

STRESS AND THE FEMININE SELF-CONCEPT: RESPONSES TO  
FEMININE AND GENDER-NEUTRAL STRESSORS AS A  
FUNCTION OF FEMININE SELF-EVALUATION

by

Betty Lynn Gillespie

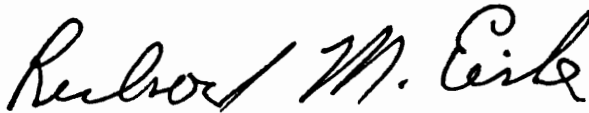
Dissertation submitted to the Faculty of  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for degree of

DOCTOR OF PHILOSOPHY

in

Clinical Psychology

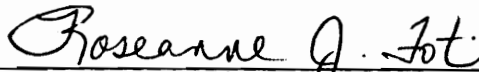
APPROVED:



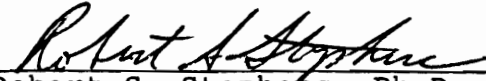
Richard M. Eisler, Ph.D., Chairperson



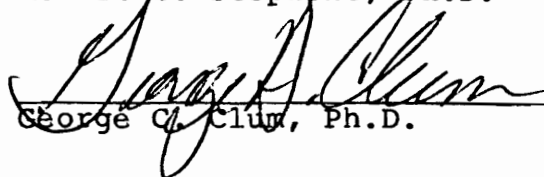
Joseph J. Franchina, Ph.D.



Roseanne Foti, Ph.D.



Robert S. Stephens, Ph.D.



George C. Clum, Ph.D.

April, 1993

Blacksburg, Virginia

STRESS AND THE FEMININE SELF-CONCEPT: RESPONSES TO  
FEMININE AND GENDER-NEUTRAL STRESSORS AS A  
FUNCTION OF FEMININE SELF-EVALUATION

STRESS AND THE FEMININE SELF-CONCEPT: RESPONSES TO  
FEMININE AND GENDER-NEUTRAL STRESSORS AS A  
FUNCTION OF FEMININE SELF-EVALUATION

by

Betty Lynn Gillespie

Committee Chairperson: Richard M. Eisler, Ph.D.

Department of Psychology

(ABSTRACT)

Vulnerability to Feminine Gender Role Stress (FGRS), defined as the tendency to evaluate the self along feminine dimensions, was introduced as a psychosocial mediator between environmental stressors and maladaptive outcomes to explain the higher rate of particular mental health problems among women relative to men. FGRS was proposed to result from 1) vulnerability, adherence to feminine standards for self-appraisal, and 2) exposure to environmental conditions which directly threaten or challenge one's ability to live up to these standards. Two studies investigated the FGRS construct. In Study 1, women who appraised threats and challenges to feminine commitments as highly stressful, rated feminine traits as more personally important to exhibit, than did women who did not appraise these situations as highly stressful. Additionally vulnerability to FGRS interacted with inadequate social support to predict

depressive symptomatology in women. Study 2 compared subjects high and low in FGRS vulnerability in responses to a counseling task presented as either a feminine or gender-neutral stressor. When the task was presented as a feminine stressor, women whose scores on the FGRS scale indicated adherence to feminine self-evaluation criteria evidenced greater physical stress, and cognitive engagement, including attempts to cognitively reframe the situation in order to cope with it, than did women who did not show adherence to these criteria. Across stressors high FGRS subjects reported greater reliance than low FGRS subjects on feminine styles of coping, including providing and soliciting social support. These findings elucidate the processes underlying women's vulnerability to FGRS and contribute to the understanding of gender-role mediated psychopathology in women.

#### ACKNOWLEDGMENTS

There are several persons I would like to recognize whose generous contributions made this project possible. I would like to thank my major professor, Richard Eisler, for his considerable contribution to the conceptualization of gender role stress. I am also grateful to committee members, Joe Franchina, Roseanne Foti, Bob Stephens, and George Clum, for sharing their time and expertise.

Research assistants, Jen Casad, Dianna Cartwright, Alice Richardson, Bobbi Stinnette, Suzanne Lynch, and Wendy Privette, provided reliable and conscientious assistance in the laboratory assessment procedures.

My husband, Steven Lash, contributed many hours of tangible support, providing cogent advice on execution of these studies, and on revisions of the text. Thank you, Steve.

## TABLE OF CONTENTS

Abstract . . . . .	ii
Acknowledgments . . . . .	iv
Table of Contents . . . . .	v
List of Tables . . . . .	vi
List of Figures . . . . .	vii
Stress and the Feminine Self-Concept: Responses to Feminine and Gender-Neutral Stressors as a Function of Feminine Self-Evaluation . . .	1
Study 1	
Major Hypotheses . . . . .	23
Method . . . . .	25
Results . . . . .	31
Discussion . . . . .	37
Study 2	
Overview . . . . .	40
Major Hypotheses . . . . .	42
Method . . . . .	44
Results . . . . .	57
Discussion . . . . .	76
Conclusion . . . . .	85
References . . . . .	87
Appendices . . . . .	95

A - Informed Consent Forms	. . . .	95
B - Feminine Gender Role Stress Scale	. . . .	99
C - Self Description Measure	. . . .	100
D - Behavioral Recall Measure	. . . .	101
E - Beck Depression Inventory	. . . .	102
F - Social Support Questionnaire	. . . .	105
G - State Anxiety Inventory	. . . .	106
H - Counseling Appraisal Scale	. . . .	107
I - Counseling Coping Scale	. . . .	108
J - Instructions for Counseling Coping Scale Development	. . . .	110
K - Items for Each Coping Category	. . . .	112
L - Transcript of Client Audiotape	. . . .	114
M - Recall Scoring Protocol	. . . .	115

## LIST OF TABLES

Table 1: Feminine Traits and Personal Commitments .	10
Table 2: Factor Analysis Pattern Matrix . . .	14
Table 3: Mean Importance Ratings . . . . .	25
Table 4: Mean Recall of Traits . . . . .	35
Table 5: Multiple Regression Statistics . . .	36
Table 6: Mean SBP . . . . .	65
Table 7: Mean DBP . . . . .	67
Table 8: Mean HR . . . . .	69
Table 9: Mean Anxiety Levels . . . . .	72
Table 10: Mean Appraisal Ratings . . . . .	73
Table 11: Mean Coping Reliance . . . . .	74

## LIST OF FIGURES

Figure 1: The Feminine Gender Role Stress Cycle .	7
Figure 2: FGRS and the Self-Concept . . . . .	12
Figure 3: Feminine Self-Concept and Styles of Coping . . . . .	17
Figure 4: Mean Importance Ratings . . . . .	34
Figure 5: Mean SBP . . . . .	66
Figure 6: Mean DBP . . . . .	68
Figure 7: Mean HR . . . . .	70
Figure 8: Mean Recall . . . . .	71
Figure 9: Mean Coping Reliance . . . . .	75



The types of mental health problems women are most vulnerable to correspond to traits which typify the feminine gender role (Francis & Widiger, 1986; Landrine, 1989; Millon, 1981). Personality disorders more often diagnosed in women than in men represent extreme versions of stereotypical feminine traits (Akhtar, Byrne & Doghramji, 1986; Kass, Spitzer, & Williams, 1983; Widiger & Frances, 1989; Widiger & Spitzer, 1991). Histrionic, borderline and dependent personality disorders are manifested by emotionality, precarious self-esteem, strong needs for others' attention and for closeness with others, and diffuse boundaries (e.g., others are experienced as an extension of the self) (APA, 1987; Millon, 1981).

The following axis I disorders differentially afflict women relative to men: 1) major depression, dysthymia, and agoraphobia, characterized by passivity, dependency, fear of abandonment, and feelings of helplessness and self-deprecation (APA, 1987), and 2) eating disorders, characterized by overconcern with physical appearance (body weight) and excessive dieting (APA, 1987).

The pattern of gender differences within certain classes of disorders further implies a major

psychosocial component in these differences. For instance, with regard to anxiety disorders, women are six times more likely than men to experience agoraphobia, characterized by intense anxiety and panic when away from home without a companion or "safe person". However, women and men are equally vulnerable to social phobia, anxiety and panic in response to potential negative evaluation on tasks such as writing or public speaking (APA, 1987).

The striking correspondence between the manifestations of mental health problems which differentially afflict women and the feminine gender role, suggests a psychosocial basis for these differences in psychopathology (Widom, 1984). It is proposed that women's predisposition to specific types of psychopathology derives from a gender-specific pattern of vulnerability to stress, determined in part by socialization into the feminine role. Through gender role socialization, women learn to evaluate themselves within particular domains of functioning. These domains become arenas of vulnerability to stress because stressors within them potentially threaten self-esteem. Vulnerability to Feminine Gender Role Stress (FGRS) is defined as the tendency for women to 1) experience

stress in situations which threaten or challenge internalized feminine standards for self-worth, (e.g., feminine stressors), and 2) respond to these stressors with coping behaviors in accordance with these internalized standards. The following discussion will relate vulnerability to FGRS with psychopathology. The subsequent section examines the feminine self-concept as a basis for FGRS vulnerability. The feminine self-concept develops through the internalization of feminine values. Feminine standards for functioning derive from these values, and serve as criteria for self-evaluation. This discussion will elaborate on the influence of the feminine self-concept, more specifically feminine standards for self-evaluation, on women's styles of appraisal and coping. The rationale for the current research and specific hypotheses will follow.

#### FGRS and Psychopathology

Underlying women's predisposition to psychopathology involving enmeshment in relationships, fear of abandonment, and precarious self-esteem, is vulnerability to stress in the context of inadequate, dissatisfying, emotionally distant, or conflictual relationships. This stress results in part from rigid or excessive self-standards for functioning in relation

to others, which many women internalize as part of their gender role development. Excessive commitments or self-standards to foster others' well-being, and to maintain positive connection with others constitute vulnerability to FGRS. Excessive or rigidly held commitments 1) predispose women to negative self-evaluations and emotional distress in the face of inadequate or dissatisfying relationships, and 2) may constrict womens' range of available coping responses for resolving emotional distress and precipitant environmental conditions (Gillespie, 1991).

Of course, having emotional needs for intimacy is not inherently unhealthy. Having strong, supportive interpersonal ties has been shown to enhance well-being (see Cohen & Wills, 1985, for a review). Women clearly benefit from their capacity to bond emotionally and develop and nurture satisfying relationships with others (Wethington, MacLeod, & Kessler, 1987). However, women who strongly or rigidly adhere to traditional feminine imperatives to nurture others and to maintain emotionally close, harmonious relationships, will be particularly vulnerable to certain types of stressors, situations which threaten or challenge their ability to live up to these standards. For these women, lack of

affective connection with others may signify personal inadequacy, and call for coping strategies outside the individual's limited repertoire. Severely disturbed patterns of emotional, cognitive, and behavioral responses constitute psychopathology, the sequelae to a pernicious cycle between the individual and conditions which trigger negative self-evaluation, and in which limited and redundant coping strategies (the result of rigid standards for behavior) serve to maintain rather than ameliorate, precipitant environmental conditions (Gillespie, 1991; Murran, 1993). According to this conceptualization, neither the individual herself nor her environment is solely responsible for FGRS related psychopathology. Rather, FGRS is the result of a specific interaction between personal vulnerabilities and relevant environmental stressors.

Figure 1 illustrates a pattern by which FGRS, including behavioral, somatic, and emotional manifestations, may cycle into psychopathology. As depicted, FGRS results from an interaction between personal vulnerability to FGRS, in the form of feminine self-evaluation criteria, and environmental conditions which impinge upon those criteria. FGRS occurs when the environmental context is negative AND relevant to

the individual's idiosyncratic standards for self-worth. An example of such an interaction would be a woman who narrowly defines her self-worth within her role as a mother. She may evaluate her ability to be a "good" mother in terms the degree that her interactions with her child are pleasant (FGRS vulnerability), experiencing somatic-emotional distress when her child throws a temper tantrum (self-relevant and threatening situational content). Clinical levels of psychopathology in the form of anxiety or depression might then result if, consistent with her personal commitment to make interactions with the child pleasant, she attempts to placate and soothe the child, inadvertently reinforcing the temper tantrum; her coping response perpetuates situational content which threatens self-esteem.

#### The Feminine Self-Concept

To understand women's vulnerability to specific emotional difficulties, it is necessary to examine commonalities in the experience of being female in our society, which lead to similarities in how women learn to think and feel about themselves and what they do in response to those thoughts and feelings. Feminine gender-role socialization is an integral part of the

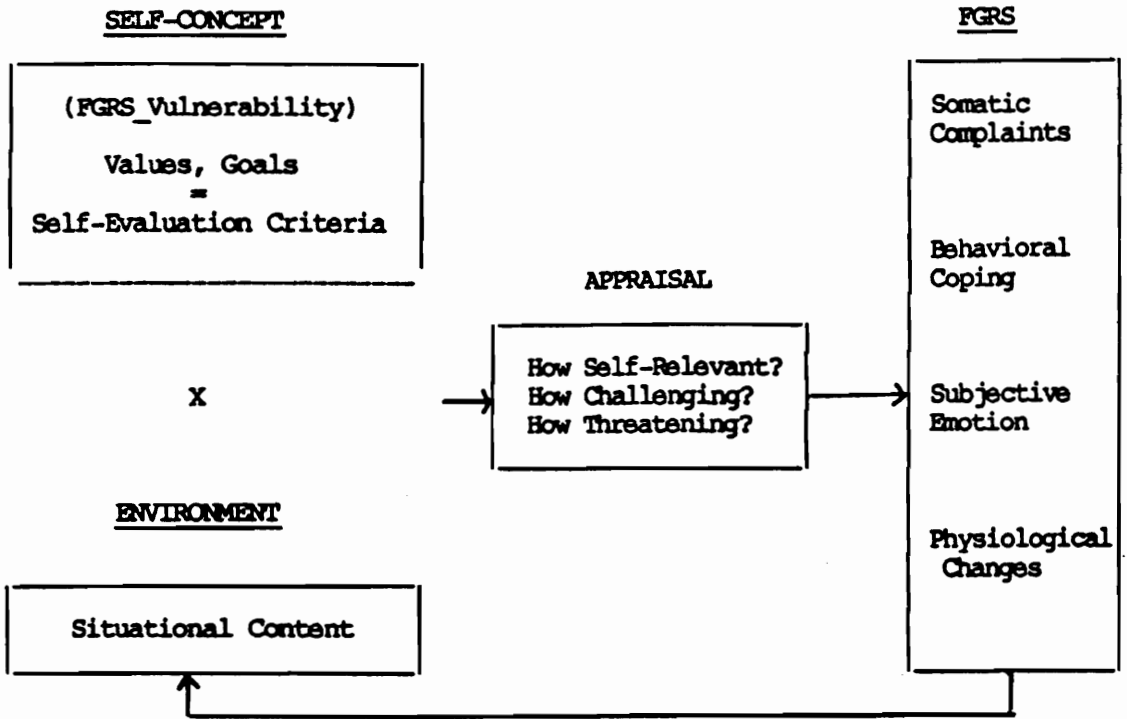


Figure 1. The Feminine Gender Role Stress Cycle.

development of cognitive representations of self, and their affective and behavioral elaborations, from which patterns of vulnerability to stress derive.

Females learn to evaluate themselves with respect to their ability to take care of others and to bond emotionally with others (Gilligan, 1982, Kaplan, 1986). This process involves an internalization of parental and societal expectations. Block (1983) found that parents of girls expected them to develop personality characteristics relevant to positive interpersonal relations. In contrast, she found that parents' of boys expected their sons to display qualities indicative of autonomy and achievement. This research speaks to the influence of the differential content of gender roles on identity development, specifically on males' and females' self expectations.

Psychodynamic theory proposed by Chodorow (1989) examines the differential process of gender identity development for males and females. Specifically, girls develop feminine identity or self-concept within their relationship with their primary attachment figure, their mothers, and through identification with her family role as nurturer and caregiver in relation to others (Chodorow, 1989). Boys sense of themselves as masculine



occurs through separation from and differentiation from their primary attachment figures, their mothers (Chodorow, 1989). Theory holds that relative to males', for females affective connection in relationship to others is more likely to constitute both the content and process of gender role development.

Through gender role socialization, females incorporate feminine values pertaining to emotional connection and caretaking in relationships, into the self-concept. Personal aspirations and goals derive from these feminine values. The cognitive-affective representations of feminine personal aspirations are conceptualized to serve as "possible selves" (Markus & Nurius, 1986) or self-evaluation criteria, providing standards for adequate functioning, which the individual is motivated to achieve. Similarly, negative possible self-conceptions define failure for the individual, possible selves to avoid. As shown in Table 1, stereotypical feminine traits correspond to feminine commitments or personal goals. Individuals likely differ in the variety and type of commitments they value, as well as in the intensity with which they value these commitments. To the extent that a woman is personally invested in achieving relationship-based feminine

Table 1.

Feminine Traits\* and Corresponding Personal Commitments.

<u>Feminine Traits</u>	<u>Personal Commitments</u>
Yielding	——> To cooperate
Does not use harsh language	
Gentle	——> To be understanding
Sensitive to the needs of others	
Compassionate	——> To nurture
Eager to soothe hurt feelings	
Warm	——> To be close to others

---

\* (Feminine traits identified by Bem, 1974.)

commitments, they serve as standards for self-evaluation with regard to progress toward highly meaningful and important goals.

### The Feminine Self-Concept and FGRS

Feminine possible selves give rise to women's vulnerability to FGRS in two essential ways. First, as shown in Figure 2, they determine arenas of vulnerability or the types of environmental conditions experienced as stressful. The stressfulness of events varies considerably among individuals depending on the degree to which the context is perceived as both relevant and challenging or threatening (Lazarus & Folkman, 1984) to the individual's commitments or highly valued personal goals. Women with primarily feminine self-conceptions will experience stress in response to situations which specifically threaten or challenge their ability to live up to self-imperatives to be nurturant, emotionally expressive, and intimate with others.

The tendency to develop valued possible selves along interpersonal dimensions of nurturance and emotional closeness with others renders women vulnerable to stress in the context of failed or dissatisfying relationships. Gillespie and Eisler (1992) found that situations

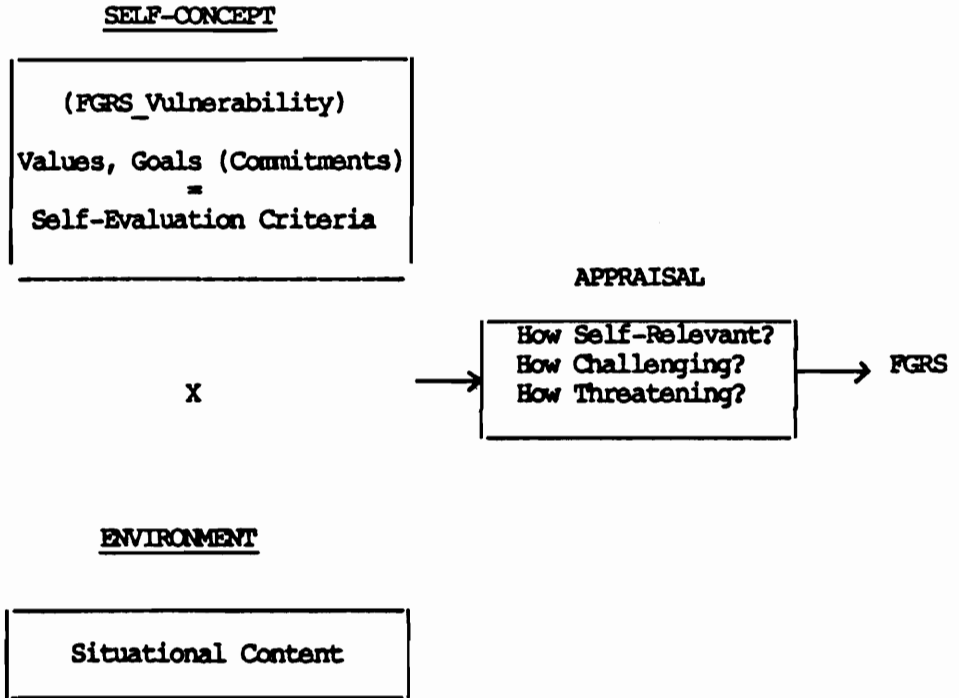


Figure 2. Feminine Gender Role Stress and the Self-Concept.

signifying emotional detachment in intimate relationships, failure to nurture significant others, potential victimization, negative evaluations of physical attractiveness, as well as interpersonal situations requiring assertiveness, are much more stressful for women than for men (see Table 2). With the exception of fear of victimization which reflects concern for personal safety, these feminine stressors were highly challenging and/or threatening for women because they reflect on ability to perform in highly valued, self-relevant feminine domains. Women who appraised situations involving failure to nurture others, or situations calling for assertive coping behaviors as highly stressful, tended to report higher levels of depressive symptomatology, than those who appraised these situations as less stressful (Gillespie and Eisler, 1992).

Second, rigid commitment to feminine self-representations may increase women's vulnerability to stress by restricting coping options. As shown in Figure 3, as personal standards for functioning, valued feminine self-conceptions determine preferred behavioral styles for managing stressful conditions and the emotions they elicit. Feminine standards for

Table 2.

Factor Analysis Pattern Matrix for the FGRS Scale.

<u>Item</u>	<u>Loading</u>
FACTOR 1 (Fear of Unemotional Relationships)	
Feeling pressured to engage in sexual activity	.67
Having to deal with unwanted sexual advances	.62
Being taken for granted in a sexual relationship	.60
Being pressured for sex when seeking affection from your mate	.52
Having multiple sex partners	.47
Having an intimate relationship without any romance	.45
Not being able to meet family members emotional needs	.43
Your mate will not discuss your relationship problems	.39
Being considered promiscuous	.38
Having others believe that you are emotionally cold	.37
FACTOR 2 (Fear of Physical Unattractiveness)	
Being perceived by others as overweight	.72
Finding you that you gained 10 pounds	.68
Feeling less attractive than you once were	.67
Being heavier than your mate	.65
Being unusually tall	.48
Being unable to change your appearance to please someone	.46
Turning middle-aged and being single	.40
Wearing a bathing suit in public	.38
(continued)	

Table 2 (continued).

---

FACTOR 3 (Fear of Victimization)	
Hearing a strange noise while you are home alone	.61
Hearing that a dangerous criminal has escaped nearby	.55
Having your car breakdown on the road	.53
Feeling that you are being followed by someone	.48
Having to move to a new city or town alone	.38
Receiving an obscene phone call	.38
FACTOR 4 (Fear of Behaving Assertively)	
Bargaining with a salesperson when buying a car	.83
Negotiating the price of car repairs	.79
Making sure you are not taken advantage of when buying a house or car	.53
Supervising older and more experienced employees at work	.43
Trying to be a good parent <u>and</u> excel at work	.37
Having to "sell" yourself at a job interview	.36
Talking with someone who is angry with you	.36
FACTOR 5 (Fear of Not Being Nurturant)	
Your mate is unemployed and cannot find a job	.42
Your child is disliked by her/his peers	.39
Having a weak or incompetent spouse	.36
Having someone else raise your children	.47
Returning to work soon after your child is born	.44
Trying to get your spouse to take responsibility for childcare	.45
Losing custody of your children after divorce	.47
A very close friend stops speaking to you	.42

---

functioning are not inherently healthy or unhealthy. In certain contexts, well-developed feminine coping skills, such as the capacity to be emotionally supportive, are efficacious. Other situations may call for coping behavior, such as expression of anger or termination of a relationship, which violates traditional feminine imperatives. In the latter case, individuals with rigid or excessive adherence to feminine standards may: 1) lack the necessary skills to manage the situation effectively, or 2) be subject to negative self-evaluation if they respond with coping behaviors which violate their own standards (or elicit condemnation from others).

Research suggests that women do rely more heavily than men on strategies, such as seeking information and personal support from others, verbally expressing emotions, crying, and thinking positively about the situation (Billings & Moos, 1981; Billings & Moos, 1984; Nolen-Hoeksema, 1987; Stone & Neale, 1984).

Correspondingly men appear to be more likely to take direct, confrontative action to solve their problems (Folkman & Lazarus, 1980), and to distract themselves from emotional distress through impulsive risk taking, physical activity, and drug use (Nolen-Hoeksema, 1987;



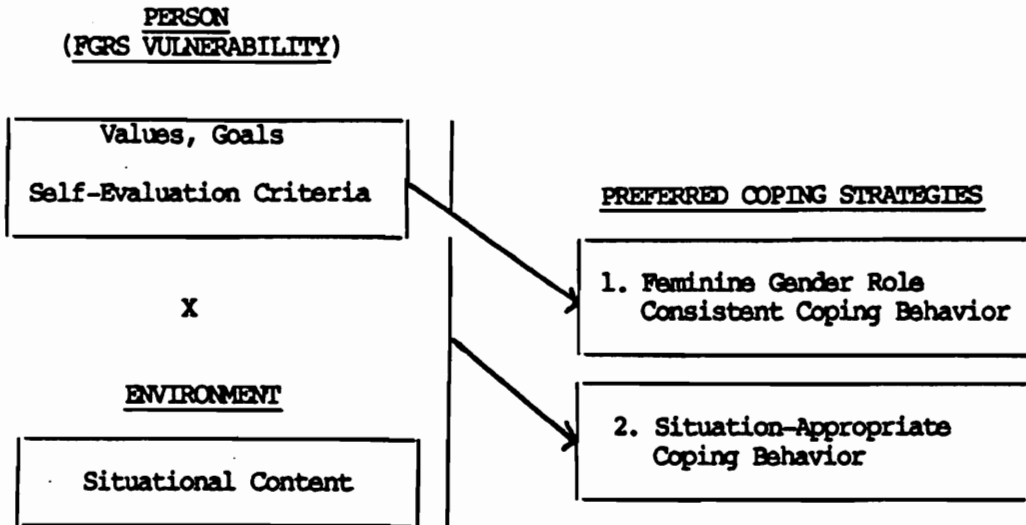


Figure 3. Feminine Self-Concept and Styles of Coping.

see Miller & Kirsch, 1987, for a review of gender differences in coping).

### Current Research

Vulnerability to FGRS is a tendency to appraise situations which challenge or threaten feminine imperatives, or which call for coping behaviors which violate feminine imperatives, as stressful. Feminine possible selves, personal aspirations consistent with stereotypical feminine imperatives, are the basis for this vulnerability. Women who value feminine traits and evaluate themselves with respect to their ability to exhibit these traits should experience FGRS in situations which threaten or challenge their ability to live up to these feminine self-evaluation criteria. In situations which do not specifically threaten or challenge feminine commitments, they should not be vulnerable to FGRS.

Two studies were conducted to evaluate the FGRS vulnerability construct. The Feminine Gender Role Stress Scale (FGRS scale), consists of situations more stressful for women than men, which specifically challenge and threaten feminine commitments, for example, to be nurturant, cooperative, lovable, attractive, in relationships with others. A

respondent's tendency to appraise such situations as stressful, derives from her personal motivation to exhibit relevant feminine traits, such as nurturance, emotional sensitivity, and cooperativeness. Women who appraise feminine stressors as highly threatening or challenging, should assign greater importance to exhibiting relevant feminine attributes, than individuals who do not subjectively rate these situations as highly stressful. Good convergent validity is expected between FGRS scale scores and subjective importance of feminine traits, supporting the notion that gender role socialization influences one's important values and goals, which in turn affect vulnerability to self-relevant or personal aspiration-relevant stressors.

Subjects' ratings of the importance of exhibiting masculine and gender-neutral traits provided a means of assessing discriminant validity. There should be no differences between subjects with high and low FGRS vulnerability scores on the subjective importance of exhibiting masculine or gender-neutral traits. Masculine and gender-neutral traits should not be differentially relevant to the self-conceptions of high and low FGRS subjects.

This study also investigated the relationships among depressive symptomatology, vulnerability to FGRS (FGRS scale scores), and quality of social support.

Depressive affect should depend on the interaction between FGRS, the tendency to cognitively appraise events which threaten feminine imperatives as highly stressful, and the absence of adequate or satisfying supportive relationships. For these individuals inadequate social support should threaten self-esteem because it signifies failure within highly valued interpersonal domains.

The second study compared individual scoring high and low on FGRS vulnerability across a counseling task presented as either a feminine and gender-neutral stressor. Women with high FGRS vulnerability should show greater stress responses than women with low FGRS vulnerability to the feminine stressor. Among women who cognitively appraise threats and challenges to feminine commitments as highly stressful, the feminine stressor should be relevant and threatening or challenging to important self-conceptions along the dimension of nurturance. However, the feminine stressor should not be as self-relevant or stressful for the low FGRS group. In contrast, high and low FGRS women should not react

differently to the gender-neutral stressor. Since the gender-neutral stressor is not designed to elicit feminine self-evaluation, high and low FGRS subjects should respond to it similarly. In response to the feminine but not the gender-neutral stressor, high FGRS subjects should evidence greater physiological stress responses, and report greater emotional arousal, physical discomfort, and motivation to do well on the task than low FGRS subjects.

Additionally, since the feminine stressor should be more self-relevant, or relevant to their personal aspirations, individuals with high FGRS vulnerability should be more attentive during the feminine stressor condition than low FGRS subjects. High FGRS subjects should show better recall of information presented during the feminine stressor, than should low FGRS subjects. Since there should be no differences between high and low FGRS subjects in self-relevance of the gender-neutral stressor, no differences in attention (recall) are expected for this condition.

Finally, group differences are expected in terms of the coping behaviors used to manage the stressor. Subjects with high FGRS scores in the self-relevant (feminine stressor) condition should experience more

FGRS than any other group. Thus, in response to the feminine but not the neutral stressor, high FGRS subjects should report greater reliance on situation appropriate coping behaviors, behaviors aimed at directly managing the situation (e.g., problem-focused coping; Lazarus & Folkman, 1984) as well as behaviors designed to reduce emotional responses to the situation, (e.g., emotion-focused coping; Lazarus & Folkman, 1984), than low FGRS subjects.

Person characteristics (FGRS vulnerability) were expected to play a greater role than situational cues (type of stressor) in determining preference for feminine-relevant coping behavior, behaviors which specifically violate or uphold internalized feminine standards. Consistent with their adherence to traditional feminine standards for behavior, high FGRS subjects should report greater reliance on help-seeking behaviors, but less reliance on expression of anger, than individuals with low FGRS scale scores, across stressor conditions.

## Major Hypotheses - Study 1

1. Individuals with high FGRS scores should rate feminine attributes as more personally important to exhibit, than low FGRS individuals. However, the two groups should not differ on the subjective importance of exhibiting masculine or gender neutral attributes.

2. High FGRS individuals should recall significantly more behavioral examples, in which they exhibited behavior reflective of feminine attributes, than low FGRS individuals. There should be no between group differences in amount of behavioral evidence recalled for masculine attributes.

3. Since high FGRS scores should reflect strong needs for emotionally close and satisfying relationships with others, they should also indicate degree of vulnerability in the context of dissatisfying or inadequate relationships. FGRS vulnerability scores together with self-reported availability and satisfaction with social support should account for a significant amount of the variability in depressive symptoms. Since FGRS vulnerability and level of social support should each relate to emotional distress independently of one another, these two factors should

together account for a greater proportion of the variance in depression scores than either predictor alone. When combined interactively FGRS vulnerability and social support should predict a greater proportion of the variance in depression scores than an additive combination of these variables, supporting the proposed conceptualization of FGRS.

#### Method - Study 1

##### Subjects

Two-hundred nine female introductory psychology students, aged 17 to 41 years ( $M=19.4$ ), served as participants in Study 1. All subjects received extra credit points in exchange for participation.

One-hundred one subjects provided data for analyses pertaining to the first two hypotheses. These subjects were selected based on extreme scores on the FGRS scale relative to the total sample. Subjects scoring in the highest fourth of the entire sample comprised the high FGRS group ( $N=49$ ), while those whose scores fell within the lowest fourth, comprised the low FGRS group ( $N=52$ ).

The entire sample of 209 subjects provided data for multiple regression analyses.



## Measures

### Feminine Gender Role Stress Appraisal

The Feminine Gender Role Stress Scale (FGRS; Gillespie & Eisler, 1992, Appendix B) consists of 39 items, each representing a potentially stressful situation associated with the feminine gender role. Respondents rate the stressfulness of each situation for her or himself personally, on a six-point Likert-type scale (6, corresponding to "extremely stressful" and 1, corresponding to "not at all stressful"). Each respondent's score is the sum of these ratings, with higher scores indicating a greater tendency to appraise these situations as stressful. The FGRS scale is based on the assumption that women will be threatened if they perceive themselves as unable to cope with the imperatives of the female role or that a situation requires them to exhibit unfeminine coping behaviors.

Factor analysis identified five categories of feminine stressors: Unsatisfactory Relationships, Fear of Physical Unattractiveness, Fear of Victimization, Fear of Behaving Assertively, and Fear of Failed Nurturance (Gillespie & Eisler, 1992). Cronbach's alpha coefficients of .83, .81, .77, .80, and .73 for factors

1 through 5 respectively, indicate internal consistency within each factor. Two-week test retest reliability of the FGRS scale ( $r = .82$ ), indicates that it taps respondents' stable cognitive characteristics.

Scores on the FGRS scale significantly discriminate between males and females, in the expected direction. High FGRS scores among women are significantly related to self-reported depressive symptomatology, trait anxiety (Gillespie & Eisler, 1992), and attitudes and behaviors consistent with eating disorders (Martz, 1991). Two FGRS subscales, Fear of Unattractiveness and Fear of Behaving Assertively, were each significantly related to scores on the Beck Depression Inventory (Beck & Steer, 1987;  $r = .34$ ,  $p < .01$  and  $r = .36$ ,  $p < .01$ , respectively).

Experimental research with the FGRS scale revealed that college women with high FGRS scores evidenced significantly more physiological arousal (heart rate reactivity) than women with low FGRS scores in response to a feminine stressor (body-image threat exam), but not to a low stress control condition (Martz, 1991). This finding supports the construct validity of the FGRS scale in terms of its ability to identify women who are

particularly vulnerable in situations which challenge traditional feminine gender role imperatives.

#### Self-Evaluation Criteria

The Self Description Measure (Appendix C) requires each subject to rate the degree to which it is personally important for her to exhibit traditionally feminine (close to others, understanding, and cooperative) traditionally masculine (brave, competitive) and gender neutral (logical, practical) traits which correspond to masculine, feminine and androgynous attributes identified by Bem (1974). The subject rated these traits on a 6-point scale (1, corresponding to "not at all important", and 6, corresponding to "extremely important").

On the Behavioral Recall Measure (Appendix D) subjects provide behavioral evidence for masculine and feminine traits used in the Self Description Measure. For each trait, the respondent lists as many specific instances as she can recall in which she exhibited behavior reflective of the traits. This measure was adapted from procedures described by Markus (1977) to assess schematic processing of personality traits. A

subject's ability to provide specific evidence of his or her behavior along a given dimension or trait reflects a tendency to categorize and evaluate her or himself along this dimension.

#### Depressive Symptomatology

On the Beck Depression Inventory (BDI; Beck & Steer, 1987; Appendix E) subjects self-report cognitive, behavioral, and somatic symptoms related to depression. There are twenty-one items, each consisting of four statements, from which the respondent selects the statement which best describes her or his mood or behavior in the past week. Each item begins with a statement representing relatively normal behavior or thoughts for the respondent, with consecutive statements representing more deviant and severely depressive functioning. Each statement receives a numerical weight (0 through 4, 0 indicating normal or adequate functioning and 1 through 4 indicating increasing depressive psychopathy). The sum of the numerical weights indicate the severity of the respondent's depression. Beck, Steer, and Garbin (1987) reported two week test-retest reliability ( $\underline{r}=.90$ ). Meta analytic procedures revealed a Pearson's correlational

coefficient,  $r = .72$ , between the BDI and clinical ratings of depression, using a clinical sample (Beck, Steer, & Garbin, 1987).

### Social Support

The Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983; Appendix F) taps respondents' perceived availability (quantity) of supportive relationships and subjective satisfaction (quality) with those relationships. The short form consists of 6 items. On each item the respondent first lists up to nine individuals he or she can count on to fulfill the particular need identified by the item. Then he or she provides a rating on a 0 to 6 scale indicating overall level of satisfaction with regard to the support received. The respondent receives two scores, average number of supportive relationships and average level of satisfaction with them. Test-retest reliability for both scores ranges between .96 and .98 over 4 weeks. Respondents with lower scores for both availability and satisfaction are more likely to experience anxiety and emotional arousal than individuals with high scores (Heitzman & Kaplan, 1988).

Procedure

Subjects completed questionnaires in large group testing sessions of about 50 subjects at a time, in the following order: Self Description Measure, FGRS, Behavioral Recall Measure, SSQ, BDI.

## Results - Study 1

The hypothesis that high FGRS subjects would rate feminine attributes as more important to exhibit than their low FGRS counterparts was confirmed ( $F(1, 105) = 14.72, p < .001$ , one-tailed). This finding indicated that the FGRS scale does tap personal aspirations to exhibit positive feminine traits. As expected, there were no differences between high low FGRS subjects' ratings for masculine ( $F(1, 105) = .84, p = .181$ , one-tailed) and neutral traits ( $F(1, 105) = .62, p = .216$ , one-tailed). Means and standard deviations are presented in Table 3, and graphically represented in Figure 4.

The prediction that women with high FGRS scores would recall a greater amount of information about their behavior within feminine domains, than would low FGRS subjects, was not confirmed. There were no significant differences between high and low FGRS groups on recall for behavior reflecting either masculine ( $F(1, 81) = .18, p = .336$ ) or feminine ( $F(1, 81) = .24, p = .315$ ) traits. Twenty-four of 105 subjects' responses (23%) were unscorable because they were filled out incorrectly. Means and standard deviations are

presented in Table 4.

Hierarchical multiple regression analysis revealed that subjects' level of satisfaction with social support and FGRS vulnerability combined to predict a significant proportion of the variance in depressive symptomatology on the BDI ( $F(2, 194) = 9.94, p = .0001, R^2 = .12$ ). The interaction of these factors explained more variance in depression scores than an additive combination of these factors ( $F(2, 194) = 9.94, p = .0001, R^2 = .08$ ). Both the additive and interactive models explained more variance than either FGRS vulnerability or satisfaction with social support alone. Multiple regression statistics are presented in Table 5.

A post-hoc stepwise regression analysis revealed the relative contribution of 7 different predictors: FGRS, FGRS subscales 1 through 5, and ratings of satisfaction with support and availability of support on the SSQ, in explaining variability in depressive symptomatology. Respondents' subjective level of satisfaction with social support and FGRS scores on subscale 1 (reflecting fear of emotional distance in relationships with significant others) proved to be more strongly related to depressed mood than the other FGRS factors or the



Table 3.

Mean Importance of Feminine, Masculine and Neutral Traits for High and Low FGRS Subjects.

Traits	High FGRS	Low FGRS
Feminine*	4.6 ( .38)	4.2 ( .94)
Masculine	4.1 (1.01)	4.0 (1.09)
Neutral	3.2 ( .69)	2.9 ( .83)

\*(p < .001).

Note. Standard deviation is in parentheses.

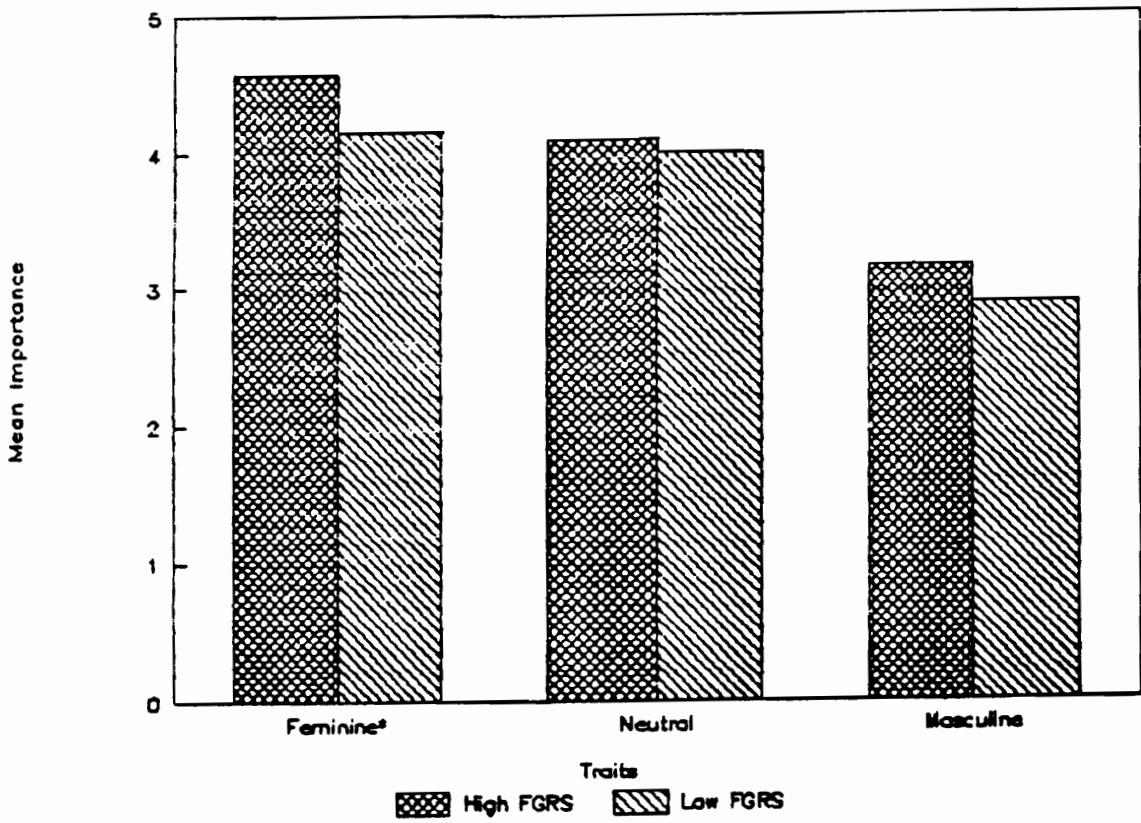


Figure 4 : Mean Importance of Feminine, Masculine and Neutral Traits for High and Low FGRS Subjects.

Table 4.

Mean Number of Feminine and Masculine Behavioral Examples  
Recalled by High and Low FGRS Subjects.

<u>Traits</u>	<u>High FGRS</u>	<u>Low FGRS</u>
Feminine*	7.83 (2.73)	7.55 (2.55)
Masculine	7.57 (3.21)	7.30 (2.51)

\*( $p < .001$ ).

Note. Standard deviation is in parentheses.

Table 5.

Multiple Regression Statistics: Predicting Depression Scores from Vulnerability to FGRS and Satisfaction with Social Support.

	<u>F</u>	<u>p</u>	R <sup>2</sup>
1. FGRS Vulnerability	5.43	.02	.03
2. Satisfaction	12.10	.0006	.06
3. FGRS Vulnerability + Satisfaction*	9.94	,0001	.08
4. FGRS Vulnerability X Satisfaction**	9.94	.0001	.12

\* additive model.

\*\* interactive model.

## Discussion - Study 1

Vulnerability to feminine stressors reflects a tendency to evaluate the self along relevant feminine dimensions. As conceptualized, high FGRS vulnerable individuals are vulnerable within the feminine arenas which contain important personal aspirations.

Individuals vulnerable to FGRS tend to experience depressive symptomatology, one of the proposed manifestations of FGRS. This finding corroborates previous research linking vulnerability to FGRS and self-reported depression and anxiety in women (Gillespie & Eisler, 1992). It is possible that the particularly strong association between the FGRS subscale Fear of Emotional Detachment and depression scores, reflects that the type of feminine stressor tapped by most of the items on this subscale (emotionally distant, sexual relationships) may be particularly common among newly autonomous college students.

FGRS vulnerability and a feminine stressor, unsatisfactory social support, contribute separately to the FGRS cycle, predicting depressive symptomatology independently of one another. Although the difference in predictive power between multiplicative and additive

combinations of these two factors was smaller than anticipated, the explanation of a greater amount of variability in depression scores by a multiplicative interaction model is consistent with the proposed process by which personal vulnerability characteristics and relevant situational stressors interact to produce psychopathology in women.

Null results, the lack of a relationship between self-evaluation measured as behavioral recall for feminine traits, and FGRS vulnerability, may be attributed to administration of questionnaires in large groups, which likely diminished subjects' willingness to respond to the behavioral recall measure with sufficient effort and thoughtfulness. This same behavioral recall measure has been used successfully to assess for masculine and feminine self-schemas, with subjects tested individually rather than in groups (Markus, 1977).

In sum, Study 1 generally supports the proposed process by which vulnerability to FGRS contributes to psychopathology. FGRS was proposed to result from an interaction between, 1) vulnerability, adherence to feminine self-evaluation criteria, and 2) exposure to

feminine stressors, which specifically threaten or challenge feminine self-evaluation criteria. Women with feminine standards for self-evaluation, involving the ability to nurture others and to maintain emotionally close, supportive interpersonal relationships, appear to be particularly vulnerable to emotional distress in the context of inadequate or dissatisfying relationships with others. Level of emotional distress depended on adherence to feminine self-standards and exposure to a feminine stressor, which threatened or challenged the individual's ability to live up to these standards.

Study 2 directly manipulated the gender-relevance of a single stressor in order to evaluate the relationship between adherence to feminine standards for self-evaluation (vulnerability to FGRS) and feminine gender role-relevance of situational context in producing stress.

## Overview - Study 2

High and low FGRS subjects were randomly assigned to either a feminine or neutral stressor condition. In each condition, the subject believed she would be participating in a "counseling task", requiring her to interact with someone who was emotionally distressed. The only difference between the two conditions was the instructions about the nature of the counseling task. In the feminine stressor condition subjects were told to try and help the distressed individual, while in the gender-neutral stressor condition, they were told to simply ask the individual questions. Additionally, instructions about the meaning of the subject's performance on the task varied across conditions in order to manipulate feminine self-evaluation. Following the instructions, all subjects listened to the same audiotape, ostensibly a psychotherapy client in emotional distress. In each condition, the subject believed that when the audiotape finished she was going to be talking with this client in person. Self-reported anxiety, cognitive recall for the client audiotape, cardiovascular reactivity, and self-reported coping strategies, provided dependent measures of stress,



appraisal, and coping.

## Major Hypotheses - Study 2

### Major Hypotheses:

1. High FGRS women should cognitively appraise the feminine, but not the gender neutral stressor condition, as more stressful and more challenging (e.g. uncomfortable, emotionally and physically arousing, stressful for women generally, important to do well in, etc.), than should low FGRS subjects.

2. In response to the feminine stressor, but not the gender-neutral stressor, high FGRS women should demonstrate greater cardiovascular reactivity (Systolic Blood Pressure (SBP), Diastolic Blood Pressure (DBP), and Heart Rate (HR) reactivity), than should low FGRS women.

3. During the feminine stressor, but not during the gender neutral stressor, high FGRS women should self-report higher state anxiety than should low FGRS individuals.

4. High FGRS women should recall more information from the distressed clients' message following the feminine stressor instructions, but not the gender-neutral instructions, than should their low FGRS counterparts.

5. High FGRS women should have a greater amount of information already stored in memory which may become associated with the client message on the tape. Hence, high FGRS subjects were expected to recall more incorrect or confabulated information than low FGRS subjects across conditions.

6. Regardless of condition, women with high FGRS scores were expected to express greater preference for coping strategies consistent with feminine behavior (e.g. Help Seeking), than were low FGRS women. Correspondingly they should report less of a tendency to rely on coping strategies which violate the female role (e.g. Anger Expression) than should low FGRS women.

Subjects experiencing higher levels of stress (High FGRS women in feminine stressor condition) in the situation should report greater reliance on Problem-Focused Coping, Situation Reappraisal and Relaxation (Appendix J), than those experiencing lower levels of stress (high FGRS in gender neutral stressor and both low FGRS groups).

## Method - Study 2

### Subjects

One-hundred eighty female introductory psychology students, who had not participated in Study 1, were screened participation. One-hundred twenty subjects with FGRS scores in the top or bottom third of the sample were recruited for the study. Of these subjects, data from seventeen subjects were eliminated from analyses due to equipment failure (N=7), use of caffeine within one hour prior to the experiment (N=2), and not believing the deception (N=8), yielding a final sample of 103 subjects. Mean FGRS score for the total sample was 125.8 with a standard deviation of 30.9. Fifty-three subjects with scores on the FGRS scale above 137 comprised the high FGRS group. Subjects scoring below 117 on the FGRS comprised the low FGRS group (N=50). High and low FGRS subjects were randomly assigned to either the feminine or gender-neutral stressor condition, yielding the following 4 groups: high FGRS in the feminine stressor condition (N=23), high FGRS in the gender-neutral stressor condition (N=27), low FGRS in the feminine stressor condition (N=23), and low FGRS in the gender-neutral stressor condition (N=30).

## Measures

### Feminine Self-Appraisal

The Feminine Gender Role Stress Scale (FGRS, Appendix B) is described in Study 1.

### Anxiety

State anxiety during the experiment was assessed using a one-item scale asking the subject to respond to the question, "How anxious do you feel right now?", on an 8-point scale, with 0 indicating no anxiety and 7, extreme anxiety.

State anxiety was assessed prior to the experiment using the state anxiety scale from the State-Trait Anxiety Inventory (STAI; Spielberger, Gorshuch, Lushene, Vagg, & Jacobs, 1983; Appendix G). On this 20-item scale, respondents describe how they feel "right now" by indicating the intensity of their anxious feelings. Respondents select from among 4 possible responses, ranging from 1, "not at all" to 4, "very much so" in response to statements, such as "I feel secure" or "I am tense". Internal consistency of the STAI is reflected by Cronbach's alpha coefficients for the T-anxiety scale ranging from .89 to .91 across four large samples, including working adults, college students, high school

students, and military recruits (Spielberger, Gorshuch, Lushene, Vagg, & Jacobs, 1983).

### Cognitive Appraisal

The Counseling Appraisal Scale (CAS; Appendix H), was developed to assess subjects' perceptions of the feminine and neutral stressor scenarios and personal coping efficacy for each stressor. Each respondent rates on a 7-point scale: 1) the degree to which the situation felt uncomfortable, emotion-arousing, physically intense, 2) how important it was for her to do well, 3) how well she thinks she dealt with the situation, 4) how well she thinks females and males would do at the counseling task, respectively, and 5) how stressful they believe the experience would be for males and females, respectively.

### Coping

The Counseling Coping Scale (CCS; Appendix I) was developed to assess subjects' preferred coping strategies during the experiment. Each subject rated the degree to which she would rely on 54 different coping behaviors. Each coping behavior was assigned a numerical weight according to a 3-point scale (0-2). Zero reflected that the subject "did not use" this

strategy, while 2, reflected that the subject used the behavior "very much" to deal with the counseling task stressor.

The coping items selected for the coping scale were derived through preliminary research. Approximately 50 students enrolled in undergraduate psychology courses participated in a relaxation exercise followed by an imagery exercise involving a situation analogous to the experimental procedure. Following the exercise, half of these subjects were asked to list the thoughts or behaviors they would use to deal with having to talk with the distressed client (see Appendix J-Coping questionnaire B, see Kendall & Hollon, 1981, for a review of thought listing procedures). The remaining subjects were asked to complete a coping questionnaire created by Stone and Neale (1984) which defines eight general ways of coping. Subjects listed anything they would do or think that fits into one of the categories while dealing with a specified stressor (See Appendix J - Coping Questionnaire A). From these coping responses, 54 common coping responses were derived for dealing with the counseling task.

In order to compare the four experimental groups on

their use of general coping strategies, the coping items were divided into meaningful categories of coping behaviors by the principal investigator and a Ph.D. level psychologist familiar with coping research. Raters divided the items into a priori coping style categories (see Appendix K), which corresponded to ways of coping identified and described by Stone and Neale (1984) and Lazarus and Folkman (1984) (e.g., emotion-focused coping and problem-focused coping). Two additional categories of feminine self-relevant coping (e.g. anger expression and help seeking) were created as well. Raters were not given any instructions as to the number of coping items that should be assigned to a given category. Interrater agreement was high; raters agreed on categorization of 48 of 53 items (91%). Discrepancies were resolved through discussion among the raters.

Problem-focused coping items included behaviors which attempt to directly deal with the stressful situation (Folkman and Lazarus, 1984). Relaxation and Situation Reappraisal correspond to Lazarus and Folkman's (1984) "emotion-focused coping". Relaxation was defined as efforts to directly decrease level of



arousal. Situation Reappraisal reflected indirect efforts to reduce arousal by altering perceptions of the situation. Anger Expression consisted of items involving expression of hostility, which did not seem designed to decrease arousal. Help Seeking was comprised of solicitation of others' help in the form of advice and emotional support.

#### Cognitive Engagement

Cognitive engagement in the task was assessed in terms of subjects' ability to recall information from the distressed client audiotape. Each subject was given three minutes to write down as much as she could remember from the client's message on the tape. The client audiotape was divided a priori into phrases or units of meaningful information (see Appendix M). Scores on this recall measure consisted of the number of meaningful phrases recalled. Confabulation was defined as the number of units of information incorrectly recalled. The principal investigator and a Ph.D. level psychologist obtained high interrater reliability ( $r = .96$ ) for scoring recall and confabulation in this manner. Discrepancies were resolved through discussion among raters.

### Cardiovascular Reactivity

The Industrial and Biomedical Sensors Corporation's (IBS) automatic blood pressure monitor (model SD-700A) was used to measure systolic blood pressure (SBP), diastolic blood pressure (DBP), and heart rate (HR). This instrument measures blood pressure indirectly by detecting Korotkov sounds, an index of the pressure of blood flow through the brachial artery. Heart rate is measured as oscillations in pressure on the cuff bladder. Accuracy of BP readings is reported to be within three mm Hg, and accuracy of HR within one beat per minute (IBS, 1987). In our laboratory, high correlations were obtained for BP measured concurrently by the IBS BP monitor and a standard Baum mercury sphygmomanometer ( $r = .99$ ,  $p < .05$  for SBP;  $r = .92$ ,  $p < .05$  for DBP).

### Procedure

Upon arrival at the experiment, each subject was seated in a large, comfortable chair. She then completed an informed consent form (Appendix A) and the state anxiety scale from the STAI (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Next, an experimenter measured the circumference of the subject's

nondominant arm two inches above the elbow. An appropriately sized blood pressure cuff was placed on this arm with the bottom edge of the cuff one inch above the elbow and the microphone positioned over the brachial artery. The subject was instructed 1) to remain as motionless as possible, 2) that the cuff would inflate periodically throughout the session, 3) that she would be observed through a video system, and 4) that audiotaped instructions would be played from another room.

#### Baseline

During baseline, an audiotape advised the subject to become comfortable, and to relax for a few minutes during the physiological measurements. The relaxation period ended upon achievement of a stable baseline, defined as three consecutive SBP measures within five mm Hg. Systolic Blood Pressure (SBP), Diastolic Blood Pressure (DBP), and Heart Rate (HR) readings were taken every 60 seconds throughout the study.

#### Anticipation Phase

Three SBP, DBP, and HR readings were taken during the anticipation phase, in which an audiotape provided the subject with the following general instructions:

Psychologists have traditionally been interested in how people relate to others who are emotionally upset. So, in a few minutes we are going to have you interact with an individual who is having some emotional problems. This individual has agreed to participate in exchange for free counseling services, and with the understanding that her identity will remain anonymous. First, listen to a brief excerpt from an initial intake interview about the problems this person has been experiencing so that you can prepare to meet and talk with her".

Depending on the stressor condition, these general instructions were immediately followed by either the feminine stressor instructions (experimental condition) or gender-neutral stressor instructions (control condition).

Feminine stressor instructions were designed to emphasize the importance of successful performance in terms of demonstrating emotional sensitivity and ability to be nurturant, creating a which situation which women with high FGRS scores should appraise as more stressful than women with low FGRS scores (Gillespie & Eisler, 1992). Feminine stressor instructions:

"As you listen to this excerpt, keep in mind we want to find out how supportive you can be with someone who needs help. When you talk with the person, be as helpful as you possibly can. Psychologists have found that women who are good helpers are able to bond emotionally with others.

Your performance today will tell us a lot about your ability to be caring and supportive. Women who do well at this are able to establish close and loving relationships with their sexual partners and friends, and also with their children. We will be evaluating your responses to determine how caring and supportive you can be. Try your best to do well. Now, listen to the brief excerpt which will begin shortly".

In contrast, subjects assigned to the gender-neutral stressor heard the following instructions:

"As you listen to this excerpt, keep in mind we want to find out your general impressions of talking with this person. When you talk with this person, ask questions and try to find out the details of her current situation. You may ask these questions in whatever manner comes to you naturally and ask whatever questions come to mind. In this study we are gathering survey information and so we want you to do this so we can get your opinion of what it is like to talk with this kind of person. We will be gathering your impressions in order to help us better understand distressed individuals. Now, listen to the brief excerpt which will begin shortly".

### Stressor Phase

The stressor phase began following the third anticipation phase reading. Six readings of SBP, DBP, and HR were taken during the stressor phase. In all conditions, subjects listened to the same two-minute client audiotape (see Appendix K). When the client audiotape finished, the experimenter reentered the room,

handed the subject a clipboard with paper and a pencil, and instructed: "in order to prepare to meet and talk with the person waiting outside write a paragraph about what you plan to say to her based on the interview you just heard". After two minutes, the experimenter stopped the subject and handed her a one-item measure of state anxiety ("how anxious do you feel right now?"). The experimenter then gave the subject brief instructions for the TRAILS B test from the Halstead-Reitan Neuropsychological Battery. TRAILS B was selected as a distraction task in order to minimize the effects of rehearsal during the written paragraph prior to recall testing. This task requires the subject to connect a series of numbers and letters in sequential order, alternating between numbers and letters (1 to A, 2 to B and so on). This task requires concentration, but is relatively simple for nonbrain-impaired individuals to complete in less than 2 minutes. Response times tend to be uniform across normal individuals. After this distraction task, the experimenter handed the subject a blank piece of paper and asked her to write down as much as she could remember, word for word, from the client's message. After three minutes the experimenter stopped

the subject and handed her the appraisal and coping scales to complete. After both questionnaires were completed, prior to debriefing the subject, the experimenter attempted to ascertain, 1), whether the subject had truly believed that she would be talking with the client on the tape, and 2), if she thought that the client was truly distressed or just an actor. Next the experimenter provided the subject with an explanation of the study, including the nature of the deception involved. She asked the subject not to discuss the study with anyone else to prevent contamination of the subject pool. The subject returned during the next week to provide return-day baseline measures for physiological dependent variables.

#### Experimental Design and Statistical Analyses

Subjects' mean physiological (BP and HR), cognitive (recall and confabulation), and self-report (state anxiety, appraisal and coping) responses were compared in a series of 2 by 2 factorial-design ANOVAs. High and low FGRS groups served as the first factor, and feminine and gender-neutral stressors served as the second factor. For analyses of BP and HR readings (three readings during the anticipation phase and 6 during the

stressor phase) a repeated measures over time factor was included. The Huynh-Feldt adjustment was used to control for the violation of the assumption of homogeneity of variance common in trial data. A repeated measures ANCOVA was used to reduce variability in baseline levels of physiological measures. On physiological measures, baseline was defined as the average of the last two physiological measures during the baseline period. Group differences in state anxiety were analyzed using 2 (FGRS) x 2 (Stressor) ANCOVA, treating preexperimental state anxiety as the covariate.

All the above analyses were conducted using ANOVA and ANCOVA procedures for unequal N's [high FGRS-feminine stressor (N = 23), high FGRS-neutral stressor (N = 27), low FGRS-feminine stressor (N = 23), & low FGRS-neutral stressor (N = 30)].



## Results - Study 2

### Analysis of Physiological Data

#### Baseline

There was an unexpected and unexplained failure of random assignment to groups to mitigate systematic group differences on baseline physiological measures. There were interactions between FGRS vulnerability and stressor condition for preexperimental SBP baseline [ $F(3, 102) = 15.28, p = .0001$ ] and return-day SBP baseline [ $F(3, 102) = 5.83, p = .009$ ]. High FGRS subjects assigned to the feminine stressor had significantly higher preexperimental [ $F(1, 45) = 10.83, p = .002$ ] and return-day [ $F(1, 45) = 4.46, p = .04$ ] baselines for SBP than high FGRS subjects assigned to the gender-neutral stressor.

ANCOVA was used as a means of statistically controlling for return-day baseline differences (Cook & Campbell, 1979).

#### Systolic Blood Pressure

Table 6 provides group means for SBP during baseline, anticipation, and stressor phases. These data are graphically depicted in Figure 5.

Repeated measures ANCOVA confirmed the expected 2

(FGRS) x 2 (stressor) interaction [ $F(1, 99) = 5.12, p = .028$ , two-tailed]. High FGRS subjects showed greater reactivity than low FGRS subjects, to the feminine stressor condition [ $F(1, 47) = 3.25, p = .039$ , one-tailed], but not to the gender-neutral stressor condition [ $F(1, 52) = 1.72, p = .097$ , one-tailed].

#### Diastolic Blood Pressure and Heart Rate

Group means for DBP are presented in Table 7 and displayed in graph form in Figure 6. There were no differences between groups on overall DBP. The predicted 2 x 2 interaction was nonsignificant [ $F(1, 97) = .15, p = .703$ , two-tailed].

Group means for HR are provided in Table 8 and graphed in Figure 7. Two-way ANCOVA revealed a trend for a FGRS by stressor interaction [ $F(1, 97) = 2.20, p = .142$ ], two-tailed]. High women were more reactive than low FGRS under the feminine [ $F(1, 43) = 5.23, p = .014$ , one-tailed] but not the gender-neutral stressor condition [ $F(1, 53) = .03, p = .863$ , one-tailed]. A main effect for HR emerged, in which high FGRS women showed greater HR reactivity than low FGRS subjects across conditions [ $F(1, 97) = 2.94, p = .045$ , one-tailed]. High FGRS women appear to have responded

more physically than their low FGRS counterparts to both conditions, but significantly more so in the experimental condition.

#### Cognitive Data

##### Recall

Two-way ANOVA did not show the expected 2 (FGRS) x 2 (Stressor) interaction for recall [ $F(1, 102) = 3.83, p = .10$ , two-tailed]. In order to directly test the directional hypothesis that high FGRS vulnerable women assigned to the feminine stressor condition would recall more than high FGRS vulnerable women in the gender neutral condition and the low FGRS vulnerable women in both conditions, these data were reanalyzed using a linear contrast procedure. The contrast of recall for the high FGRS-feminine stressor group versus average recall for the other three groups revealed that high FGRS subjects in the feminine stressor condition recalled significantly more information from the client audiotape [ $F(1, 99) = 3.27, p = .04$ ]. Further analysis of simple effects confirmed that, while the experimental group recalled more of the client message ( $M = 10.74$ ), than did low FGRS subjects ( $M = 9.57$ ) following the feminine stressor instructions [ $F(1, 45) = 2.88, p =$

.048, one-tailed], there were no differences in recall for high ( $M = 9.44$ ) and low ( $M = 10.13$ ) FGRS subjects after the neutral stressor instructions [ $F(1, 56) = 1.13$ ,  $p = .146$ , one-tailed]. These data are graphed in figure 8.

### Confabulation

A chi-square analysis revealed no differences between the number of individuals in each group who provided confabulatory information during recall [ $\chi^2(3, N = 103) = 2.2$ ,  $p = .468$ ]. For the most part, subjects tended to recall information accurately from the client audiotape. Nine high FGRS feminine stressor subjects (39%), eight low FGRS feminine stressor subjects (35%), fifteen high FGRS neutral stressor subjects (56%), and fourteen low FGRS neutral stressor subjects (47%), provided confabulated information during recall. Mean number of inaccurate recall was low with little variability between subjects ( $M = .66$  incorrect phrases recalled,  $SD = .84$ ).

### Self-Report Data

#### Anxiety

Group means for state anxiety were analyzed using ANCOVA, with preexperimental state anxiety as a

covariate. High FGRS subjects reported significantly higher levels of preexperimental state anxiety than low FGRS subjects [ $F(3, 100) = 3.26, p = .05$ , two-tailed]. Unexpectedly, there was no interaction between stressor and FGRS for state anxiety during the stressor [ $F(4, 100) = 6.83, p = .226$ , two-tailed]. However, there was a main effect for state anxiety during the stressors, such that high FGRS women reported higher levels of anxiety than did low FGRS women, regardless of condition [ $F(4, 100) = 7.78, p = .006$ , one-tailed]. Means and standard deviations for preexperimental and experimental state anxiety are presented in Table 9.

#### Cognitive Appraisal

Contrary to predictions, a MANOVA revealed no interaction between FGRS vulnerability and stressor condition for nine cognitive appraisal ratings [Wilk's Lambda coefficient  $F(9, N = 102) = .88, p = .55$ ]. A MANOVA for FGRS vulnerability revealed a significant main effect (Wilks' Lambda coefficient  $F(9, N = 102) = 3.66, p = .0006$ ) across nine cognitive appraisal ratings. A series of one-way ANOVAs confirmed that high FGRS subjects reported greater discomfort [ $F(3, 102) = 9.22, p = .004$ ], emotional stressfulness [ $F(3, 102) =$

20.69,  $p < .002$ ], and physical responsivity [ $F(3, 102) = 11.06, p < .002$ ], and placed more importance on doing well personally [ $F(3, 102) = 15.24, p < .002$ ], than did their low FGRS counterparts. High FGRS subjects also reported that women in general should perform better on the task [ $F(3, 102) = 7.90, p = .003$ ], and that the task would be more stressful for women in general [ $F(3, 102) = 6.52, p = .006$ ], than did low FGRS subjects. However, high FGRS women did not indiscriminantly rate all the cognitive appraisal items higher than did low FGRS subjects. High and low FGRS subjects did not differ in their perceptions of men's performance and level of stress in each condition. There were no differences between high and low FGRS subjects' ratings of how well men should perform [ $F(3, 102) = .22, p = .640$ ], how much stress men should experience [ $F(3, 102) = .28, p = .505$ ]. Group means for each item are presented in Table 10.

### Coping

Group mean scores for each coping style were compared in a series of 2 (FGRS) x 2 (stressor condition) two-way ANOVAs. These means are presented in Table 11 and graphically displayed in Figure 9.

As predicted, there was a significant FGRS by stressor interaction for Situation Reappraisal [ $F(3, 96) = 4.15, p = .040$ , two-tailed]. High FGRS women in the feminine stressor condition reported greater reliance on Situation Reappraisal than did low FGRS subjects in this condition [ $F(1, 42) = 9.94, p = .002$ , one-tailed]. There were no differences between high and low FGRS subjects assigned to the neutral stressor on use of Situation Reappraisal [ $F(1, 52) = .01, p = .461$ , one-tailed].

All four groups relied more on Problem-Focused coping than on any other coping strategy. Unexpectedly, reliance on Problem-Focused Coping and Relaxation did not depend on an interaction between FGRS and stressor. Regardless of stressor condition, high FGRS subjects reported greater use of Problem Focused Coping [ $F(3, 99) = 4.15, p = .044$ , two-tailed] and Relaxation [ $F(3, 95) = 4.12, p = .046$ , two-tailed] than did low FGRS subjects.

There was no FGRS by stressor interaction for use of Help Seeking [ $F(1, 101) = .04, p = .846$ , two-tailed]. The predicted main effect for FGRS emerged, such that regardless of stressor condition high FGRS subjects were

more likely than low FGRS subjects to report reliance on Help Seeking [ $F(3, 101) = 12.62, p < .001$ , one-tailed] to deal with the stressor.

The predicted main effect for Anger expression was not found. High FGRS subjects did not report lower levels of anger expression than low FGRS subjects [ $F(3, 98) = 3.31, p = .072$ , two-tailed].

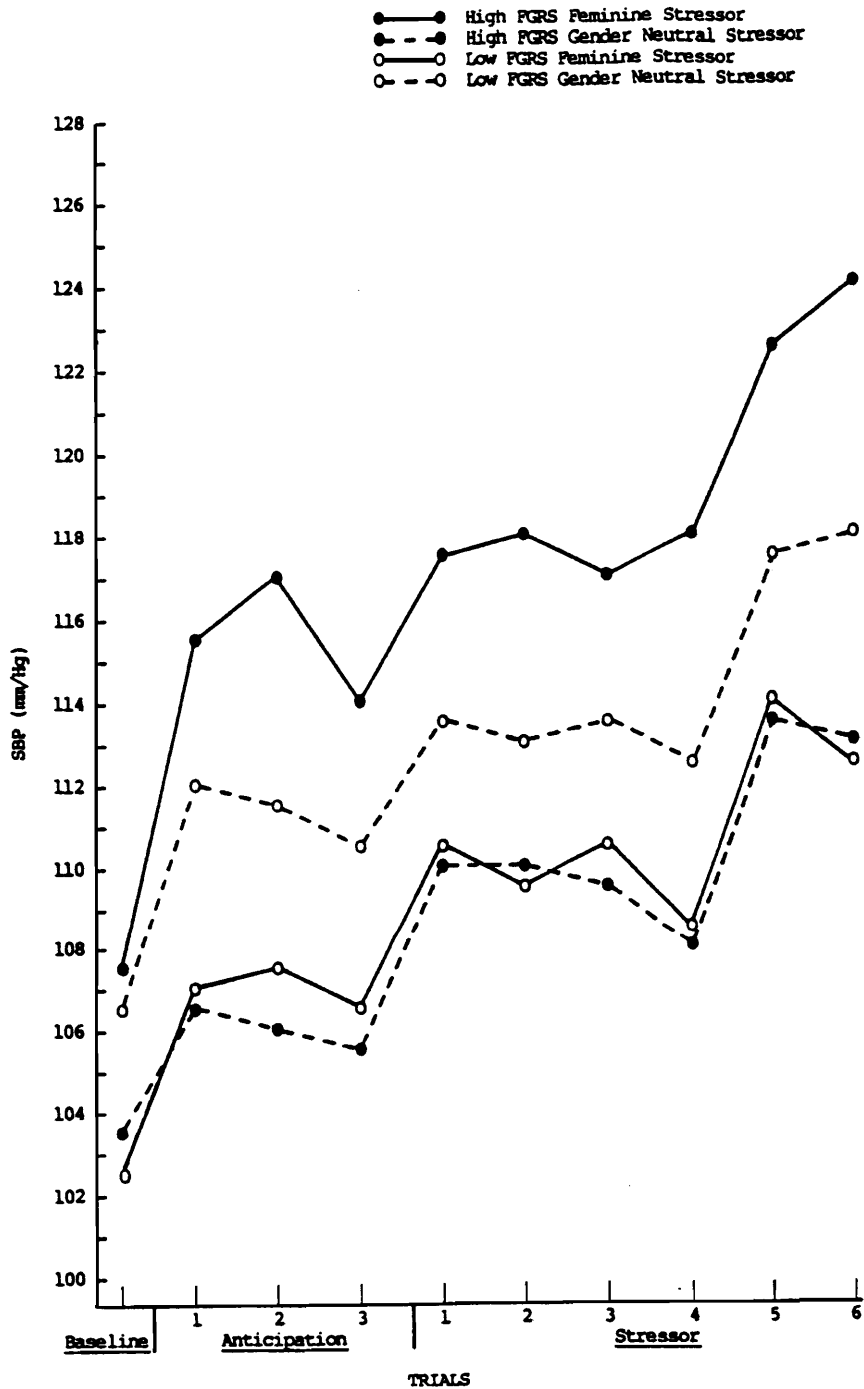


Table 6.

Mean SBP (mm Hg) for High and Low FGRS Subjects as a Function of Stressor.

Phase	<u>Gender Neutral Stressor</u>		<u>Feminine Stressor</u>	
	Low FGRS	High FGRS	Low FGRS	High FGRS
Baseline				
Experimental	108.6 (15.7)	103.2 ( 7.9)	104.0 ( 9.0)	112.6 ( 8.9)
Return-day	106.4 ( 8.0)	103.4 ( 9.2)	102.6 ( 8.0)	107.4 ( 7.9)
Anticipation 1	112.2 (10.6)	106.6 ( 8.5)	106.9 ( 7.9)	115.7 ( 8.7)
" " 2	111.5 ( 9.3)	106.1 ( 8.9)	107.6 ( 7.7)	117.2 ( 9.6)
" " 3	110.5 (10.3)	105.5 ( 9.7)	106.3 ( 7.6)	113.9 ( 8.8)
Stressor 1	113.6 ( 9.5)	109.9 ( 8.9)	110.4 ( 8.2)	117.6 (10.9)
" " 2	113.1 (10.1)	110.2 ( 9.2)	109.7 ( 9.0)	118.0 (10.5)
" " 3	113.4 ( 8.6)	109.5 (11.2)	110.4 ( 9.3)	116.9 ( 8.5)
" " 4	112.6 (11.8)	107.9 ( 9.1)	108.7 (10.0)	117.9 (10.4)
" " 5	117.4 (10.7)	113.4 ( 9.3)	113.9 ( 9.3)	122.6 ( 7.9)
" " 6	117.8 (11.5)	112.8 (10.2)	112.3 (11.7)	123.8 ( 8.5)

Note. Standard deviation is in parentheses.



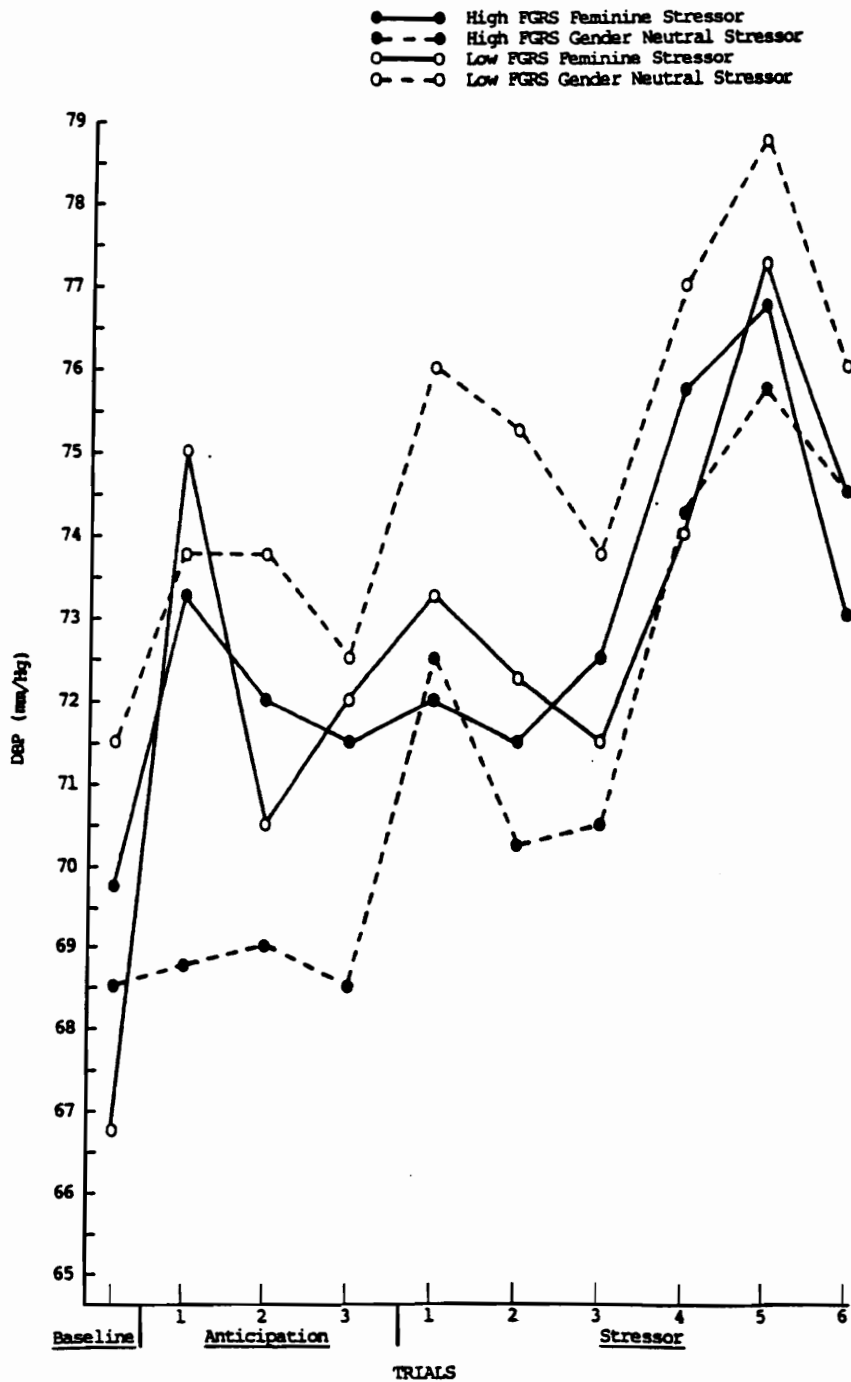
**Figure 5** : Mean SBP (mm Hg) for High and Low FGRS Subjects as a Function of Stressor.

Table 7.

Mean DBP (mm Hg) for High and Low FGRS Subjects as a Function of Stressor.

Phase	<u>Gender Neutral Stressor</u>		<u>Feminine Stressor</u>	
	Low FGRS	High FGRS	Low FGRS	High FGRS
Baseline				
Experimental	72.2 ( 7.5)	67.7 ( 7.4)	69.9 ( 6.3)	69.6 ( 8.5)
Return-day	71.4 ( 9.3)	68.5 ( 8.9)	66.8 ( 8.1)	69.7 ( 8.7)
Anticipation 1	73.7 ( 7.5)	68.8 ( 8.1)	74.9 (11.5)	73.3 ( 9.4)
" " 2	73.8 ( 7.5)	69.1 ( 7.3)	70.6 ( 6.2)	72.1 ( 8.9)
" " 3	72.4 ( 8.1)	68.4 ( 7.0)	71.9 ( 6.6)	71.5 ( 9.3)
Stressor 1	76.0 (10.0)	72.6 ( 8.8)	73.3 ( 6.2)	72.0 ( 9.5)
" " 2	75.3 ( 8.2)	70.3 ( 8.6)	72.3 ( 7.0)	71.5 (10.6)
" " 3	73.7 ( 9.1)	70.6 ( 7.4)	71.5 ( 5.5)	72.4 (10.8)
" " 4	77.0 ( 8.3)	74.3 (10.5)	73.9 ( 8.2)	75.7 (14.6)
" " 5	78.7 ( 8.7)	75.7 ( 7.9)	77.2 ( 7.5)	76.7 ( 9.8)
" " 6	75.9 ( 9.2)	74.6 (10.3)	74.4 ( 8.2)	73.0 (11.0)

Note. Standard deviation is in parentheses.



**Figure 6** : Mean DBP (mm Hg) for High and Low FGRS Subjects as a Function of Stressor.

Table 8.

Mean HR (beats per minute) for High and Low FGRS Subjects as a Function of Stressor.

Phase	Gender Neutral Stressor		Feminine Stressor	
	Low FGRS	High FGRS	Low FGRS	High FGRS
Baseline				
Experimental	78.4 (11.8)	78.5 (11.4)	76.1 ( 9.4)	79.2 ( 9.2)
Return-day	77.3 (11.6)	77.9 (11.8)	77.8 ( 9.1)	78.1 ( 9.8)
Anticipation 1	85.5 (11.3)	85.4 (13.8)	83.6 (12.2)	90.2 (11.8)
" " 2	80.0 (11.9)	82.3 (13.6)	78.4 ( 8.8)	84.7 (11.7)
" " 3	78.9 (12.1)	79.5 ( 9.6)	77.2 ( 8.2)	81.9 ( 8.7)
Stressor 1	87.3 (13.9)	87.9 (15.6)	83.7 (12.2)	89.7 (10.6)
" " 2	83.7 (11.8)	83.4 (11.7)	80.3 ( 9.3)	86.8 (13.2)
" " 3	82.3 (13.7)	82.2 (11.2)	78.7 ( 8.5)	86.3 (11.5)
" " 4	90.5 (12.6)	90.9 (12.0)	90.3 ( 9.7)	93.6 (14.8)
" " 5	92.1 (13.4)	91.3 (12.1)	88.7 ( 8.6)	96.2 (10.3)
" " 6	88.5 (14.1)	90.0 (11.8)	87.7 (10.7)	93.7 ( 8.7)

Note. Standard deviation is in parentheses.

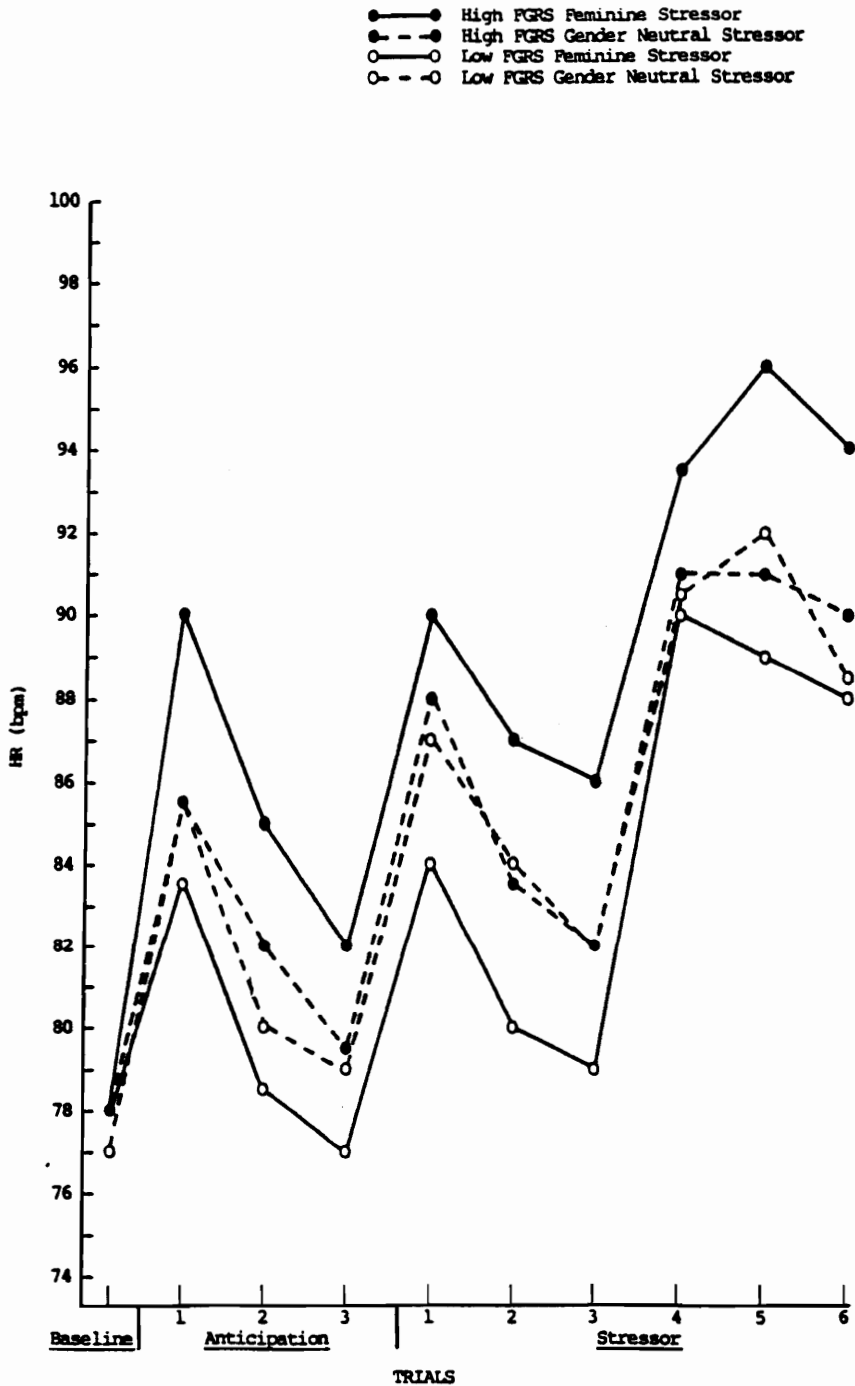


Figure 7 : Mean HR (beats per minute) for High and Low FGRS Subjects as a Function of Stressor.

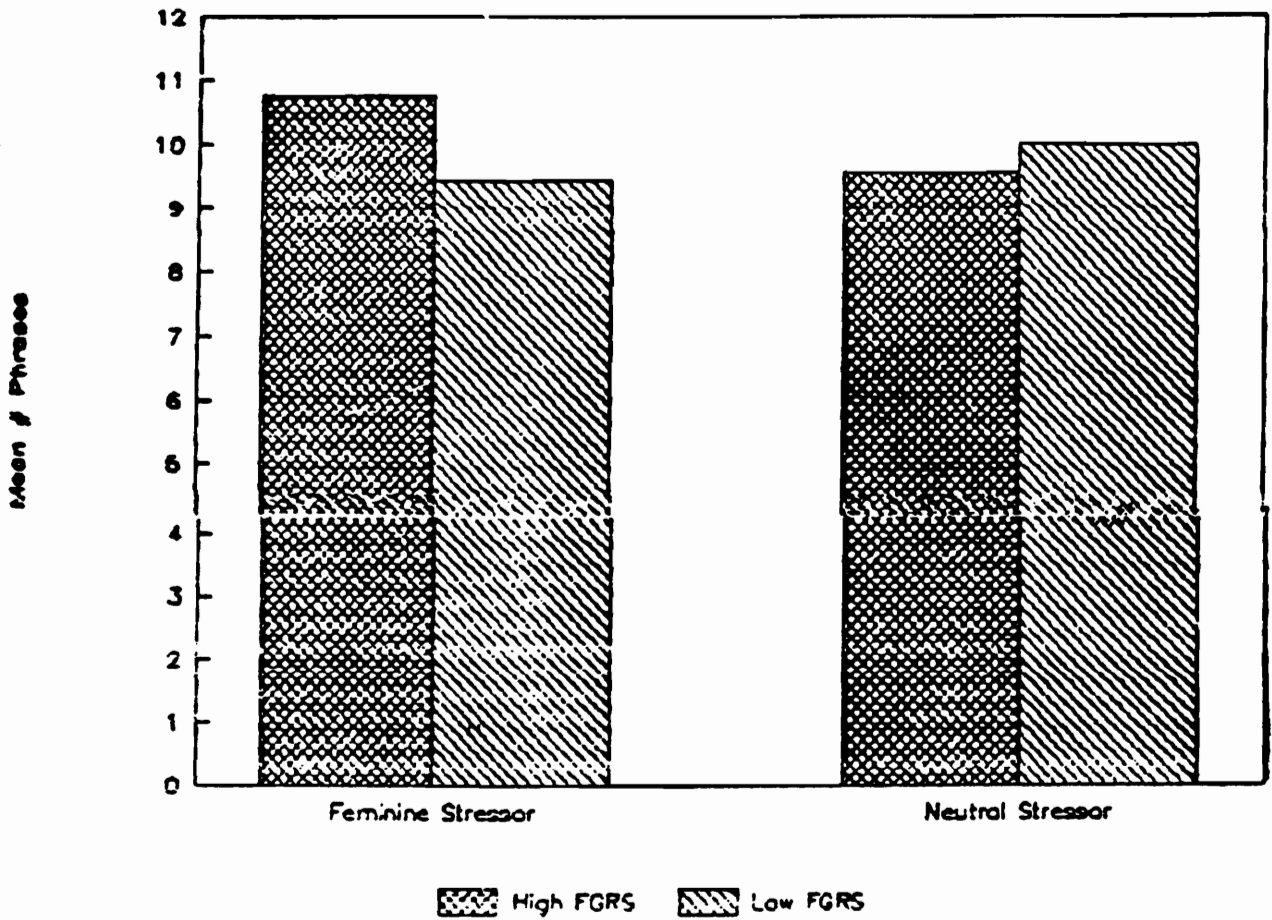


Figure 8 : Mean Recall (# phrases) for High and Low FGRS Subjects as a Function of Stressor.

Table 9.

Mean Preexperimental and Experimental Anxiety for  
High and Low FGRS Subjects by Stressor.

Anxiety	<u>Neutral Stressor</u>		<u>Feminine Stressor</u>	
	<u>Low</u> FGRS	<u>High</u> FGRS	<u>Low</u> FGRS	<u>High</u> FGRS
Preexperimental*	31.3 (6.5)	36.7 (10.7)	31.0 (8.9)	36.3 (7.8)
Experimental**	3.3 (1.3)	4.6 (1.4)	4.0 (1.1)	4.5 (1.0)

\* 20-item state anxiety scale (response range 1 - 4).

\*\* one-item state anxiety scale (response range 0 - 7).

Note. Standard deviation is in parentheses.



Table 10.

Mean Appraisal Ratings for High and Low FGRS Subjects  
as a Function of Stressor.

Appraisal Items	Neutral Stressor		Feminine Stressor	
	Low FGRS	High FGRS	Low FGRS	High FGRS
1. How uncomfortable did you feel?*	3.6 (1.2)	4.7 (1.6)	4.0 (1.1)	4.5 (1.0)
2. How well did you deal with it?	4.7 (1.2)	4.0 (1.0)	4.6 (1.2)	4.5 (1.0)
3. How important was it to you that you do well?*	5.1 (1.3)	6.0 (1.0)	5.2 (1.2)	6.2 (1.0)
4. Emotionally, how much stress did you experience?*	3.6 (1.1)	4.7 (1.3)	3.8 (1.1)	4.9 (1.1)
5. Physically, how much did your body respond?*	3.4 (1.1)	4.1 (1.3)	3.3 (1.2)	4.4 (1.5)
6. How much stress do you think males would experience in this situation?	4.3 (1.6)	4.0 (1.9)	3.9 (1.7)	4.6 (1.8)
7. How much stress do you think females would experience in this situation?*	4.5 (1.1)	5.1 (1.3)	4.4 (1.1)	5.1 (1.5)
8. How well do you think males would do in this situation?	4.1 (1.4)	3.7 (1.7)	3.7 (1.6)	3.8 (1.5)
9. How well do you think females would do in this situation?*	4.2 (1.1)	5.0 (1.2)	4.3 ( .9)	4.8 (1.5)

\* main effect for FGRS ( $p < .01$ ).

\*\*main effect for FGRS ( $p < .001$ ).

Note. Standard deviation is in parentheses.

Table 11.

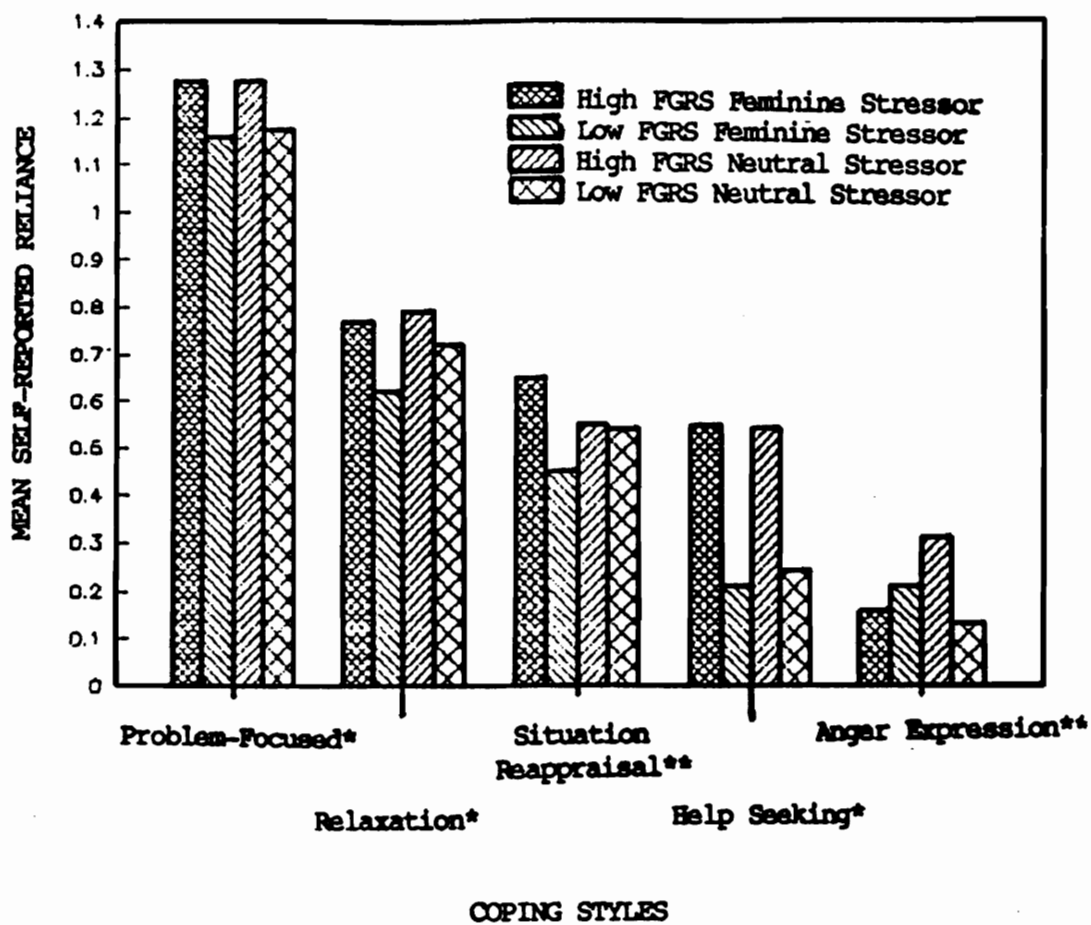
Mean Reliance on Coping Styles for High and Low FGRS  
Subjects as a Function of Stressor.

Coping Style	Neutral Stressor		Feminine Stressor	
	Low FGRS	High FGRS	Low FGRS	High FGRS
1. Problem-Focused*	1.17 (.28)	1.28 (.29)	1.16 (.23)	1.28 (.29)
2. Relaxation	.72 (.43)	.79 (.38)	.62 (.32)	.77 (.58)
3. Situation Reappraisal**	.54 (.54)	.55 (.24)	.45 (.16)	.65 (.25)
4. Help Seeking*	.24 (.23)	.54 (.50)	.21 (.21)	.55 (.54)
5. Anger Expression	.13 (.19)	.31 (.52)	.21 (.59)	.16 (.44)

\*main effect for FGRS.

\*\*interaction effect for FGRS by stressor.

Note. Standard deviation is in parentheses.



\* main effect for FGRS.

\*\* interaction effect for FGRS by stressor.

Figure 9 : Mean Reliance on Coping Styles for High and Low FGRS Subjects as a Function of Stressor.

## Discussion - Study 2

Vulnerability to FGRS interacts specifically with feminine stressors to produce stress in women. Women who appraise feminine stressors as highly threatening on the FGRS scale, evidence greater physiological arousal and cognitive engagement to a feminine challenge, but not to a gender neutral challenge, than women with low FGRS appraisal scores.

FGRS vulnerable subjects evidenced greater SBP reactivity than their low FGRS counterparts, to a feminine but not to a gender-neutral stressor. Null findings for DBP concur with evidence that, as a physiological correlates of psychological stress, DBP does not typically distinguish between groups (for reviews, see Holmes, 1983; Houston, 1983). The expected stressor by vulnerability interaction effect for HR reactivity may have been obscured by high within group (error) variance for HR in this study.

The tendency for FGRS vulnerable subjects in each condition to exhibit greater HR reactivity than FGRS invulnerable subjects raises the possibility that both stressors, in which subjects prepared to interact with a emotionally distressed client, may have challenged

feminine commitments to nurturance. However, the interaction effects obtained for SBP and cognitive engagement suggest that feminine gender role relevance was successfully manipulated across conditions.

Groups differences in cognitive recall as a function vulnerability by stressor indicate FGRS subjects may have attended more closely than their low FGRS counterparts to the counseling task as a function of the manipulation (instructions). High FGRS subjects appear to have perceived the feminine stressor, designed to be relevant to their self-conceptions involving nurturance, as more important and meaningful.

However, the finding that high FGRS subjects rated the feminine and gender-neutral stressors as more personally stressful and more stressful for women in general than did low FGRS subjects, suggests the possibility that the two conditions failed to differentiate between high FGRS groups on cognitive appraisal. Interaction effects for more objective measures, cognitive recall and SBP do not corroborate the interpretation that the manipulation was unsuccessful. The discrepant results for subjective self-report versus physiological data, probably reflect

the relative insensitivity of self-report measures (in comparison to physiological measures) to group differences in stress reactivity (Strube, 1989). Previous studies reported similar discrepancies between physiological stress responsivity and self-reported cognitive appraisal (Lash, Eisler, & Schulman, 1990; Lash, Gillespie, Eisler, & Southard, 1991).

Subjects may have responded to the retrospective, self-report measures on the basis of their general impressions, rather than their actual feelings and perceptions during the study. A "yay-saying" response bias is unlikely since the three cognitive appraisal ratings which FGRS vulnerable subjects did not rate higher than FGRS invulnerable subjects, included the only two items pertaining to males' performance on the task.

The failure of another self-report measure, state anxiety, to differentiate groups as predicted, raises the question of whether FGRS vulnerable subjects tend to generally experience more anxiety than their relatively invulnerable counterparts (Gillespie & Eisler, 1992). Elevations in preexperimental state anxiety for FGRS vulnerable subjects may have created a

ceiling effect, hampering the detection of difference in the stressors' effects on state anxiety.

Analysis of subjects' self-reported preferences for dealing with the stressors generally confirmed the predicted relationship between FGRS and type of stressor in determining coping responses. The high FGRS feminine stressor group, who evidenced the most physiological stress and cognitive engagement, also reported greater reliance on coping aimed at cognitively reframing the situation, than any other group. This finding is consistent with the general prediction that, for gender-neutral coping strategies, strength of the coping response depends on the degree of perceived personal threat or challenge. More specifically, the experimental group's reliance on cognitive coping strategies may reflect an attempt to reframe a feminine challenge. That is, this cognitive coping strategy may have designed to neutralize a potential threat to self, by reframing it as a challenge and by downplaying the meaningfulness of the outcome.

In the case of problem-focused coping, the expectation of a similar FGRS vulnerability by stressor interaction, treated problem-focused coping as a gender-

neutral coping strategy. However, inspection of the behaviors which make up the Problem-Focused Coping category for the counseling task suggests that this assumption may have been inappropriate. Problem-focused coping behaviors tailored to this particular interpersonal task tend to reflect feminine, rather than gender neutral, attributes. For instance empathic listening may be tapped by the items " [I] put myself in the distressed person's place and thought of how I would solve her problem, [I] listened to every detail, and [I] focused on the distressed person and her problems rather than on myself". Taking the apparently feminine nature of these coping behaviors into account, the main effect for FGRS vulnerability on problem-focused coping may actually support the proposed conceptualization of the effects of feminine self-evaluation on coping styles. Women with high FGRS scores were also more likely than low FGRS women to report greater reliance on the advice and support of others, Help Seeking, to deal with both stressors. In sum, adherence to feminine standards for behavior, as reflected by scores on the FGRS scale, and preference for traditionally feminine coping behaviors, was born out for both Help Seeking and for Problem-



### Focused Coping.

It is less clear why there was a main effect for FGRS for reliance on coping behaviors designed to reduce physiological arousal (e.g. took deep breaths). Contrary to the prediction that this gender-neutral coping strategy would differentiate between high and low FGRS subjects as a function of stressor condition, high FGRS groups were more likely to report using this strategy than were low FGRS subjects across conditions.

The expected relationship between FGRS and Anger Expression also did not emerge. The two items in this category oppose traditional feminine commitments to be cooperative and compliant (Gillespie & Eisler, 1992), but may not have successfully measured behavioral anger expression.

Despite some unexpected results, the general trend for coping analyses indicated that, in response to a feminine stressor, FGRS vulnerable women appear to engage in cognitive reframing to alter the meaningfulness of the stressor to make it less threatening. Moreover, they appear to especially likely to respond to a variety of stressors with feminine styles of coping. For high FGRS women who evaluate the

self in accordance with feminine standards, gender role consistent coping behaviors should consist of well learned behaviors which inspire a sense of personal efficacy. These women may have positive outcome expectancies for gender "appropriate" coping (e.g. expressing anger through tears rather than curses) based on previous experience with environmental contingencies for such behavior (Costrich, Feinstein, Kiddler, Marecek, & Pascale, 1975).

This study represents one of very few systematic, empirical investigations into stress related specifically to feminine socialization (see also Martz, 1989). These results indicate that, as conceptualized, FGRS derives from a combination of personal vulnerability and exposure to relevant situational stressors, with implications for the process underlying gender specific patterns of vulnerability to stress.

The finding that FGRS in women depends on an interaction between personal vulnerability and exposure to feminine stressors, suggests the inappropriateness of broadly characterizing women as more likely than men to experience stress-related disorders, such as depression, on the basis of biological sex alone. Instead, women's

tendency to exhibit certain types of deleterious FGRS outcomes may depend on an ongoing pattern of specific person by situation interactions. Through these interactions the individual and her environment impact one another negatively in a self-perpetuating cycle. The environment impinges upon the individual to the degree that it is relevant and threatening to her important needs or goals. The individual experiences stress and responds behaviorally, in a manner consistent with her personal standards or goals, thereby impacting and altering her environment. This "new" environment, in turn, impinges upon her needs and commitments, and so on. When an individual has rigid or narrowly defined needs, goals, and values (from which criteria for self-evaluation derive), a vicious cycle may occur. First, the individual tends to be especially vulnerable to situations which threaten these values. Second, she or he may respond to those situations with inflexible and repetitive styles of coping. Psychopathology develops when inflexible or inappropriate coping styles serve to perpetuate stressful environmental conditions.

Future research should address the nature of the relationship between FGRS and psychopathology in women

with a variety of clinical samples. As a potential sequel to chronic FGRS, clinical psychopathology may derive from some combination of person and situation factors. These could include: 1) frequent exposure to negative environmental conditions which threaten feminine commitments, 2) excessively high self-standards within feminine domains, so that a sense of mastery is never achieved, 3) exclusive adherence to feminine standards for self-evaluation, such that there are few alternate sources of self-esteem, and resulting in rigid and inflexible (situation inappropriate feminine coping styles), and/or 4) the relatively uncontrollable nature of feminine stressors.

Perhaps most notable with regard to women's vulnerability to anxiety and depression, is the relatively uncontrollable quality of feminine stressors, which often concern the actions, feelings, and behaviors of others. Feminine stressors tend to involve the self in relation to significant others, more than do stressors involving the self as a separate individual (for instance, stressors in personal achievement domains). Women's assessments of self-worth tend to be relationship based, meaning that women may often make

internal attributions for relatively uncontrollable and unpredictable events. The helplessness, dependency, and passivity manifested in agoraphobia and depression may reflect the nature of feminine stressors (These responses may be situation appropriate.) as much as feminine styles of coping.

#### Conclusion

This research generally supported the FGRS construct as conceptualized. Vulnerability to FGRS was proposed to be a psychosocial mediator between environmental conditions and maladaptive outcomes. FGRS vulnerability appears to be associated with a tendency to categorize and appraise the self along feminine dimensions. In the present study, FGRS, operationalized as self-reported depression and physiological arousal, resulted from an interaction between feminine standards for self-appraisal, and a stressor which specifically threatened or challenged the ability to live up to those standards. Adherence to feminine self-appraisal criteria also corresponded to preference for feminine coping responses to stressors. Thus, the person by situation interactions which underlie FGRS were demonstrated on both cognitive-affective and behavioral levels. Future

research should further investigate the role of gender-specific patterns of interacting with the environment in producing gender-specific patterns of vulnerability to psychopathology.

## References

- Akhtar, S., Byrne, J. P., & Doghramji, K. (1986). The demographic profile of borderline personality disorder. Journal of Clinical Psychiatry, 47, 196-198.
- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd edition. revised). Washington, D. C.: American Psychiatric Association.
- Beck, A. T., Steer, R. A., & Garbin, M. (1987). Psychometric properties of the Beck Depression Inventory: A review. Clinical Psychology Review, .
- Beck, A. T. & Steer, R. A. (1987). Beck Depression Inventory Manual. New York: The Psychological Corporation Harcourt Brace Jovanovich, Inc.
- Bem, S. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.
- Billings, A. G. & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. Journal of Behavioral Medicine, 4, 139-157.
- Billings, A. G. & Moos, R. H. (1984). Coping, stress,

and social resources among adults with unipolar depression. Journal of Personality and Social Psychology, 46, 877-891.

Block, J. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. Child Development, 54, 1335-1354.

Chodorow, N. (1989). Feminism and psychoanalytic theory, New Haven, CT: Yale University Press.

Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Costrich, N., Feinstein, J., Kidder, L., Maracek, J., & Pascale, L. (1973). When stereotypes hurt: Three studies of penalties for sex-role reversals. Journal of Experimental Social Psychology, 11, 520-530.

Eisler, R. M. & Skidmore, J. R. (1987) Masculine gender role stress: Scale development and component factors in the appraisal of stressful situations. Behavior Modification, 11, 123-136.

Folkman, S. & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21, 219-239.



- Frances, A. & Widiger, T. (1986). The classification of personality disorders: An overview of problems and solutions. In A. Frances & R. Hales (Eds.), Psychiatry update: The American Psychiatric Association annual review (Vol. 5, pp. 240-257). Washington, DC: American Psychiatric Press.
- Gillespie, B. L. (1991). The feminine gender role and depression. Unpublished manuscript. Virginia Polytechnic Institute & State University.
- Gillespie, B.L. & Eisler, R.M. (1992). Development of the Feminine Gender Role Stress scale: A cognitive-behavioral measure of stress appraisal and coping for women. Behavior Modification, 16, 426-438.
- Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, Mass: Harvard University Press.
- Goldberg, H. (1976). The hazards of being male. New York: Sanford J. Greenburger Associates.
- Holmes, D. S. (1983). An alternative perspective concerning the differential psychophysiological responsivity of persons with the Type A and Type B behavior patterns. Journal of Research in Personality, 17, 40-47.

- Houston, B. K. (1983). Psychophysiological responsivity and the Type A behavior pattern. Journal of Research in Personality, 17, 22-39.
- Industrial and Biomedical Sensors Corporation. (1987). Operating and maintenance manual for model SD-700A automated blood pressure monitor. Waltham, MA: Industrial and Biomedical Sensors Corporation.
- Kaplan, A. (1986). The "self in relation": Implications for depression in women. Psychotherapy, 23, 234-242.
- Kass, F., Spitzer, R. L., & Williams, J. B. W. (1983). An empirical study of issue of sex bias in the diagnostic criteria of DSM-III Axis II personality disorders. American Psychologist, 38, 799-801.
- Kendall, P.C. & Hollon, S.D. (1981). Assessing self-referent speech: Methods in measurement of self statements. In P.C. Kendall & S.D. Hollon (Eds.), Assessment strategies for cognitive-behavioral interventions (pp. 85-118). New York: Academic Press.
- Landrine, H. (1989). The politics of personality disorders. Psychology of Women Quarterly, 13, 325-339.

- Lash, S. J., Eisler, R. M., & Schulman, R. S. (1990). Cardiovascular reactivity to stress in men: Effects of masculine gender-role stress appraisal and masculine performance challenge. Behavior Modification, 14, 3-20.
- Lash, S. J., Gillespie, B. L., Eisler, R. M., & Southard, D. R. (1991). Sex differences in cardiovascular reactivity: Effects of the gender relevance of the stressor. Health Psychology, 10, 392-398.
- Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Markus, H. (1977). Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 35, 63-67.
- Markus, H., Crane, M., Bernstein, S. & Siladi, M. (1982). Self-schemas and gender. Journal of Personality and Social Psychology, 42, 38-50.
- Markus, H. & Nurius, P. (1986). Possible selves. American Psychologist, 41, 954-969.
- Miller, S. M. & Kirsch, N. (1987). Sex differences in cognitive coping with stress. In K. C. Barnett, L. Biener, & G. Baruch (Eds.), Gender and stress.

New York: The Free Press.

Millon, T. (1981). Disorders of personality, DSM-III: Axis II. New York: Wiley.

Murran, J.C. (1993). The self in cognitive-behavioral research: An interpersonal perspective. The Behavior Therapist, 16, 69-73.

Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. Psychological Bulletin, 2, 259-282.

Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The social support questionnaire. Journal of Personality and Social Psychology, 44, 127-139.

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press, Inc.

Stone, A. A., & Neale, J. M. (1984). New measure of daily coping: Development and preliminary results. Journal of Personality and Social Psychology, 46, 892-906.

Strube, M. K. (1989). Assessing subjects' construal of the laboratory situation. In N. Schneiderman, S.

M. Weiss, & P. G. Kaufmann (Eds.), Handbook of research methods in cardiovascular behavioral medicine (pp. 527-542). New York: Plenum.

Weissman, M., & Klerman, G. L. (1979). In E. S. Gomberg & V. Franks (Eds.), Gender and disordered behavior: Sex differences in psychopathology. New York: Brunner/Mazel.

Wethington, E., MacLeod, J. D., & Kessler, R. C. (1987). The importance of life events for explaining sex differences in psychological distress. In R. C. Barnett, L. Beiner, & G. K. Baruch (Eds.), Gender and Stress. New York: The Free Press.

Widiger, T. A. & Frances, A. (1989). Epidemiology, diagnosis, and comorbidity of borderline personality disorder. In A. Tasman, R. Hales & A. Frances (Eds.), Review of Psychiatry (Vol. 8) Washington, DC: American Psychiatric Press.

Widiger, T. A. & Spitzer, R. L. (1991). Sex bias in the diagnosis of personality disorders: Conceptual and methodological issues. Clinical Psychology Review, 11, 1-22.

Widom, C. W. (1984). Sex roles and psychopathology. In

C. S. Widom (Ed.), Sex roles and psychopathology,  
(pp. 3-17). New York: Plenum.

## Appendices

### Appendix A: INFORMED CONSENT FORMS - Study 1

This experiment is designed to investigate how people describe themselves and their experiences. In order to accomplish the goals of the study you will be asked to complete several questionnaires today. This should take about one and one-half hour. You will be asked some questions about your personal characteristics, feelings, thoughts, and your relationships with others.

There are no anticipated risks or benefits associated with participation in this study. Some of questions you will be asked are personal and you may feel uncomfortable answering them. The results of this study will be kept strictly confidential. At no time will the researchers release the results of the study to anyone other than individuals working on the project, unless you provide written consent. The information you provide will have your name removed and only a subject number will identify you during analyses and any writeup of the research.

You are free to withdraw your consent to participate and discontinue participation in the experiment at any time without penalty. Students participating in this questionnaire session will receive two extra credit points in Introductory Psychology classes.

The information accumulated by this research may be used for scientific or education purposes and information relating to you responses may be presented at scientific meetings and/or published and republished in professional journals or books or used for any other purpose which VA Tech's Dept. of Psychology considers proper in the interest of education knowledge or research.

This research project has been approved by the Human Subjects Committee of the Dept. of Psychology and by the Institutional Review Board of VA Tech.

1. I have read and understand the above description of the experiment, had an opportunity to ask questions and had them all answered, and hereby acknowledge the above and give my voluntary consent for participation in this study.
2. I understand that I am participating freely in full understanding that I need not participate if I do not wish to, and if I participate I may withdraw at any time without penalty.

3. I understand that should I have questions about this research and its conduct, I should contact any of the following:

Researchers: Betty Gillespie, M.S. 552-0719

Faculty Advisor: Richard Eisler, Ph.D. 231-6914

Chair, HSC: Helen Crawford, Ph.D. 231-6520

Chair, IRB: Ernest Stout, Ph.D. 231-9359

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Appendix A Continued: INFORMED CONSENT FORMS - Study 2

This experiment is designed to investigate how people experience and deal with others. In order to accomplish the goals of the study you will be asked to complete two questionnaires today. This should take about one-half hour. Most subject who complete these questionnaires will be contacted and invited to participate in a second session lasting one-hour. This session will be scheduled at a later date.

During this second session, the procedure will be explained to all participants. Then each participant will have her heart rate and blood pressure monitored during relaxation and a counseling task. Afterward all participants will complete several questionnaires. All subjects will come back several days after their second session for fifteen minutes of additional blood pressure and heart rate measures. Subjects who do not intend to participate in these latter sessions should not sign up for this experiment. This will take about fifteen minutes. There are no anticipated risks or benefits associated with participation in this study.

The results of this study will be kept strictly confidential. At no time will the researchers release the results of the study to anyone other than individuals working on the project, unless you provide written consent. The information you provide will have your name removed and only a subject number will identify you during analyses and any writeup of the research. You will be monitored by the experimenter through a video system during the experiment to ensure that you are following instructions. However, you will not be recorded on videotape.

You are free to withdraw your consent to participate and discontinue participation in the experiment at any time without penalty. Students participating in this one-half hour questionnaire session, and the one hour and fifteen minute laboratory sessions in this experiment will receive four extra credit points in Introductory Psychology classes, one for the half hour session and two for the one-hour laboratory session and one for the fifteen minute session.

The information accumulated by this research may be used for scientific or education purposes and information relating to you responses may be presented at scientific meetings and/or published and republished in professional journals or books or used for any other purpose which VA Tech's Dept. of Psychology considers proper in the interest

of education knowledge or research.

This research project has been approved by the Human Subjects Committee of the Dept. of Psychology and by the Institutional Review Board of VA Tech.

1. I have read and understand the above description of the experiment, had an opportunity to ask questions and had them all answered, and hereby acknowledge the above and give my voluntary consent for participation in this study.

2. I understand that I am participating freely in full understanding that I need not participate if I do not wish to, and if I participate I may withdraw at any time without penalty.

3. I understand that should I have questions about this research and its conduct, I should contact any of the following:

Researchers: Betty Gillespie, M.S. 552-0719

Faculty Advisor: Richard Eisler, Ph.D. 231-6914

Chair, HSC: Helen Crawford, Ph.D. 231-6520

Chair, IRB: Ernest Stout, Ph.D. 231-9359

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix B: Feminine Gender Role Stress Scale

1. Being perceived by others as overweight.
2. Not being able to meet family members' emotional needs.
3. Feeling less attractive than you once were.
4. Trying to be a good parent and excel at work.
5. Having others believe that you are emotionally cold.
6. Being in a sexual relationship without any commitment.
7. Being pressured for sex when seeking affection from from your mate.
8. Your child is disliked by her/his peers.
9. Wearing a bathing suit in public.
10. Having a weak or incompetent spouse.
11. Making sure you are not taken advantage of when buying a house or car.
12. Having an intimate relationship without any romance.
13. Being unable to change your appearance to please someone.
14. Moving to a new city or town alone.
15. Bargaining with a salesperson when buying a car.
16. Negotiating the price of car repairs.
17. Being heavier than your mate.
18. Being unusually tall.
19. Supervising older and more experienced employees at work.
20. Feeling that you are being followed by someone.
21. Being considered promiscuous.
22. Hearing a strange noise while you are home alone.
23. Having to deal with unwanted sexual advances.
24. Losing custody of your children after divorce.
25. Your mate is unemployed and cannot find a job.
26. Feeling pressured to engage in sexual activity.
27. Talking with someone who is angry with you.
28. Turning middle-aged and being single.
29. Having your car breakdown on the road.
30. Having multiple sex partners.
31. Having to "sell" yourself at a job interview.
32. Hearing that a dangerous criminal has escaped nearby.
33. Receiving an obscene phone call.
34. Having someone else raise your children.
35. Trying to get your spouse to take responsibility for childcare.
36. Returning to work soon after your child is born.
37. A very close friend stops speaking to you.
38. Your mate will not discuss your relationship problems.
39. Finding that you have gained 10 pounds.

## Appendix C: Self Description Measure

Use the scale provided below to rate how important it is  
for you that you are:

0-----1-----2-----3-----4-----5  
 not at all      a little      moderately      very      extremely  
 important      important      important      important      important

1. Cooperative
2. Muscular
3. Dependent
4. Athletic
5. Logical
6. Popular
7. Close to Others
8. Spiritual
9. Intellectual
10. Competitive
11. Aggressive
12. Practical
13. Understanding
14. Emotional
15. Sensuous
16. Brave
17. Independent
18. Cautious
19. Creative
20. Witty

## Appendix D: Behavioral Recall Measure

Directions: Use the space provided below to list as many SPECIFIC examples as you can, for each attribute, of actual situations or times when you have exhibited behavior that reflected the attribute.

1. Briefly specify your actual behavior that reflects the attribute (Use a verb in the past tense for each example, to describe what you did).
2. Only write down examples that you remember from past situations.
3. List AS MANY EXAMPLES AS YOU CAN REMEMBER for each attribute.

EXAMPLE: Studious

I read (past tense) the chapters in my course textbooks several times.

I outlined the chapters in my course textbook.

I recopied my lecture notes.

I decided to stay home from the movies in order to spend some extra time studying for a test.

I went to the library and did some additional readings on lecture topics.

I wrote down questions to ask my professor in class.

I completed some study exercises at the end of the chapter in my psychology book in order to make sure I understood the chapter.

I went to see my professor during her office hours to ask questions about the lecture.

\*\*\*\*\*

BEGIN HERE:

1. Cooperative
2. Athletic
3. Close to Others
4. Competitive
5. Understanding
6. Brave

## Appendix E: Beck Depression Inventory

This questionnaire consists of 20 groups of statements. After reading each group of statements carefully, fill in the number (0, 1, 2, or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. Be sure to read all the statements in each group before making your choice. Please answer every item.

1. 0 I do not feel sad.  
1 I feel sad.  
2 I am sad all the time and I can't snap out of it.  
3 I am so sad or unhappy that I can't stand it.
2. 0 I am not particularly discouraged about the future.  
1 I feel discouraged about the future.  
2 I feel I have nothing to look forward to.  
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.  
1 I feel I have failed more than the average person.  
2 As I look back on my life all I can see are a lot of failures.  
3 I feel I am a complete failure as a person.
4. 0 I get as much satisfaction out of things as I used to.  
1 I don't enjoy things the way I used to.  
2 I don't get real satisfaction out of anything anymore.  
3 I am dissatisfied or bored with everything.
5. 0 I don't feel particularly guilty.  
1 I feel guilty a good part of the time.  
2 I feel quite guilty most of the time.  
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.  
1 I feel I may be punished.  
2 I expect to be punished.  
3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.  
1 I am disappointed in myself.  
2 I am disgusted with myself.  
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.  
1 I am critical of myself for my weaknesses or mistakes.  
2 I blame myself all the time for my faults.  
3 I blame myself for everything bad that happens.
9. 0 I have not noticed any recent change in my interest in sex.  
1 I am less interested in sex than I used to be.  
2 I am much less interested in sex now.  
3 I have lost interest in sex completely.
10. 0 I don't cry any more than usual.  
1 I cry more now than I used to.  
2 I cry all the time now.  
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.  
1 I get annoyed or irritated more easily than I used to.  
2 I feel irritated all the time now.  
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.  
1 I am less interested in other people than I used to be.  
2 I have lost most of my interest in other people.  
3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.  
1 I put off making decisions more than I used to.  
2 I have greater difficulty in making decisions than before.  
3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.  
1 I am worried that I am looking old or unattractive.  
2 I feel that there are permanent changes in my appearance that make me look unattractive.  
3 I believe that I look ugly.

15. 0 I can work about as well as before.  
1 It takes an extra effort to get started at doing something.  
2 I have to push myself very hard to do anything.  
3 I can't do any work at all.
16. 0 I can sleep as well as usual.  
1 I don't sleep as well as I used to.  
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.  
3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get any more tired than usual.  
1 I get tired more easily than I used to.  
2 I get tired from doing almost anything.  
3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.  
1 My appetite is not as good as it used to be.  
2 My appetite is much worse now.  
3 I have no appetite at all anymore.
19. 0 I haven't lost much weight, if any, lately.  
1 I have lost more than 5 lbs.  
2 I have lost more than 10 lbs.  
3 I have lost more than 15 lbs.
20. 0 I am no more worried about my health than usual.  
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.  
2 I am very worried about physical problems and it's hard to think of much else.  
3 I am so worried about physical problems that I cannot think about anything else.



## APPENDIX F: Social Support Questionnaire

DIRECTIONS: The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials and their relationship to you (see example). Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how satisfied you are with the overall support you have. If you have no support for a question, check the words "no one", but still rate your level of satisfaction. Do not list more than nine persons per question. Please answer all questions as best you can. All your responses will be kept confidential.

## EXAMPLE:

Who do you know whom you can trust with information that could get you in trouble?

No one	1) T.N. (brother)	4) T.N. (father)	7)
	2) L.M. (friend)	5) L.M. (employer)	8)
	3) R.S. (friend)	6)	9)

How Satisfied?

1-----	2-----	3-----	4-----	5-----	6-----
very	fairly	a little	a little	fairly	very
	dissatisfied			satisfied	

## BEGIN:

1. Whom can you really count on to be dependable when you need help?
2. Whom can you really count on the help you feel more relaxed when you are under pressure or tense?
3. Who accepts you totally, including your worst and best points?
4. Whom can you really count on to care about you, regardless of what is happening to you?
5. Whom can you really count on the help you feel better when you are feeling generally down-in-the-dumps?
6. Whom can you count on the console you when you are very upset?

## Appendix G: State Anxiety Inventory

A number of statements which people use to describe themselves are given below. Read each statement and then fill in the circle corresponding to the number on your opscan sheet to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement, but give the answer which seems to describe your present feelings best.

1=Not At All    2=Somewhat    3=Moderately So    4=Very Much So

1. I feel calm.
2. I feel secure.
3. I am tense.
4. I feel strained.
5. I feel at ease.
6. I feel upset.
7. I am presently worrying over possible misfortunes.
8. I feel satisfied.
9. I feel frightened.
10. I feel comfortable.
11. I feel self-confident.
12. I feel nervous.
13. I am jittery.
14. I feel indecisive.
15. I am relaxed.
16. I feel content.
17. I am worried.
18. I feel confused.
19. I feel steady.
20. I feel pleasant.

## Appendix H: Counseling Appraisal Scale

We would like you to rate your experience of listening and responding to this tape on the following scales. Please circle the number that best describes what it was like for you.

1. How uncomfortable did you feel?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Extremely Comfortable Extremely Uncomfortable

2. How well did you deal with it?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Very Poorly Very Well

3. How important was it to do well?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Not Very Important Very Important

4. Emotionally, how much stress did you experience?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 No Distress Extreme Distress

5. Physically, how much did your body respond?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Little or No Arousal Extreme Arousal

6. How much stress do you think males would experience in this situation?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Little or None Extreme Stress

7. How much stress do you think females would experience in this situation?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Little or None Extreme Stress

8. How well do you think males would do at this?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Very Poorly Extremely Well

9. How well do you think females would do at this?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 -----7  
 Very Poorly Extremely Well

## Appendix I: Counseling Coping Scale

**DIRECTIONS:** We are interested in how you handled or dealt with being asked to help the person and listening to the audiotape. What were some of the thoughts that passed through your mind? What things did you do? Below is a list of thoughts and behaviors that people use to deal with being required to help others.

Rate the items on the following scale (enter a 0, 1, or 2 in the blank next to each item):

0-----1-----2  
 Not Used                      Used Somewhat                      Used Very Much

**BEGIN HERE:**

1. Thought of inspirational passages (e.g. from the Bible).
2. Thought that I wasn't the only person going through this experiment.
3. Decided that the situation was hopeless so it didn't matter how well I did.
4. Concentrated only on what was happening at the moment.
5. Thought about my physical surroundings (sights and sounds in the room, other than the audiotape).
6. Wished that I hadn't signed up.
7. Kept myself from feeling any emotions.
8. Focused on the benefit I could get from being in the experiment.
9. Put myself in the student's place and thought of how I would solve her problem.
10. Looked for a positive way to view being in the experiment.
11. Tried to remember how I may have handled situations that were similar to the experiment.
12. Remained calm.
13. Consulted expert sources.
14. Tried to imagine how the person would look.
15. Decided to find someone else to help the person if I could not.
16. Decided what I would say to the person.
17. Decided to ask someone (after the experiment) for advice.
18. Decided to ask someone (after the experiment) just to listen and be supportive.
19. Told myself to relax because I could think better that

- way.
20. Focused on the person and her problems rather than myself.
  21. Prayed or meditated.
  22. Thought about leaving soon.
  23. Accepted that I could only do my best and that would have to be good enough.
  24. Thought about how the person would look.
  25. Made the situation into a game or a personal challenge.
  26. Decided to talk to someone (after the experiment) for reassurance that I had done the right thing.
  27. Told myself it did not really matter how well I did.
  28. Imagined myself doing well.
  29. Viewed the situation in a larger context, so how well I did would seem less important.
  30. Focused on what was positive about the person.
  31. Thought about relaxing.
  32. Felt happy to have a chance to help.
  33. Thought of jokes.
  34. Kept breathing regularly.
  35. Got angry with the experimenter.
  36. Told myself to take things one step at a time.
  37. Thought positive thoughts.
  38. Decided to ask the person questions to find out a little more.
  39. Thought about the worst thing that could happen to me.
  40. Tried to figure out the core problem and brainstormed ways to solve it.
  41. Told myself that I was not nervous.
  42. Reminded myself that the experimenter was there in case I needed help.
  43. Put myself in the student's position and understood her feelings.
  44. Decided to tell the person about similar experiences I have had.
  45. Got angry.
  46. Decided that the experiment was too difficult, so I quit worrying about how well I did.
  47. Compared being in the experiment to other, more difficult experiences I had had.
  48. Decided that the experiment was not fair.
  49. Listened to every detail.
  50. Took deep breaths.
  51. Thought about God.
  52. Thought about getting extra credit in my class.

Circle the number next to one item which you used the most.

## Appendix J: Counseling Coping Scale Development

## Verbal Instructions:

I would like you to imagine that you are talking with a distressed person who needs your help. Imagine this scene and then answer a brief questionnaire about your thoughts during this scene. Close your eyes try to make this scene as realistic as possible. Pay close attention to the thoughts and feelings you experience in this situation.

## Coping Questionnaire A:

We are interested in how you would handle or deal with preparing to talk with the client on the tape. What were the thoughts that went through your mind while you were listening to what the speaker was saying to you? Listed below are some ways people deal with difficult situations. Please read each of these descriptions carefully. If you think you would not do or think anything that fits that description circle the NO next to it and go on to the next one. If you do think you would do or think anything that fits that description circle YES and briefly describe it in the blanks below the item. If you would do or think more than one thing that fits the definition, describe them all.

- 
- |    |     |    |  |
|----|-----|----|--|
| 1. | YES | NO | Divert attention away from the problem by thinking about other things or engaging in some activity.          |
| 2. | YES | NO | Try to see the problem in a different light that made it more bearable.                                      |
| 3. | YES | NO | Think about solutions to the problem, gather information about it, or actually do something to solve it.     |
| 4. | YES | NO | Express emotions in response to the problem to reduce tension, anxiety, or frustration.                      |
| 5. | YES | NO | Accept that the problem had occurred, but that nothing could be done about it.                               |
| 6. | YES | NO | Seek or find emotional support from loved ones, friends, or professionals.                                   |
| 7. | YES | NO | Do something with the implicit intention of relaxing.  |
| 8. | YES | NO | Seek or find spiritual comfort and support.  |
| 9. | YES | NO | I would do or think something to handle or deal with the situation that does not fit the above descriptions. |

Appendix J continued: Coping Questionnaire B:

We are interested in how you would handle or deal if you were actually in the situation on this tape. What were the thoughts that went through your mind while you were listening to what the speaker was saying to you? Please list as many of these thoughts as possible below. Please be concise and phrase them as you actually thought them.

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

7 \_\_\_\_\_

8 \_\_\_\_\_

9 \_\_\_\_\_

10 \_\_\_\_\_

Please continue below if needed.

Appendix K: Items for Each Coping Category

---

Problem-Focused

Concentrated only on what was happening at the moment.  
 Put myself in the distressed person's place and thought of how I would solve her problem.  
 Tried to remember how I handled situations similar to the experiment.  
 Planned to consult expert sources.  
 Tried to imagine how the person would look.  
 Decided to find someone else to help the person if I could not.  
 Decided what I would say to the person.  
 Focused on the distressed person and her problems rather than myself.  
 Decided to ask the person questions to find out a little more.  
 Tried to figure out the core problem and brainstormed ways to solve it.  
 Put myself in the distressed person's position and understood her feelings.  
 Decided to tell the person about similar experiences I have had.  
 Listened to every detail.  
 Decided to befriend the person and take care of her.

Situation Reappraisal

Thought that I wasn't the only person going through this experiment.  
 Decided that the situation was hopeless so it didn't matter how well I did.  
 Focused on the benefit I could get from being in the experiment.  
 Looked for a positive way to view being in the experiment.  
 Accepted that I could only do my best and that would have to be good enough.  
 Thought about getting extra credit in my class.  
 Made the situation into a game or a personal challenge.  
 Told myself it did not really matter how well I did.  
 Viewed the situation in a larger context, so how well I did would seem less important.  
 Focused on what was positive about the distressed person.  
 Felt happy to have a chance to help.  
 Thought positive thoughts.  
 Thought about the worst thing that could happen to me.  
 Decided that the experiment was too difficult; quit worrying about how I did.  
 Compared being in the experiment to other, more difficult experiences I'd had.  
 Decided that the experiment was not fair.  
 Decided that the person could not be helped.

Anger Expression

Wished that I hadn't signed up.  
 Got angry with the experimenter.

---

(continued)



---

Appendix K: Items for Each Coping Category continued

---

Help Seeking

Decided to ask someone for advice (after the experiment).  
Decided to ask someone just to listen and be supportive (after the experiment)

Relaxation

Thought of inspirational passages (e.g. from the Bible).  
Thought about my physical surroundings.  
Kept myself from feeling any emotions.  
Remained calm.  
Told myself to relax because I could think better that way.  
Prayed or meditated.  
Imagined myself doing well.  
Thought about relaxing.  
Thought of jokes.  
Kept breathing regularly.  
Told myself to take things one step at a time.  
Told myself that I was not nervous.  
Reminded myself that the experimenter was there in case I needed help.  
Took deep breaths.  
Thought about God.

---

## Appendix L: Transcript of Client Message (2:00 minutes)

I don't know what I'm going to do. Its my husband. He just, he doesn't understand me. He doesn't ever listen to me anymore. He's never home. All I do is I sit at home and I think what if how am I gonna change this my marriage is going down the tubes and I don't know I feel like I'm going crazy. I just feel like I'm losing it. I don't know what I'm I don't know what I'm going to do. I just can't stop thinking about how bad things are. Isn't there anything, isn't there anything that that can be done? How, how am I going to get better? This just just keeps getting worse. Do you hear, do you hear what I'm saying? I don't know I just keep I keep thinking you know we had a really good marriage in the beginning and we spent lots of time together and then things have just been getting worse and worse and he's not coming around me. He's leaving for work early. He's he's avoiding me. We never talk. Whenever he sees me he's like can't you just pull yourself together? Can't you just get back in control of your life? I don't know this is getting worse and worse and we're we're drifting apart and I'm feeling like I feel like I'm gonna be alone and he's gonna leave me and I feel like I feel like I'm gonna do something desperate to get his attention because he's ignoring me. He's just like totally and completely ignoring me. The only thing I can try to think of doing is like doing something to hurt myself. Getting so desperate and doing something so impulsive that ... I'm gonna hurt myself. Like I think of like staging something staging like cutting myself or taking, trying to take my own life, taking pills just so he'll look at me, just so he'll like, just so he'll like pay some attention to me. I just I don't know I just can't stand this.

## Appendix M: Recall Scoring Protocol

Recall ScoringPoints

- (0 to 1) I don't know what I'm going to do.
- (0 to 3) Husband ignores / doesn't understand / doesn't listen to me anymore.
- (0 to 4) He's never home / not coming around me / leaving for work early/ avoiding me.
- (0 to 1) All I do is I sit at home.
- (0 to 1) My marriage is going down the tubes.
- (0 to 3) I feel like I'm going crazy / losing it. / I can't stand this.
- (0 to 2) I just can't stop thinking about how bad things are. / This just keeps getting worse and worse.
- (0 to 1) Isn't there anything that that can be done?
- (0 to 1) Do you hear what I'm saying?
- (0 to 2) We had a really good marriage in the beginning. / We spent lots of time together.
- (0 to 2) We never talk. / We're drifting apart.
- (0 to 2) He's like can't you just pull yourself together / get back in control of your life?
- (0 to 1) I feel like I'm gonna be alone.
- (0 to 1) He's gonna leave me.
- (0 to 4) I'm gonna do something / desperate or impulsive / to get his attention / get him to look at me.
- (0 to 5) I'm going to hurt myself / stage something / cut myself / try to take my own life / take pills.

Confabulation  
(examples)

I'm lonely. I'm depressed. I feel horrible. What's wrong with me?

No Score  
(examples)

Can't you help me? I'm having marital problems.

## Appendix N: Health Questionnaire

HEALTH QUESTIONNAIRE

Please indicate if you have any of the following health conditions. If an item does not apply to you simply go on to the next item. If an item does apply to you write the word "YES" in the blank and then briefly describe the condition.

\_\_\_\_\_ Diabetes

\_\_\_\_\_ Heart Condition or Problem

\_\_\_\_\_ Hypertension (high blood pressure)

\_\_\_\_\_ Do you have any other medical problems?

\_\_\_\_\_ Have you ever been hospitalized?

Are you currently taking any of the following medications?

\_\_\_\_\_ Heart Medication

\_\_\_\_\_ Blood Pressure Medication

\_\_\_\_\_ Other: \_\_\_\_\_

CURRICULUM VITAPERSONAL INFORMATION

Name: Betty Lynn Gillespie  
 Date of Birth: September 21, 1965  
 Marital Status: Married  
 Office: Psychology Service (116B)  
 Veteran's Affairs Medical Center  
 Salem, Virginia 24153  
 (703) 982-2463 (Ext. 2930)  
 Residence: 2518 Crystal Spring Avenue, S.W.  
 Roanoke, Virginia 24014  
 (703) 344-2630

EDUCATION

Aug 1983 - May 1985 James Madison University  
 Harrisonburg, Virginia 22807  
 Aug 1985 - May 1987 Virginia Commonwealth University  
 Richmond, Virginia 23284  
 Major: Psychology, B.S.  
 Magna Cum Laude, 1987  
 Phi Kappa Phi, Psi Chi Honoraries  
 Undergraduate Thesis: Adolescent's Perceived Global Social  
 Support Compared to Daily Supportive Interactions.  
 Aug 1988 - May 1990 Virginia Polytechnic Institute and State University  
 (APA Approved)  
 Blacksburg, Virginia 24061  
 Major: Clinical Psychology, M.S.  
 Patricia Roberts Harris Fellowship, 1987 - 1991  
 Master's Thesis: The Feminine Gender Role Stress Scale:  
 Development, Factor Analysis and Preliminary Validation.  
 Aug 1990 - May 1993 Virginia Polytechnic Institute and State University (APA  
 Approved)  
 Blacksburg, Virginia 24061  
 Major: Clinical Psychology, Ph.D.  
 Instructional Fee Scholarship, 1991-1992  
 Doctoral Dissertation: Stress and the Feminine Self-  
 Concept: Responses to a Feminine and Gender-Neutral  
 Stressor as a Function of Feminine Self-Evaluation.

SPECIAL INTEREST AREAS:

Gender Roles and Mental Health, Personality Disorders, Self  
 Psychology, Object Relations Theory and Therapy, Hypnosis,  
 Stress Management.

PROFESSIONAL EXPERIENCE

Aug 1992 - Psychology Intern. Veteran's Affairs Medical Center, Salem, Virginia. APA approved predoctoral clinical psychology internship consisting of 3 major rotations (32 hours per week for 4 months) and 2 minor rotations (8 hours per week for 6 months). (1900 Hours)

Behavioral Medicine and Medical/Surgical Consult-Liaison.  
Supervisors: Kim G. Ragsdale, Ph.D. Jerome D. Gilmore, Ph.D.  
Kathryn C. Finnell, Ph.D.

Individual assessment and psychotherapy with outpatients and medical/surgical inpatients as consultation service to primary physicians. Consultant to renal dialysis, pulmonary, acute and intermediate medicine, general surgery, intensive care, and rehabilitation units. Co-led chronic pain management outpatient group. Developed and led smoking cessation groups for outpatients. Individual behavioral therapy and biofeedback for stress management. (Major rotation)

Lewis-Gale Clinic Anxiety Disorders Program.  
Supervisors: Sam Rogers, Ph.D. Bruce Sellars, Ph.D.  
Co-led structured group therapy for clients with anxiety and panic disorders, involving client education, coping skills training, cognitive therapy, and in-vivo desensitization. Individual psychotherapy using imaginal and in-vivo systematic desensitization for treatment of agoraphobia. Psychological evaluation of adult and adolescent clients, using projective and objective personality tests. Marital therapy with agoraphobic client and spouse. Individual psychotherapy for stress management. (Minor rotation)

Acute-Care Inpatient Psychiatric Unit.  
Supervisor: J. David Cooley, Psy.D.  
Participation in multidisciplinary treatment team on acute inpatient unit. Individual psychotherapy with veteran inpatients having difficulties including anxiety disorders, personality disorders, situational crises, and depression. Psychological assessment of inpatients using intellectual tests, objective and projective personality tests, neuropsychological screening measures. (Major rotation)

Post Traumatic Stress Treatment Program.  
Supervisor: Daniel E. Lonquist, Ph.D.  
Participation in multidisciplinary treatment team on an intensive, 4-week, inpatient treatment program for Post Traumatic Stress Disorder. Co-facilitation of group treatment modalities (e.g. adventure-based counseling, psychodrama, and psychoeducational, art therapy, and interpersonal process groups). Interview assessment of program applicants. (Major rotation to be completed by August 1993)

Rockbridge Area Mental Health Clinic.  
Supervisor: Carol R. Sacks, Ph.D.  
Psychological evaluation and intervention with adolescent and adult outpatients. Individual, marital, and group therapy. (Minor rotation to be completed by August 1993)

- Aug 1991 - Practicum Student. Psychological Services Center, Virginia  
May 1992 Polytechnic Institute and State University.  
Supervisor: Richard Eisler, Ph.D.  
Supervision of graduate clinicians. Couples therapy. Individual psychotherapy with adult and adolescent clients. (240 hours)
- Summer 1991 Practicum Student. Psychology Service, Veteran's Affairs Medical  
Center, Mountain Home, Tennessee.  
Supervisors: Patrick Sloan, Ph.D. Christine Adler, Ph.D.  
Neuropsychological assessment of inpatients. Psychological assessment and intervention with medical patients. Individual psychotherapy with outpatients. Family therapy with head-injured clients and their parents. Program development for women veteran's domiciliary treatment program. (416 hours)
- Fall 1991 & Course Instructor. Department of Psychology, Virginia  
Spring 1992 Polytechnic Institute and State University.  
Undergraduate course in principles of psychological research.
- Spring 1992 Research Project Coordinator. Department of Psychology, Virginia  
Polytechnic Institute and State University, Blacksburg, Virginia.  
Supervision of undergraduate research assistants in laboratory research project.
- May 1990 - Practicum Student. Psychology Service, Veteran's Affairs Medical  
May 1991 Center, Salem, Virginia.  
Supervisors: Jerome Gilmore, Ph.D. Penelope Finn, Ph.D.  
Individual cognitive-behavioral therapy with outpatients. Co-led structured stress management and process-oriented psychotherapy groups. Psychological evaluation of outpatients and psychiatric inpatients, using structured diagnostic interview and mental status exam, intellectual tests, objective and projective personality measures, and neuropsychological screening measures. (800 hours)
- June 1989 - Crisis Hotline Volunteer. Raft Community Crisis Center,  
Feb 1990 Blacksburg, Virginia.  
Crisis intervention. Information/referral regarding community mental health services.
- Aug 1989 - Practicum Student. Psychological Services Center, Virginia  
May 1990 Polytechnic Institute and State University.  
Supervisors: Carolyn Pickett, Ph.D. Russell Jones, Ph.D.  
Psychological assessment and psychotherapy with adults and children. (480 hours)
- Aug 1988 - Practicum Student. Psychological Services Center,  
Aug 1989 Virginia Polytechnic Institute and State University.  
Supervisors: Laura Clark, Ph.D. David Harrison, Ph.D.  
Psychological assessment and individual psychotherapy with adults. (240 hours)
- Aug 1988 - Research Project Coordinator. Psychology Department, Virginia  
Aug 1989 Polytechnic Institute and State University.  
Coordination of research projects. Parent interviews. Supervision of undergraduate research assistants.
- Sept 1987 - Group Home Counselor. Elmtree Group Home, Pearisburg, Virginia.  
Aug 1988 Training mildly to moderately mentally handicapped adults in independent living skills.

May 1987 - Residential Counselor. St. Joseph's Villa, Richmond, Virginia.  
 Aug 1987 Supervision of emotionally disturbed adolescents in a residential behavioral treatment program.

#### RELATED CLINICAL EXPERIENCE

- Oct 1989 "Cognitive Therapy." Workshop presented by John Ludgate, M.S. and Glenda Camp, Ph.D. Saint Alban's Psychiatric Center, Radford, Virginia. (16 hours)
- Nov 1991 "Competence and Courage: How to Focus Therapy and Keep It Moving." Workshop led by David Waters, Ph.D. Virginia Polytechnic Institute and State University. (8 hours)
- Feb 1992 Creating Confidence in Women. Conference led by Thelma Jean Goodrich, Ph.D. and Teresa Bernardez, Ph.D. Virginia Polytechnic Institute and State University, Blacksburg, Virginia. (12 hours)
- April 1992 "Introduction to Short Term Dynamic Psychotherapy: Entry into the Unconscious" presented by Stephen V. Heim, Ph.D. and Jason Worchel, M.D. Virginia Psychological Association Spring convention, Roanoke, Virginia. (4 hours)
- April 1992 "Couple Therapy" presented by Neil S. Jacobson, Ph.D. Virginia Psychological Association Spring convention, Roanoke, Virginia. (6 hours)
- Feb 1993 - "Clinical Hypnosis." An ongoing series of seminars presented by  
 May 1993 James Lanter, Ph.D. to psychology interns and medical residents. Salem Veteran's Affairs Medical Center.

#### PROFESSIONAL AFFILIATIONS

American Psychological Association  
 Association for the Advancement of Behavior Therapy  
 Society for Behavioral Medicine

#### PUBLICATIONS

- Gillespie, B. L., & Eisler, R. M. (1992). Development of the feminine gender role stress scale: A cognitive-behavioral measure of stress, appraisal, and coping for women. Behavior Modification, 16(3), 426-438.
- Lash, S. J., Gillespie, B. L., Eisler, R. M., Southard, D. R. (1991). Sex differences in cardiovascular reactivity: Effects of the gender relevance of the stressor. Health Psychology, 10(6), 392-398.

#### MANUSCRIPTS IN PREPARATION

Gillespie, B. L. (1991). Feminine self-appraisal: A psychosocial basis for depression. Virginia Polytechnic Institute & State University.



PRESENTATIONS

- "Psychological Adjustment to Myocardial Infarction." Presentation given to cardiac rehabilitation program at Salem Veteran's Affairs Medical Center, October, 1992.
- "Stress Management." Presentation given to Post Traumatic Stress Treatment Program at Salem Veteran's Affairs Medical Center, November, 1992.
- Weaver, T., Clum, G., Gillespie, B., & Preister, M. (1991). Early family environments and vulnerability factors associated with borderline personality disorder. Poster presented at 25th annual convention of the Association for the Advancement of Behavior Therapy, New York.
- Gillespie, B. L. & Eisler, R. M. (1991). Exploring the relationship between feminine gender role stress and self-reported depression and anxiety. Paper presented at the Society for Behavioral Medicine 12th annual scientific sessions, Washington, D.C.
- Gillespie, B. L. & Eisler, R. M. (1991). The development and factor analysis of the Feminine Gender Role Stress scale. Poster presented at the Society for Behavioral Medicine 12th annual scientific sessions, Washington, D.C.
- Gillespie, B. L. & Slavin, L. A. (1988). Adolescents' perceived global social support compared to daily supportive interactions. Poster presented at American Psychological Association annual convention, New Orleans, Louisiana.

REFERENCES

- Jerome D. Gilmore, Ph.D. Licensed Clinical Psychologist  
Psychology Service VAMC Salem, VA 24153 (703) 982-2463 Ext.2930
- Kim G. Ragsdale, Ph.D. Licensed Clinical Psychologist  
Psychology Service VAMC Salem, VA 24153 (703) 982-2463 Ext.2930
- Richard M. Eisler, Ph.D. Professor of Psychology  
Psychology Department Virginia Tech 24061 (703) 231-6581

*Betty S. Gillespie*