women to attribute success to luck and failure to poor ability (e.g., Nichols, 1975). This tendency for women to believe negative information but discount positive information has been termed the "self-derogatory" model and viewed as contributing to women's low self-esteem in achievement settings (Frieze *et al.*, 1982). In contrast, men have been found to attribute success to skill and failure to luck, which has been viewed as reflecting men's fear of failure (Levine, Reis, Sue, & Turner, 1976).

Women's attributions following success and failure are related to gender role, however. Women who were classified as feminine were unaffected by success but inhibited by failure (Welch & Huston, 1982). Androgynous women, on the other hand, were unaffected by failure but facilitated by success. Androgynous women also tended to attribute success to ability and failure to task difficulty, whereas feminine women did not differ in attributions for success and failure. The authors of this study speculate that the attributional patterns of androgynous women may help to increase their self-esteem. In a study relating sex roles to career achievement (Wong, Kettlewell, & Sproule, 1985), women's educational level, presence of masculinity, and absence of femininity all contributed as predictors of career achievement. In contrast, fear of failure was found not to be significantly related to sex roles classified as "traditional" (family oriented) or "nontraditional" (career oriented) (Steinberg, Teevan, & Greenfield, 1983).

### *Racial Differences*

A few studies have compared achievement motivation between blacks and whites. Early research on locus of control found that blacks were more externally oriented than were whites (Battle & Rotter, 1963; Lefcourt & Ladwig, 1965). Strickland (1971) states (p. 318): "This expectancy may well reflect the reinforcement history of members of minority or disadvantaged groups who often find that their behaviors have little to do with the subsequent events that happen to them."

Unfortunately, most of the research on race and achievement makes no specific mention of fear of failure. One exception is a study by Gurin and Epps (1975). These authors found that black men who exhibited fear of failure had lower course grades and performed more poorly on an anagrams task than did black men without fear of failure. However, no such relationships existed for black women with fear of failure (Gurin & Epps, 1975). Both black men and women with fear of failure had lower career aspirations than did those without fear of failure.

### *Childrearing Factors*

A number of studies have investigated parent-child interaction factors that might contribute to the development of fear of failure. Birney *et al.* (1969) discuss

the development of fear of failure as a consequence of parental reinforcement patterns. They argue that parents may either reward, punish, or remain neutral to their child for trying or not trying (effort) and for succeeding or failing (outcome), resulting in many patterns of reinforcement. The parent who remains neutral and thus ignores both effort and outcome will produce a child with low achievement motivation. The parent who rewards success and remains neutral to all other outcomes will presumably have a child high in hope for success and low in hostile press, who is eager to seek out achievement situations. Third, the parent who rewards success and punishes failure may have a child who learns to value success and hide failure. Finally, the parent who remains neutral to success and punishes failure would be expected to produce a child high in fear of failure. This child learns to avoid achievement situations when at all possible, since there is no reward for trying but instead a negative focus on failing.

Teevan and McGhee (1972) tested some of these hypotheses about parental reinforcement and resulting fear of failure. Mothers of male high school students were asked how they characteristically reward or punish their child. Mothers of male students who were high on hostile press were more likely to respond neutrally to satisfactory achievement situations, whereas mothers of students low on hostile press were more likely to respond positively to such successes. Mothers of students high on hostile press were also more likely to punish their sons for unsatisfactory achievement behavior than were mothers of students low on hostile press, but this difference was not significant. Thus, it seems that fear of failure may develop by maternal neutrality to success and some maternal punishment of failure, as predicted by Birney *et al.* (1969). Specifically, they argue that this parental reinforcement pattern creates low self-image in children and poor adjustment in an achievement-focused society.

Second, researchers have examined the role of parental expectations for independence in the development of fear of failure. Teevan and McGhee (1972) asked mothers of male high school students to list the ages at which they expected their son to accomplish various independence and achievement behaviors (e.g., tie his shoes right, stand up for his own rights around other children, earn his own spending money). Male students who were high in fear of failure had mothers with earlier expectations for their independence. However, other research (Winterbottom, 1958) has found early independence training by mothers to also be indicative of high achievement motivation among elementary school boys compared with boys low in achievement motivation. When research has compared boys and girls, mothers of girls cite later ages for their daughters to gain independence and begin achievement than do mothers of boys (Collard, 1964, in Hoffman, 1972).

A study by Hermans, ter Laak, and Maes (1972) compared Dutch elementary school boys and girls who were either high or low on achievement motivation and either high or low on fear of failure (as measured by the achievement motivation and debilitating anxiety subscales of a Dutch version of the Achievement Motivation Test for Children). Parent-child interactions at home were then observed as the child performed four difficult tasks to which the parents knew the solution. Parents of children with high debilitating anxiety showed fewer

reactions when the child expressed insecurity, produced more negative tension releases (e.g., showing irritation) and fewer positive tension releases (e.g., expressing enthusiasm), and withheld more reinforcements after correct solutions. Children high in debilitating anxiety also expressed more negative and fewer positive tension releases than did children low in debilitating anxiety. Parents of children with high achievement motivation used more nonspecific help (e.g., hinting), less specific help (e.g., providing the solution), and more positive task-oriented reinforcements than did parents of children low in achievement motivation. Children high in achievement motivation tended to refuse help offered by parents. Parents of children who were high in achievement motivation and low in debilitating anxiety had the highest expectations of performance for their child. Teacher ratings in this study indicated that children high in debilitating anxiety were more socially dependent and that children high in achievement motivation were more goal oriented, had high personal responsibility, and high persistence. The authors conclude that children high in debilitating anxiety seem to receive less structure (both affectively and cognitively) from parents and more irrelevant information. Children high in achievement motivation and low in anxiety have parents who provide direction but also allow the child to perform independently. Finally, in a study of level of aspiration, children who tended to avoid failure in a goal-setting task had mothers high in protectiveness (Crowne, Conn, Marlowe, & Edwards, 1969).

Third, researchers have investigated parental warmth as a factor in children's achievement. Moderate, rather than high levels of warmth seem to be optimal for achievement (Stein & Bailey, 1973). Parents who are either highly nurturant or rejecting have children with low achievement behavior. However, warmth seems to have a greater effect in influencing boys' rather than girls' achievement (Crandall, 1963, in Stein & Bailey, 1973). There is little research on the relationship between warmth and fear of failure. Baumrind (1971) has postulated that moderate, rather than high, levels of warmth may assist the child in handling failure. In a study of parental warmth and children's attributions (Karkovsky, Crandall, & Good, 1967), girls whose fathers had been observed during home visits to be affectionate and nurturing were less likely to believe that they had caused their own failures on a self-report questionnaire of attributions.

Stein and Bailey (1973) have reviewed the literature examining parental modeling of achievement and parental acceptance of achievement in children. Not surprisingly, children high in achievement have mothers who reinforce achievement (Crandall, Preston, & Rabson, 1960) and who expect high performance (Kagan & Moss, 1962, in Stein & Bailey, 1973). High-achieving females tend to have working mothers (Nye & Hoffman, 1963, in Stein & Bailey, 1973). However, there has been little research examining the role of fathers in fostering achievement.

Finally, in the case of females, Stein and Bailey (1973) have described how the development of achievement motivation and the feminine sex role are incompatible. Girls are most likely to develop achievement motivation when mothers are employed, behave toward their daughter in a moderately warm manner, encourage independence, and encourage achievement behavior. In

contrast, mothers who are very warm, permissive, and ignore achievement are more likely to have daughters who are conforming, dependent, and feminine (Stein & Bailey, 1973). Thus, traditional childrearing patterns for girls are in conflict with the development of achievement behavior. It is not surprising that achievement motivation is inversely related to femininity, as discussed earlier. Since models of achievement motivation may or may not consider fear of failure and need achievement to be polar opposites, this does not necessarily mean that fear of failure and femininity are positively related.

### Intervention

Because of the origins of the achievement motivation literature in social psychology, there has been little treatment outcome research on changing fear of failure as defined by low achievement motivation or hostile press. One exception is a study by Montanelli and Hill (1969) that found achievement expectancies of elementary school children to increase following praise and decrease following criticism. Birney *et al.* (1969) also suggest that changes in patterns of reinforcement may reduce fear of failure, but they argue that at some point in a child's development (perhaps even by the beginning of school), fear of failure may be resistant to change or irreversibly entrenched in children's self-concepts. Additionally, much of the research on consequences of experimentally induced success and failure and of childrearing factors on fear of failure has implications for intervention to reduce fear of failure.

### Summary

In the achievement motivation literature, fear of failure is defined either as low need for achievement, low hope for success, or hostile press imagery on the TAT. Individuals high in fear of failure choose extreme rather than moderate goals, are reluctant to participate in achievement situations, and will attempt to avoid failure even if this means not succeeding. Both women and blacks tend to attribute success and failure to luck rather than skill. Parental childrearing factors that are related to fear of failure include lack of reward for success and early expectations for independence. Females and individuals high in fear of failure place greater value on affiliative tasks. The nature of many achievement tasks is more relevant for males, whereas females score lower on need for achievement, particularly as they enter adolescence and if they are feminine in their sex roles.

### FEAR OF SUCCESS

In 1964, a graduate student named Matina Horner was working on her dissertation at the University of Michigan. John Atkinson, her dissertation advisor, was described earlier as formulating a model of achievement motivation. Horner examined the relationships between need for achievement, need for affiliation, anagram performance, and level of aspiration (Tresemer, 1976a). Stu-

dents enrolled in introductory psychology served as the subjects for this experiment, and they spent several hours completing stories to such headings as "Tom is looking into his microscope." After five such stories, subjects were given the heading "At the end of first-term finals, Anne finds herself at the top of her medical school class" (Tresemer, 1976a). Male subjects were asked to write about John at the top of his class and females, about Anne.

Horner found that this last story heading yielded strong gender differences, with 62.2% of females writing stories with a negative content to the medical school cue, compared with only 9.1% of males (Tresemer, 1976a). Her dissertation was completed in 1968, and the results were reported in *Psychology Today* under the title "Fail: Bright Women" (Horner, 1969). Soon, every major magazine and newspaper picked up the story, focusing on fear of success as an explanation for women's unequal occupational status in the United States (Tresemer, 1976a).

As early as 1916, Freud had used the term "wrecked by success" to describe his patients who appeared to become ill immediately after a wish had come true, such as a political appointment (in Cavenar & Werman, 1981). Psychodynamic writers (e.g., Fenichel) viewed fear of success to stem from guilt, fears of future failure, and conflicts around independence (Cavenar & Werman, 1981). What was significant about Horner's research, however, was that it represented the first achievement-related theory that dealt specifically with gender differences. As was described earlier, the early achievement motivation literature focused mostly on males, and results for females were not as replicable or clear-cut.

How is fear of success related to fear of failure? Tresemer (1976a) argues that to demonstrate fear of success, there must be a performance decrement in achievement-related activities in which success is a possible outcome. However, fear of success should not lead to performance decrements in activities in which only failure is a possible outcome. In contrast, fear of failure is demonstrated when people avoid situations in which there is possible failure but not situations in which there is possible success (Tresemer, 1976a). This differentiation in fact becomes very difficult to verify empirically, since most achievement-related activities have both success and failure as possible outcomes. Thus, the fear-of-success literature will be reviewed here, given its salience in the achievement literature and its overlap with fear of failure.

### Model

According to Horner (1972), femininity has been viewed throughout history as incompatible with intellectual competence. Even today, as the educational system is designed to prepare males and females equally for future career success, females still perceive social and psychological barriers to stand in the way of this success. Specifically, women will be motivated to avoid success when they expect negative consequences (such as rejection by others or feelings of being unfeminine) as the result of succeeding. She argues that this is not the same as the motive to avoid failure, which consists of individuals expecting negative consequences from failing. Fear of success is more characteristic of

high-achieving women; one cannot fear success if one is incapable of attaining it (Horner, 1972).

The motive to avoid success is most strongly aroused in competitive conditions. In Horner's original study, females high on fear of success decreased their performance in competitive group situations, whereas females low on fear of success and males increased performance in such situations (Horner, 1972). The most significant factor related to fear of success is the concern of negative reactions from peers (Horner, 1972).

Alternative explanations have been provided for Horner's theory of fear of success. Fear of success has been termed "fear of gender-inappropriate behavior" by Cherry and Deaux (1978), due to the nontraditional nature of medicine as a career for women in the 1960s. Similarly, fear of success has been conceptualized as reflecting cultural stereotypes about gender-appropriate occupations (Feather & Raphaelson, 1974; Monahan, Kuhn, & Shaver, 1974). Makovsky (1976) has argued that Horner's measure of fear of success is actually a measure of gender-role orientation, and that performance in situations that are incompatible with gender role will lead to role conflict. Finally, given women's relative lack of options in society compared to those of men, the personality approach taken by Horner has been termed "blaming the victim . . . of an oppressive social system" (Tresemer, 1977, p. 50).

The early conceptualization of the fear-of-success model viewed it as a personality trait or motive, sometimes referred to as the "motive to avoid success." Much of the research on fear of success, on the other hand, has viewed this concept as situationally determined behavior that is influenced by environmental cues. This trend has been paralleled by the journals in which fear-of-success articles have been published. Early studies were published in personality journals; by the mid-1970s the overwhelming majority of fear-of-success articles were published in the journal *Sex Roles* and stressed societal factors.

### *Psychometric Scales and Assessment*

Although Horner originally gave subjects a variety of stories to complete, the majority of the research on fear of success has used only one: the heading "At the end of first-term finals, Anne (John) finds herself (himself) at the top of her (his) medical school class." Stories generated by subjects are scored for positive or negative content. Horner's original system of scoring focused on a number of specific indices that she regarded as indicative of concern with success, including

- (a) negative consequences because of the success, (b) anticipation of negative consequences because of the success, (c) negative affect because of the success, (d) instrumental activity away from present or future success, including leaving the field for more traditional female work such as nursing, school teaching, or social work, (e) any direct expression of conflict about success, (f) denial of effort in attaining the success (also cheating or any other attempt to deny responsibility or reject credit for the success), (g) denial of the situation described by the cue, or (h) bizarre, inappropriate, unrealistic, or nonadaptive responses to the situation described by the cue. (Lockheed, 1975, p. 44)

Furthermore, Horner found that the negative imagery tended to fall into one of three categories (Hyde, 1985, p. 205), consisting of:

1. Social rejection fears. For example, "Anne is an acne-faced bookworm. She runs to the bulletin board and finds she's at the top. As usual she smarts off. A chorus of groans is the rest of the class's reply . . ."
2. Worries about womanhood. For example, "Unfortunately Anne no longer feels so certain that she really wants to be a doctor. She is worried about herself and wonders if perhaps she isn't normal. . . . Anne decides not to continue with her medical work but to take courses that have a deeper personal meaning for her."
3. Denial of reality. For example, "Anne is a code name of a nonexistent person created by a group of medical students. They take turns writing exams for Anne."

There have been major criticisms of Horner's methodology (see Zuckerman & Wheeler, 1975, for a review). First, a published manual for scoring fear of success did not exist until 1977 (Horner & Fleming, in Macdonald & Hyde, 1980), resulting in multiple ways of scoring stories for fear-of-success content. In this revised scoring system by Horner, story cues are scored only for the presence or absence of fear of success, rather than the more specific scoring system that Horner used in her original study (Macdonald & Hyde, 1980). Second, stories were usually scored for the single cue of fear of success, so that the internal consistency of the measure could not be scored. Zuckerman and Wheeler (1975) present some evidence that studies which used multiple cues found fear-of-success imagery to fluctuate considerably across cues. Furthermore, fear-of-success rates fluctuate markedly between studies—ranging from 20 to 88% among females and from 9 to 76% among males (Zuckerman & Wheeler, 1975). Zuckerman and Wheeler (1975) speculate that this may be due to coding errors in labeling all negative themes (e.g., references to drug abuse, murder) as reflecting fear of success, when in fact Horner considered only negative themes resulting from success to constitute fear of success. Finally, the interrater reliability of scoring of fear of success via projective stories has been questioned. Robbins and Robbins (1973) found that female raters tended to score more content as related to fear of success in stories written by women than did male raters. Nevertheless, interrater reliability can be quite high. Lentz (1982) trained three male and three female raters for 10 hours and found that interrater reliability was .96 based on 26 practice protocols.

Although most of the fear-of-success literature uses Horner's original cues of "Anne/John" at the top of their medical school class, a considerable proportion of studies have modified these projective instructions to reflect other careers, to add more information about interpersonal factors, and so on, as will be described below. Interestingly, researchers have clung to the names "Anne" and "John" without exception. Additionally, a number of paper-and-pencil scales of fear of success have been developed in order to increase the objectivity of scoring.

*Zuckerman and Allison's Fear of Success Scale* consists of 27 items asking sub-

jects to agree or disagree with items that describe the benefits of success, the costs of success, and subjects' attitudes toward success (Zuckerman & Allison, 1976). This scale has a low (.18) but significant correlation with Horner's original scale, and high fear-of-success scores predict poor anagram performance under competitive conditions and external attributions about success (Zuckerman & Allison, 1976).

*Pappo's Fear of Success Scale* consists of 83 items that measure academic fear of success, including self-doubt, preoccupation with competition, preoccupation with evaluation, rejection of competence, and self-sabotage (Gelbert & Winer, 1985). Although this scale is part of an unpublished doctoral dissertation completed in 1972, it has been used in several subsequent studies. Pappo's scale did not correlate significantly with Horner's original measure, but it was correlated with Alpert and Haber's Debilitating Anxiety Scale, which is used to measure fear of failure. Pappo deliberately avoided items related to gender roles, and consequently the scale does not yield different scores between males and females (Shaver, 1976).

*Cohen's Fear of Success Scale*, also based on an unpublished doctoral dissertation, views fear of success as broader than academic success (Shaver, 1976). This scale correlated highly with Pappo's scale and, like Pappo's scale, is uncorrelated with Horner's original measure. It predicted which subjects would perform poorly on a memory task after being told that they had qualified for the final stage of a memory contest. However, like Pappo's scale, it is difficult to know whether this scale measures fear of success or fear of failure.

*Major's Revised Fear of Success Scale* consists of two story cues: Horner's traditional cue about Anne and the cue "Mary has just received word that out of a class of 50, she alone passed the entrance exam and is being assigned the important position abroad" (Major, 1979). After each cue, subjects are asked to rate 30 items, half of which refer to positive consequences about the event and half to negative consequences. The two cues have been found to relate significantly to each other and to Horner's original measure (Major, 1979).

*Spence's Objective Scoring System* of Horner's story cues involves a 10-item questionnaire that follows presentation of the story cues (Spence, 1974). Items refer to attributions, external pressures against aspirations, career outcomes, noncareer outcomes, and cue denial.

### Research

In contrast to the need for achievement literature, every study examining fear of success has used female subjects. Gender differences have been a part of the model from its inception. Much of the research was designed to test alternative explanations for Horner's concept of fear of success. Interestingly, because of the controversy regarding whether or not this term was valid, studies in which statistically significant results were not obtained have been published with some frequency as well as those in which significant results were found (Tresemer, 1976b).

When both male and female college students are given both the "Anne" and

the "John" heading, males too are more likely to write stories with fear-of-success content for "Anne" (Feather & Raphaelson, 1974). Thus, the authors conclude that the instructions elicit cultural stereotypes rather than motives, since men are presumably not identifying with the female character.

When "Anne" and "John" are described as either at the top, in the top 5%, top 15%, top 25%, or top half of their medical school class, more positive imagery was projected onto "Anne" the lower her rank in class, whereas "John" was rated more negatively as he decreased in rank (Fogel & Paludi, 1984). Lentz (1982) suspected that the situation in which subjects complete the fear-of-success task can influence the outcome. She asked college women to complete the fear-of-success task, under instructions stating that the stories would be read by a panel of either males, females, or persons, who would evaluate subjects as either potential friends, coworkers, or acquaintances. Contrary to predictions, none of these instructions affected fear-of-success imagery. However, anagram performance was significantly affected by instructions about evaluators. Women who anticipated evaluation by males or by persons as potential friends performed significantly worse on the anagrams task than did women who anticipated evaluation by males as potential coworkers or acquaintances. Women who anticipated evaluation by women did not exhibit these effects (Lentz, 1982). Thus, it seems that the instructions aroused evaluation anxiety rather than fear of success.

Schnitzler (1977) observed that women's fears described in their stories about "Anne" all focused on interpersonal factors, such as not being liked, not dating, not getting married, and not having children. In contrast, those men that exhibited fear of success to the "John" heading tended to write that John was becoming too one-sided or materialistic. She concludes that women are more likely than are men to experience a career as sacrificing friendship, marriage, or family. To assess this, Spence (1974) modified Horner's scenario to reflect a successful medical student who was either a single woman, married woman, or single male. Male and female undergraduates then answered objective questions about the story cues, using Spence's objective scoring system. Men were more likely than women to rate both the single man and single woman more negatively (Spence, 1974).

Lockheed (1975) postulated that women's fear of success is present only in situations in which women are considered deviant. Thus, medical school attendance is more normative, and thus less anxiety producing, for men than for women. She asked male and female college students to write stories to one of the two following headings:

1. "All Anne's classmates in medical school are men. After first-term finals, Anne finds herself at the top of her class."
2. "Half of Anne's classmates in medical school are women. After first-term finals, Anne finds herself at the top of her class" (p. 44).

When medical school attendance was described as more typical for women, men and women did not differ significantly in their story content about "Anne." However, when medical school attendance was described as more deviant for

women, men were significantly more likely than were women to describe negative consequences for "Anne." Thus, women were more accepting of the successful woman in the heading, regardless of how deviant her role was, than were men.

In order to examine whether women who exhibited fear of success were more likely to aspire to traditionally female occupations than were women low on fear of success, Anderson (1978) asked college women to complete the fear-of-success task as well as answer questions about their career plans. Women low on fear of success were more likely to state that they wanted to make a major contribution to their field, that they had plans for nontraditional careers, and that they had mothers who were employed in nontraditional fields for women. Women low on fear of success were also more likely to have higher self-esteem, a more internal locus of control, and scores indicating more affection expressed to intimate others than were women high on fear of success (Anderson, 1978). Anderson concludes that women high on fear of success are more likely to have ambivalent feelings about career success, greater self-criticism, and greater need for affection.

Topol and Reznikoff (1979) compared female senior high school achievers and underachievers on fear of success, beliefs in women's roles, and educational and career goals. Female achievers had higher educational aspirations, less traditional career goals, and more commitment to their career goals than did underachievers. There was a tendency for achievers to exhibit lower fear of success and more feminist views of women's roles than did underachievers, but this did not reach significance.

Males and females at an adult religious conference center were asked to write stories for female headings that differed in deviance (engineering school versus nursing school) and role overload (happily married with children versus happily married without children) (Bremer & Wittig, 1980). Both men and women were more likely to write fear-of-success stories in response to deviant than to nondeviant situations, and to role overload rather than situations without role overload.

A number of researchers have been interested in correlating fear of success with gender role. For example, Major (1979) asked college women to complete the Bem Sex Role Inventory (Bem, 1974) and Major's Revised Fear of Success Scale. Androgynous women scored lower on fear of success than did feminine (sex-typed) women. Furthermore, masculine (sex-reversed) women scored higher on fear of success than did androgynous, feminine, or undifferentiated women. Major postulates that achieving women who are also feminine are more likely to experience positive consequences for success than are achieving women who reject feminine characteristics. Nevertheless, relatively few women are classified as sex-reversed on gender-role inventories. In line with this analysis, Makovsky (1976) found that high fear-of-success women perform best on anagrams tasks when competing against another woman and when the task is described as feminine.

Finally, a review by Tresemer (1976b) of over 100 fear-of-success studies yielded the following generalizations: (1) females tell a slightly greater propor-

tion of fear-of-success stories than do males given a same-gender cue (i.e., "Anne" for women; "John" for men); (2) when males and females write stories to both male and female cues, there is no gender difference in fear of success; and (3) fear of success is not consistently related to academic ability or gender-role identification.

### *Racial Differences*

With few exceptions, the subjects of the fear-of-success literature have been white college students. In two studies of fear of success comparing black and white college students (Puryear & Mednick, 1974; Weston & Mednick, 1970), black women showed less fear of success than did white women. Social class did not affect fear of success scores (Weston & Mednick, 1970).

Interestingly, women who endorsed more black militant attitudes were more likely to show fear of success (Puryear & Mednick, 1974). Fear of success and black militant attitudes were most strongly correlated among women who reported not being attached to a man. Puryear and Mednick speculate that women in this category may experience some of the same role conflicts first postulated by Horner. This corresponds with results by Caballero, Giles, and Shaver (1975), who found that women who hold liberal or radical political views and who favor the women's movement also score higher on fear of success than do women with more traditional beliefs.

### *Fear of Success among Children*

There has been surprisingly little focus on fear of success and childrearing practices, given the large literature on childrearing and achievement motivation reviewed earlier. However, fear-of-success researchers have examined developmental factors in fear of success in an attempt to pinpoint at what age the phenomenon becomes salient.

Romer (1977) gave children in the fifth, seventh, eighth, ninth, and eleventh grades five story cues, with the heading "Anne (John) finds herself (himself) at the top of the (junior) high school class." Children were subsequently asked to perform an anagrams task in either a competitive or nonexplicitly competitive setting, either with one other individual or in a group. There was no overall gender difference in the frequency of fear-of-success content, although there was an effect for grade, with ninth graders of both genders most likely to write fear-of-success stories. Girls were more likely to write themes indicating loss of affiliation, followed by themes of denial. Boys were more likely to describe tragic events as the consequence of success, followed by themes related to loss of affiliation (Romer, 1977). Males with fear of success performed better in the competitive group condition than in the noncompetitive group condition; males with low fear of success showed the reverse pattern. The results for girls were not as clear-cut.

Hawkins and Pingree (1978) gave third-, sixth-, ninth-, and twelfth-grade students the original medical school scenario (reworded for simplicity) and then

asked students to respond to semantic differential scales. "Anne" and "John" were rated as happier when they were successful than when they failed. When they failed, "John" was rated as much less nice than "Anne" was when she failed; when both succeeded, "Anne" was rated as slightly less nice than was "John" (Hawkins & Pingree, 1978). Monahan *et al.* (1974) similarly used Horner's original medical school scenario with 10- to 16-year-old boys and girls. Both boys and girls responded more negatively to the female cue, with boys responding significantly more negatively to "Anne" than did the girls.

Fear of success has been shown to increase from fourth to tenth grade but to decrease from tenth to twelfth grade (Kimball & Leahy, 1976), when children were asked to respond to the cue "After report cards, Anne (John) finds that she (he) is at the top of her (his) class." Gender differences in fear of success did not appear until high school, when females scored higher on fear of success than did males. Specifically, females enrolled in secretarial courses demonstrated low fear of success, and females in college preparatory classes showed high fear of success. The results were interpreted by the authors as demonstrating less conflict for high school girls involved in more gender-compatible tasks (Kimball & Leahy, 1976). Similarly, O'Leary and Hammack (1975) found high school girls with traditional career aspirations to demonstrate less fear of success.

Girls who had attended single-gender elementary and high schools were less likely to demonstrate fear of success than were girls from coeducational schools (Winchel, Fenner, & Shaver, 1974), even though these children came from similar religious backgrounds, neighborhoods, and social classes. The authors argue that coeducation "... increases the salience of cross-gender competition for academic and professional success" (p. 727).

### *Fear of Success versus Fear of Failure*

Given the research described earlier that found evidence for women being more motivated by affiliative than by achievement needs, some researchers have speculated that women's needs for affiliation may motivate both their fear of success and fear of failure. For example, Jackaway and Teevan (1976) state: "If it is true that social approval is the achievement goal of many women, then fear of social rejection because of success (FOS) becomes tantamount to fear of failure" (p. 286). Consequently, there have been some attempts to compare fear of success with fear of failure. Furthermore, the scoring criteria for fear of success and for the hostile press scoring system of fear of failure show considerable overlap (Jackaway & Teevan, 1976). Both focus on negative consequences, reprimands for personal action, and relief for alleviation of the tension. Thus, the two are not independent concepts.

Jackaway and Teevan (1976) asked male and female high school students to write three stories, and included the prompt "John (Anne) is looking into his (her) microscope." Half the students were asked to compete with another student on a performance task and then to announce the "winner" publicly. Story content was then scored for both fear of success and hostile press imagery. Correlations between fear-of-success and fear-of-failure imagery ranged from .41

to .58, depending on condition and gender, and were highly significant. Thus, both males and females under neutral and competitive conditions demonstrated a relationship between the fear-of-success and fear-of-failure content of their stories.

Fear of success (using the Zuckerman and Allison Fear of Success Scale) and fear of failure (using the Alpert and Haber Debilitating Anxiety Scale) among male and female engineering undergraduates were correlated with the Bem Sex Role Inventory (Mulig, Haggerty, Carballosa, Cinnicak, & Madden, 1985). Fear of success and fear of failure were significantly correlated among females ( $r = .62$ ) and among males ( $r = .45$ ). Regression analyses indicated that fear of failure was best predicted from subjects' gender (females). However, fear of success was best predicted from subjects' gender role, with masculine and neutral (androgynous and undifferentiated) subjects higher on fear of success (Mulig *et al.*, 1985). These results are similar to those of Kimball and Leahy (1976) and of O'Leary and Hammack (1975) described earlier, that found females involved in gender-incompatible tasks and courses to exhibit higher fear of success than those involved in more traditionally feminine tasks.

In one of the most comprehensive studies comparing fear of success with fear of failure, Macdonald and Hyde (1980) factor analyzed male and female college students' responses to four measures of fear of success (Horner's original scoring system of fear of success, Horner and Fleming's revised system of fear of success, Cohen's Fear of Success Scale, and Zuckerman and Allison's Fear of Success Scale); three measures of fear of failure (Birney *et al.*'s hostile press scoring system, an alternative TAT scoring system, and Alpert and Haber's Debilitating Anxiety Scale); and three measures of need achievement (McClelland's TAT measure, the Achievement Scale of Jackson's Personality Research Form, and the Achievement Scale of the Edwards Personal Preference Schedule). Additionally, they included the Marlowe-Crowne Social-Desirability Scale, the Taylor Manifest Anxiety Scale, and three statements: "I am motivated to avoid success," "I am motivated to avoid failure," and "I have a need for achievement."

Results of the factor analysis indicated similar patterns for males and females. Specifically, Factor 1, labeled Anxiety, consisted of the Taylor Manifest Anxiety Scale, Alpert and Haber's Debilitating Anxiety Scale, and Cohen's Fear of Success measure. Factor 2 consisted of the three individual statements, and was thus hard to label. Factor 3 was labeled Fear of Success, and consisted of Zuckerman and Allison's Fear of Success Scale and Horner's original scoring system. Females scored higher than did males on every fear-of-success measure. Fear of failure did not appear as a distinct construct in the factor analysis (Macdonald & Hyde, 1980).

Gelbort and Winer (1985) correlated a number of fear-of-success and fear-of-failure scales, including Horner's fear-of-success scoring system, Pappo's Fear of Success Scale, Zuckerman and Allison's Fear of Success Scale, the Alpert and Haber Debilitating Anxiety Scale, and Birney *et al.*'s hostile press scoring system. The hostile press measure of fear of failure was significantly correlated with Horner's scoring system of fear of success (thus, it could be argued that it was

the projective nature of these measures that was similar, rather than content) but negatively correlated with the Zuckerman and Allison Fear of Success Scale. The Debilitating Anxiety Scale was positively correlated with the Zuckerman and Allison Fear of Success Scale and Pappo's Fear of Success Scale.

In sum, it is unclear whether fear of success and fear of failure are separate concepts. Tresemer has stated that the "motive to avoid success may not be a motive and may have little to do with avoiding success" (in Zuckerman & Wheeler, p. 932).

### *Has Fear of Success Decreased since 1965?*

Given the onset of the second wave of feminism in the late 1960s and the increasing numbers of women entering medical school, has fear-of-success motivation decreased over the years when the scenario of "Anne" is presented? Some studies have not found a decrease in fear of success over the years. In 1971 Hoffman (1974) carried out Horner's study under the same conditions at the same university. The percentage of fear of success among women was identical in 1965 and 1971—about 65%. Among men, fear of success rose from 9% in 1965 to 77% in 1971—a tremendous increase. Consequently, there were no gender differences in fear of success in 1971. Yet there were gender differences in content of fear-of-success stories: women indicated that "Anne" suffered a loss of affiliation, whereas men tended to question the value of achievement.

In a similar vein, Alper (1974) replicated Horner's study on Wellesley College women in the academic year 1970–1971. About 89% told avoidance stories about "Anne," and 50% told avoidance stories about "John." When Dartmouth College males were given the same story cues, 62.5% told avoidance stories about "Anne," a statistically significant difference (Alper, 1974).

On the other hand, Tresemer's (1976b) review of the fear-of-success literature indicated that both men and women decreased in fear-of-success content when the results of more recent studies are compared with earlier ones. Tresemer compared these results with national statistics on the percentages of women entering medical school. For women rating "Anne" over the years, fear of success began to decrease markedly in 1969 and continued to decrease rapidly until 1975, when Tresemer's review was written. The proportion of women entering medical school increased slightly in 1969 and continued to increase until 1975, although not at the same marked rate as that of the decrease in fear-of-success scores among women. Thus, other social changes presumably contributed to this change in women's attitudes.

Whether or not fear of success is decreasing, it continues to receive its share of coverage in psychology and women's studies textbooks. The term "fear of success" has become part of the general vocabulary but is also beginning to lose its specificity. For example, Sherman (1983) described high school girls who took advanced math courses as reflecting less "fear of success." Thus, the term as used here is synonymous with positive attitudes toward math. When researchers examine fear of success these days, they need to realize that "Anne" and "John" have become familiar to college students. One student wrote the

following story in response to the traditional medical school cue: "Anne is being congratulated by the male and female members of her class. The males are somewhat chagrined, as is Anne. However, Anne has read *Psychology Today* and knows that studies such as this indicate that this is an expected reaction" (Tresemer, 1977, p. 104).

Finally, Shaver (1976) speculates that what is fearful about success is not that different from what is fearful about failure: people who deviate from normative scores ". . . may pay a high price in strained interpersonal relations" (p. 317). He argues that had Horner used the cue "Anne is by all accounts the most beautiful coed at the University of Michigan," she would have found similar themes of negative interpersonal consequences and denial, yet she would hardly have termed her results "fear of beauty." The very term *success* is defined as one that involves ". . . obtaining desirable outcomes as a result of an action or performance. Thus, a distinction should be made between quality of performance and the consequences of the performance" (Jellison, Jackson-White, Bruder, & Martyna, 1975, p. 382). Success and failure are synonymous when a positive outcome also implies rejection and negative consequences in the future.

The peak period of research on fear of success occurred in the early 1970s, corresponding with the beginning of the focus on gender differences in the psychological literature. A decade later, fear-of-success research has all but ceased, and Horner's original conception of the term is no longer used.

### *Intervention*

There has been no focus on interventions for fear of success. Although Horner originally conceptualized fear of success as a personality trait, the emphasis quickly changed to environmental explanations, particularly those focusing on gender roles. Currently, the term fear of success is not used much either in research or intervention. Presumably, if a client described her academic or work-related difficulties as stemming from a fear of success, the therapist would reinterpret these as reflecting women's roles in society and would inquire about the negative consequences of success.

### *Summary*

Horner viewed fear of success as the consequence of women's roles in society, in which women are rejected or considered unfeminine when they succeed. In fact, fear of success and fear of failure are difficult to separate empirically, since most situations have both success and failure as possible outcomes. Furthermore, some of the fear-of-success scales overlap with scales on fear of failure. Research on fear of success indicates that women are more likely to tell negative stories about other women who are described as at the top of their medical school class, but that both males and females write more negative stories about successful females than successful males. Specifically, female children and adults fear interpersonal loss as the consequence of academic or professional success. There is some evidence that fear of success among women

decreased in the decade following Horner's original study, and the concept is rarely used in current research.

#### FEAR OF FAILURE AS AN ANTECEDENT OF PROCRASTINATION

In the early 1970s, as record numbers of U.S. students attended college, behavior therapists became interested in improving the performance of individuals who were failing academically. The initial focus was on students who were on academic probation or failed to complete coursework. Procrastination, poor study habits, and lack of goal setting were found to be prevalent among these students (Green, 1982). This resulted in an enormous literature that provided study skills training and time management strategies (Bristol & Sloane, 1974; Greiner & Karoly, 1976; Mawhinney, Bostow, Laws, Blumenfeld, & Hopkins, 1971; McReynolds & Church, 1973; Richards, 1975; Richards, McReynolds, Holt, & Sexton, 1976; Ziesat, Rosenthal, & White, 1978). Interventions focused on improving the "time-work relationship" (Semb, Glick, & Spencer, 1979) by such methods as stimulus control, self-reward, and self-punishment (Ziesat *et al.*, 1978), increasing time spent studying (Mawhinney *et al.*, 1971), planning skills (Greiner & Karoly, 1976), and study skills advice (Richards, 1975).

It soon became apparent that academic procrastination was not limited to students performing poorly in college or to those deficient in study skills. A survey of 500 students at five colleges (Hill, Hill, Chabot, & Barrall, 1978) found that only 12% of students reported that they seldom procrastinated. Of the remaining students, 38% reported procrastinating occasionally, 23% about half the time, 17% frequently, and 10% stated that they usually procrastinated. Faculty estimates of student procrastination in this survey were even higher. Only 1% of faculty stated that students seldom procrastinated, 30% occasionally, 27% about half the time, 35% frequently, and 7% felt that students usually procrastinated. Furthermore, faculty rated themselves as occasional procrastinators: 18% reported that they seldom procrastinated, 51% occasionally, 13% about half the time, 15% frequently, and 3% usually (Hill *et al.*, 1978). Despite these data indicating that procrastinators included some high-performing students and faculty members, the intervention for procrastination continued to focus on study skills improvement.

In 1983, Burka and Yuen published their clinical observations of the reasons for procrastination, based on treatment groups of nonstudent populations. They found a number of cognitive and affective factors to precede procrastination, including evaluation anxiety, difficulty in making decisions, rebellion against control, lack of assertion, and perfectionism. In the first empirical study of cognitive-affective antecedents of academic procrastination, Solomon and Rothblum (1984) asked students and faculty for reasons for academic procrastination and found 13 possible antecedents of procrastination: evaluation anxiety, perfectionism, difficulty making decisions, dependency and help seeking, aversiveness of the task and low frustration tolerance, low self-esteem, laziness, lack of assertion, fear of success, poor time management, rebellion

against control, risk taking, and peer influence. These reasons for procrastination were subsequently incorporated into a scale, described below.

A factor analysis of college students' reasons for procrastination yielded two major factors. The first, termed Fear of Failure, consisted of five items reflecting evaluation anxiety (anxiety about meeting the expectations of others), perfectionism (concern about meeting one's own standards), and low self-esteem, and it accounted for 49.4% of the variance. The second factor, termed Task Aversiveness, consisted of items reflecting aversiveness of the task and laziness, and it accounted for 18% of the variance. Factors 3 through 7 tapped dependency, risk taking, lack of assertion, rebellion against control, and difficulty making decisions, respectively. Interestingly, given the large intervention literature, time management was not found to be an independent factor for reasons for procrastination. Nor was fear of success, despite the large literature on this topic in the 1970s. Given that fear of failure accounted for half the variance of reasons for academic procrastination, research on fear-of-failure-related procrastination has continued and will be described below.

#### *Psychometric Scales and Assessment*

The Procrastination Assessment Scale—Students (PASS) was developed to measure the frequency and cognitive-behavioral antecedents of academic procrastination (Solomon & Rothblum, 1984). The first part assesses the frequency of procrastination in six academic areas: (1) writing a term paper, (2) studying for exams, (3) keeping up with weekly reading assignments, (4) performing administrative tasks, (5) attending meetings, and (6) performing academic tasks in general. Subjects are asked to indicate on 5-point Likert scales the extent to which they procrastinate on each task and the extent to which procrastination on each task is a problem for them.

The second part of the PASS describes a procrastination scenario (delay in writing a term paper) and then lists 26 possible reasons for procrastination on the task (two statements for each of the 13 reasons listed above). Subjects rate each statement on a 5-point Likert scale according to how much it reflects why they procrastinated the last time they delayed writing a term paper. For example, the two items reflecting evaluation anxiety are "You were concerned the professor wouldn't like your work" and "You were worried you might get a bad grade." The two items related to perfectionism are "You were concerned you wouldn't meet your own expectations" and "You set very high standards for yourself and you worried that you wouldn't be able to meet those standards" (Solomon & Rothblum, 1988). Males and females do not differ in frequency of academic procrastination on the PASS.

The PASS has also been modified to reflect the British-based university system of Australia (APASS; Beswick, Rothblum, & Mann, 1988) and for use in assessing procrastination among employees (PASE, Rothblum, 1986). Finally, Jeffers (1986) developed a scale of social procrastination (SPASS).

Self-reported frequency of procrastination on the PASS correlates significantly with delay in completing self-paced quizzes (Solomon & Rothblum, 1984;

Rothblum, Solomon, & Murakami, 1986). delay in submitting course assignments (Beswick *et al.*, 1988), delay in participation in psychology experiments (Solomon & Rothblum, 1984), and lower course grades (Beswick *et al.*, 1988; Rothblum *et al.*, 1986). Frequency of procrastination on the PASS also correlates positively with self-report measures of irrational cognitions, depression, and anxiety, and negatively with self-esteem and study habits (Solomon & Rothblum, 1984).

### Research

Fear of failure has been found to account for most of the variance in factor analyses of reasons why students procrastinate, both in the United States (Solomon & Rothblum, 1984) and Australia (Beswick *et al.*, 1988). Although males and females are equally likely to report procrastination, females are significantly more likely to endorse the Fear-of-Failure factor than are males. The five items that make up the Fear-of-Failure factor are endorsed by about 6–14% of students as extremely reflective of why they procrastinated. Thus, a small but very homogeneous group of female students seem to experience fear of failure. In contrast, males are more likely to endorse items reflecting risk taking and rebellion against deadlines.

Fear of failure as a reason for academic procrastination was found to correlate positively with anxiety, depression, and irrational cognitions, and negatively with self-esteem and organized study habits (Solomon & Rothblum, 1984). In contrast, the second factor, Task Aversiveness, was endorsed by more students, was more heterogeneous (accounted for a lower percentage of the variance) and did not correlate significantly with anxiety. There also were no significant gender differences in the endorsement of Task Aversiveness as a reason for procrastination.

In order to examine more specifically how anxiety-related factors are related to procrastination, high and low procrastinators were assessed weekly as an academic deadline approached (Rothblum *et al.*, 1986). Women were more likely than were men to report test anxiety and low self-control (consisting of delay of gratification, perceived self-efficacy, and perceived control over emotional reactions). High procrastinators were more likely than were low procrastinators to report test anxiety and low self-control. High procrastinators were also more likely to attribute success on a task to external and temporary factors, whereas low procrastinators attributed success more to internal and stable factors. High and low procrastinators did not differ on attributions of failure, and there were no gender differences on attributions. Female high procrastinators were more likely to report state anxiety and anxiety-related physical symptoms across time periods than were female low procrastinators. Finally, fear of failure was viewed as an obstacle to effective study by all groups, and it decreased in salience as the deadline approached (Rothblum *et al.*, 1986). Thus, the results of this study indicate that procrastination is associated with high and stable levels of anxiety across time, especially for women.

Is fear of failure as a reason for procrastination related to fear of failure as

defined by the need achievement literature? Dalton, Rothblum, and Solomon (1984) asked subjects to complete the Fear-of-Failure factor of the PASS and Mehrabian's self-report scale of achieving tendency (a low score indicates greater motive to avoid failure). There was a small ( $r = -.24$ ) but significant negative correlation between the two measures, indicating some overlap between the two conceptualizations of fear of failure.

Given the importance placed on evaluation from others in the Fear-of-Failure factor, Jeffers (1986) developed a version of the PASS that focused on social rather than academic procrastination (SPASS). The first component of the SPASS focused on procrastination in eight social situations (e.g., communicating with roommates, meeting new people). The second component provides two scenarios: contacting a roommate or family member about conflict, and contacting a boyfriend/girlfriend/lover about conflict, and asks subjects to think of the last time they were involved in these situations. Both scenarios were found to be high-frequency areas of social procrastination in a pilot study, and each scenario is followed by 15 statements reflecting reasons for procrastination in these scenarios. Separate factor analyses of each scenario indicated that Fear of Rejection (including items reflecting fear of not being liked, not wanting to be hurt, feeling judged or advised, and not wanting to deal with the consequences) accounted for approximately 30% of the variance of the first scenario (conflict with roommate/family member), followed by a factor termed Lack of Responsibility that accounted for 7% of the variance. For the second scenario (conflict with lover), Fear of Rejection again accounted for about 30% of the variance, followed by a factor termed Fear of Causing Pain or Anger. This second factor, which accounted for 10% of the variance, was endorsed significantly more by women than by men (Jeffers, 1986).

### Childrearing Factors

There has been no research using the PASS with children. However, McKenna, Solomon and Rothblum (1986) speculated that fear of failure, consisting of high evaluation anxiety and perfectionism, is likely to result from childrearing patterns. Specifically, they hypothesized that children with overly critical parents who demand high standards might learn to avoid important tasks rather than risk disapproval. They asked college students to complete the PASS and measures of parental affection and control. Subjects high on fear of failure were less likely to report their fathers to have been accepting, to demonstrate caring, and to allow cognitive independence, while they were growing up. When males and females were compared separately, it was females high on fear of failure who experienced these childrearing styles from fathers while they were growing up; these relationships were not significant for males high on fear of failure. Additionally, females high on fear of failure showed a small but significant tendency to report paternal overprotectiveness while they were growing up (McKenna *et al.*, 1986). There were no significant relationships between fear of failure and maternal childrearing styles.

### Model

Solomon and Rothblum (1983) have developed an avoidance model of procrastination, depicted in Figure 1. According to this model, high fear-of-failure procrastinators will experience some worry and anxiety as the deadline for a task approaches. A way to reduce this anxiety is to avoid the task by procrastination, resulting in relief from anxiety and thus reinforcement of the avoidance behavior. Thus, fear-of-failure procrastinators may be similar to individuals with phobias. There is some evidence that high procrastinators, especially those also high on fear of failure, are unconcerned with performance until anxiety and worry reach peak levels (Solomon, Murakami, Greenberger, & Rothblum, 1983).

Additionally, the research on attributions (Rothblum *et al.*, 1986) indicates that high procrastinators attribute success to more external and fleeting circumstances than do low procrastinators. In this way, high procrastinators do not take credit for their own performance and may not feel as competent. Group discussions with high and low procrastinators (Solomon *et al.*, 1983) indicated that high procrastinators begin work on academic tasks immediately preceding the deadline, in part so as not to test their true ability. If they then succeed on the task, they can attribute performance to luck; if they fail, to lack of effort. In this manner, they are protecting their self-esteem, and avoiding a true test of their competence. Because performance is thus attributed to unstable circumstances (i.e., luck or effort), feelings of competence are unlikely to generalize to subsequent tasks. The procrastinator thus approaches each new academic task with slight aversion, resulting in additional avoidance.

The avoidance model of fear-of-failure-based procrastination has similarities to three areas of cognitive-behavioral research. The first, termed *self-handicapping*

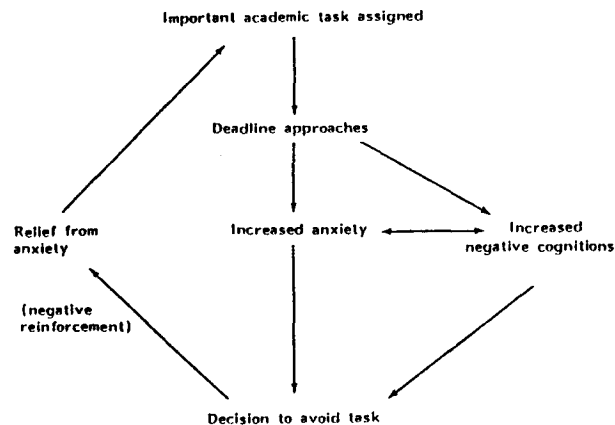


FIGURE 1. Solomon and Rothblum's avoidance model of procrastination.

(Berglas & Jones, 1978), argues that individuals may enhance the difficulty of tasks in order to externalize failure and thus "save face." Self-handicapping strategies may include choosing performance-inhibiting drugs (Berglas & Jones, 1978; Kolditz & Arkin, 1982), drinking alcohol (Jones & Berglas, 1978; Tucker, Vuchinich, & Sobell, 1981), reporting shyness (Snyder, Smith, Augelli, & Ingram, 1985), or reporting physical illness (Smith, Snyder, & Perkins, 1983), as decrements to performance. In this way, individuals can avoid a true test of their ability, given that their maladaptive behavior serves as an "excuse" for poor performance.

The second area, termed *defensive pessimism* (Norem & Cantor, 1986b), focuses on the strategies used by people to cope with situations that present the possibility of failure and risks to self-esteem. According to Norem and Cantor (1986a), individuals can cope with anticipatory anxiety by setting low expectations and can cope with actual failure by restructuring their cognitions of the situation.

Finally, Clance (1985) has coined the term *imposter phenomenon* to describe individuals who feel like fakes or frauds despite successful careers. Clance argues that such individuals do not take credit for their success, believing that it was due to a mistake or to kindness on the part of others. Because individuals experiencing the imposter phenomenon do not view themselves as competent, they will worry unduly about new tasks, procrastinate, engage in frenzied work immediately before the deadline, and then attribute success to chance. In this way, they will perpetuate the cycle of anxiety and self-doubt and avoid new tasks or responsibility.

### Intervention

The procrastination model of fear of failure originated from intervention studies using study skills and time management strategies. Given cognitive and affective components of procrastination, and especially the salience of fear of failure as a reason for procrastination, what are the implications for intervention?

A few researchers have incorporated cognitive strategies into the intervention of procrastination and study skills training. Jason and Burrows (1983) provided "transition training" for students about to graduate from high school. High school seniors who were provided with relaxation, cognitive restructuring, and problem solving demonstrated greater self-efficacy and rational beliefs than did students not given this training. Wilson and Linville (1985) found that attributional retraining increased the academic performance of college freshmen. Freshmen who were told in class that low grades in the freshmen year are temporary had significant increases in grade point average during the following semester, compared with freshmen who were not told this information (Wilson & Linville, 1985). Borkovec's research on treating worry has found stimulus control (i.e., telling worriers when and for how long to worry) decreased the daily frequency of worry for these individuals (Borkovec, Wilkinson, Folenbee, & Lerman, 1983). Finally, collective, rather than individual, performance on

difficult tasks decreases anxiety, a phenomenon known as "social facilitation" (Jackson & Williams, 1985).

Solomon and Rothblum's avoidance model of fear-of-failure-based procrastination implies that the treatment of procrastination may need to use similar techniques as that for phobias. If individuals are motivated to avoid performance because this avoidance is reinforcing, then they may not comply with programs that require them to gradually increase anxiety. Thus, flooding may be an effective intervention for fear-of-failure-based procrastination. Research on flooding as a treatment method for fear-of-failure-based procrastination is currently in preparation (Loew, Solomon, Rothblum, & Kaloupek, 1988).

### Summary

A small but homogeneous group of female college students endorsed fear of failure as the primary reason why they procrastinated. Fear of failure as an antecedent of academic procrastination remains at high levels across time and is related to a number of anxiety-related measures. Solomon and Rothblum have conceptualized an avoidance model of fear of failure that is similar to the anxiety-relief model of phobias.

### CONCLUSION AND FUTURE DIRECTIONS

The four perspectives on fear of failure differ in their theoretical conceptualization and assessment of the term fear of failure. Nevertheless, the research on fear of failure yields some consistent themes. First, women generally report more fear of failure, and behave in ways that express more fear of failure, than do men. What is fearful about failure seems to be the expected interpersonal consequences (such as fear of rejection) rather than the specific academic performance. Individuals with fear of failure are motivated to avoid situations that run the risk of poor performance, even at the expense of less success. When presented with a choice to receive feedback about their performance, individuals with fear of failure would rather not know how they are doing. Yet those individuals high on fear of failure are often performing adequately, even successfully. The cycle of avoidance and external justification for success is associated with poor self-esteem and increased self-doubt.

Furthermore, the importance of achievement for women seems to decrease in adolescence. The research on fear of success indicates that our educational system is more relevant for the career goals of men than of women. Finally, parental childrearing practices interact with gender to influence children's self-perceptions of competence and achievement.

Most of the literature on fear of failure has focused on college students, and there have been a few studies on children. Little is known about the achievement patterns of older adults, particularly as they become secure in their careers and face retirement. Theories of gender differences in adult development (e.g., Gilligan, 1982; Levinson, 1978) indicate that men and women face different

changes in attitudes, values, and work satisfaction as they mature. There is some evidence to indicate that for women achievement motivation declines during the childrearing period and then increases when children mature (Baruch, 1967). Kaufman and Richardson (1982) have argued that such "vicarious achievement" through children and spouses among homemakers should be investigated more thoroughly.

There is little information on fear of failure among minority groups and members of lower socioeconomic groups. Presumably, achievement and success as they are traditionally defined may have little relevance for oppressed groups. More emphasis needs to be placed on redefining achievement as it relates to the priorities of groups other than white, middle-class, young people.

There is little question that fear of failure as defined by images of barriers to success and by test anxiety should be ameliorated. The term itself connotes an aversive affective state and poor academic performance. However, much of the research reviewed above suggests that, in many ways, individuals who score high on fear of failure are cooperative rather than competitive and socially rather than personally oriented. Thus, individuals low on achievement motivation possess important affiliative skills. Perhaps a more important question is whether high striving for success is a desirable goal for clinicians to prioritize for their clients.

Because of the focus on males in early achievement motivation research, the models of achievement single-mindedly emphasize academic achievement to the exclusion of all other areas, such as athletic, domestic, social, and community performance. Hoffman (1972) has argued that a mentally healthy society needs to emphasize greater flexibility, and that the more diffuse achievement patterns of women should serve as a model for a fuller life. Developing affiliative and social skills is preferable to encouraging competitive striving for goals that can be won by, at most, a few individuals.

The peak period of achievement-related research took place during the postwar decades, when emphasis on career and academic success was primary. The social change of the late 1960s, affirmative action for women and minorities, and women's increased participation in the labor force may (or may not) have affected achievement patterns. It remains to be seen whether changes in childrearing, the work setting, and family constellations will change the nature of achievement and fear of failure in future years.

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