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THE FEMININE GENDER ROLE STRESS SCALE:
DEVELOPMENT, FACTOR ANALYSIS, AND PRELIMINARY VALIDATION

by

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

MASTER OF SCIENCE

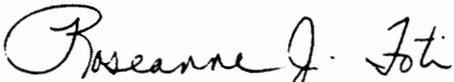
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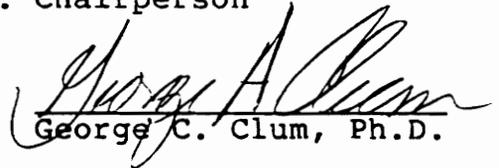
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May, 1990

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(ABSTRACT)

The purpose of the present study was to develop a measure of feminine gender role stress appraisal (FGRS), the cognitive tendency to appraise threats and challenges to femininity as stressful. Stressors particularly salient for women were identified. Through factor analysis these stressors were categorized as situations involving emotional detachment, evaluation of physical attractiveness, potential victimization, assertive coping, and evaluations of nurturance. The FGRS appraisal style should create additional stress in the lives of women to the extent they are faced with these types of stressors. Thus, it was predicted that women high on FGRS would be more vulnerable to stress related disorders that disproportionately afflict women. Supporting this hypothesis, women with high FGRS scores reported more depression and, to a lesser extent, anxiety. Additionally, the psychometric properties of the FGRS scale were investigated. Women scored higher on FGRS

than men and scores among women showed good two week test-retest reliability. The tendency to appraise situations on the FGRS scale as stressful was moderately associated with the tendency to perceive masculine threats and challenges and daily hassles as stressful as well. Discriminant validity was demonstrated between FGRS appraisal and the expression of hostility and self-perceived femininity.

ACKNOWLEDGMENTS

Many individuals deserve special thanks for their contributions to this project. I would like to thank to my committee chairperson, Richard Eisler, for his support and conceptual insight. Committee members, George Clum and Roseanne Foti also provided invaluable guidance in the conceptualization and execution of this study. I am grateful to Bob Schulman for his assistance in the analysis of results.

My husband Steven Lash contributed encouragement and sound advice when it was needed most. Finally, I would like to thank my parents, Lester and Marylou for their many years of support and love.

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In the early part of this century, Hans Selye introduced a revolutionary concept in the field of medicine, known as the General Adaptation Syndrome. According to this view, environmental demands elicit a built-in, physiological, adaptational response in an organism, which increases its general vulnerability to all illnesses (Lazarus & Folkman, 1984). Psychologists have borrowed from this conceptualization of physiological disease etiology, applying it to the etiology of mental disorder.

Psychologists interested in the deleterious effects of adaptation in humans have attempted to quantify the amount of adaptation required of an individual, as a result of the changes in her or his environment, using this quantity to predict the individual's vulnerability to mental and physical illness. Holmes and Rahe (1967) did this by correlating the number of major, disruptive life events an individual had been exposed to in a given amount of time with her or his mental and physical health.

Many studies demonstrated a link between one's exposure to stressful life events and subsequent mental and/or physical illness (Freden, 1982; Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper, 1969). However, despite the fact that women suffer more from depression and anxiety than men, few sex differences in amount of exposure to stressful life events have been found (Wethington, MacLeod, & Kessler, 1987).

There have been several criticisms of the life events method of assessing individuals exposure to stress. First, these scales which measure exposure to acute events, may fail to tap chronic stressors such as poverty and social oppression (Weissman & Klerman, 1979; Skevington, 1986). Second, life events scales such as the widely used Schedule for Recent Life Events (Holmes & Rahe, 1967), were originally developed for use with men and thus fail to include many stressors particularly salient for women such as childrearing and stressors in the lives of significant others (Makosky, 1980). Third, despite their statistical significance, correlations between exposure to negative life events and subsequent psychological and physical difficulties are relatively small (Kanner, Coyne, Schaefer, & Lazarus, 1981), casting doubt on this approach to measuring stress.

Fourth, traditional life events scales have failed to account for individual differences in the perception of and response to particular life events or stressors. They typically measure the individual's exposure to the event without taking into account its meaningfulness for the individual. Generality theories based on Selye's initial hypothesis have lost their appeal, in part, because of their failure to explain individual differences in responses to similar stressful conditions.

Correspondingly, specificity theories which attempt to account for individual differences in responses and vulnerability to specific types of stressors (Folkman & Lazarus, 1984, Kobasa, 1979), are receiving increased attention.

The Role of Appraisal in Perception of Threat

In 1966, Richard Lazarus introduced the role of psychological variables in the stress process. He proposed that an individual's perception or cognitive appraisal of a given encounter influences the extent that it will be stressful for the individual. In this way, individual differences in cognitive appraisal account for different responses to events. Appraisal of the stressfulness of an event involves two interdependent evaluative processes. Primary appraisal is the process in which an individual evaluates the meaningfulness of an encounter for her/his well-being. In secondary appraisal, the individual assesses the available coping responses and her or his ability to carry them out efficaciously (Lazarus & Folkman, 1984).

According to Lazarus' model, an individual's primary appraisal of a given event is a function of the interaction between person factors, including commitments, beliefs, and values, and the characteristics of a given situation. Based on this interaction, the individual determines what is at stake in the encounter. An event may be appraised as (1)

irrelevant, (2) benign/positive, or (3) stressful. If the event does not involve her or his important values, commitments and beliefs, then he or she has no investment in the outcome of the event, and it will be appraised as irrelevant. When the event is relevant, and the individual perceives that deeply held commitments are challenged or threatened, then the event will be appraised as stressful. In secondary appraisal the individual evaluates the availability of coping options, her or his ability to effectively carry them out, and the likelihood that once employed, these coping behaviors will be successful. An event will be less challenging or threatening if the individual perceives that there are sufficient coping options, which he or she can skillfully employ.

Gender-Role Stress Appraisal

The relationship between gender role imperatives and the experience of stress was addressed by Wethington et. al. (1987, p. 146), who pointed out that

certain events may affect women more [than men and that this]... selective vulnerability which differentiates men and women can be traced to different roles and to the different salience of role domains of men and women.

The notion that men and women are differentially affected by events, which are taxing in terms of their respective roles, is consistent with findings that women experience certain events, such as infertility (Brand, Roos, & van der Merwe, 1981), stressors in the lives of significant others (Wethington, et. al., 1987), new parenthood (Wilkie & Ames, 1986), the absence of high quality emotional support in a marital relationship (Williams, 1985), weight control (Attie & Brooks-Gunn, 1987), physical appearance, and criticism (Hamilton & Fagot, 1988) as more stressful than men. Correspondingly, some life experiences appear to be more stressful for men than women, including the death of a spouse (Stroebe & Stroebe, 1983), financial hardship (Kessler, 1982), and separation and divorce (Wallerstein & Kelly, 1980).

It is obvious that certain events, such as natural catastrophes, fires, and serious accidents tend to be universally stressful, but situations involving demands related to gender roles, such as parenting, speaking before a group, or playing sports may be differentially stressful for men and women to the extent that they are relevant to strongly held commitments and values related to gender roles.

Recently, Eisler & Skidmore (1987) applied Lazarus' concept of appraisal to the study of gender differences in

vulnerability to different potentially stressful situations. They reported that the male gender role involves a commitment to sexual prowess and physical fitness. Correspondingly, they found that situations which are highly relevant to these commitments, such as "having your lover say that she/he is dissatisfied" and "losing in a sports competition", were appraised as more stressful by men than by women.

In addition to a determination of the personal meaningfulness of an event, appraisal involves an assessment of personal and environmental resources for managing it. Gender role socialization may influence this part of the appraisal process by affecting men and women's self-efficacy for coping behaviors.

As Bem (1981) noted, every culture divides up its adult roles on the basis of gender and prescribes appropriate behaviors and attributes for each sex, consistent with adult roles. It is proposed the gender appropriate behaviors which males and females learn in early development determine many of the behaviors and skills in their coping repertoires upon adulthood. An individual may rely more on coping responses consistent with their respective gender role training, as these responses may consist of well learned behaviors, which inspire the individual's confidence that he or she can carry them out efficaciously.

Situations which require gender inappropriate coping responses may be stressful if an individual lacks confidence in her or his ability to successfully carry out the necessary coping behaviors. Women may find situations requiring assertiveness, such as "negotiating with a salesperson when buying a car", stressful. Likewise, men reported more discomfort when exhibiting nurturance in order to comfort someone who is crying (Eisler & Skidmore, 1987). In addition to having less confidence in their ability to carry out unfamiliar coping behaviors, men and women may be less likely to engage in gender inappropriate coping responses if they perceive they may be subject to social condemnation for exhibiting such behavior (Pleck, 1981).

Eisler and his colleagues have examined the role of gender specific cognitive appraisal as a mediating factor in the relative amount of challenge or threat experienced by men in particular situations. Eisler and Skidmore (1987) devised the Masculine Gender Role Stress (MGRS) scale to measure individual differences in men in the cognitive appraisal of stressors related to the imperatives of the male role. Masculine threats related to physical inadequacy, emotional expressivity, subordination to women, intellectual inferiority, and performance failure, were identified through factor analysis of the items on this scale. The items represent situations which men report

finding significantly more stressful than do women. Masculine gender role stress appraisal refers to the tendency to perceive situations as stressful, which reflect a failure to achieve the standards of the male role or require coping behaviors that violate male role imperatives.

The rationale for the development of the MGRS appraisal scale was based on the notion that there are some deleterious aspects of the masculine role, including sanctions against emotional expressivity and an emphasis on competition for power and control, which may lead to additional stress in the lives of men. Measurement of MGRS appraisal provides a means of predicting vulnerability to the maladaptive consequences of stressors related to the male role. High levels of MGRS appraisal in men have been linked to poorer health behaviors (Eisler, Skidmore, & Ward, 1988) and increased cardiovascular stress responses to tasks involving pain endurance and an interview designed to threaten masculinity (Skidmore, Eisler, Blalock, & Sikkema, 1988). The importance of gender related appraisal in mediating cardiovascular stress responses was further demonstrated in findings that high MGRS men showed greater cardiovascular reactivity to the cold-pressor task than low MGRS men when the task was presented as a masculine challenge, but not when masculine challenge was minimized (Lash, Eisler, & Schulman, 1990).

The concept of FGRS refers to the cognitive appraisal of situations involving chronic conditions and specific environmental stressors associated with the female role as highly threatening or challenging. Women exhibiting this appraisal style feel threatened to the extent that they believe they cannot live up to the imperatives of the female role or when they perceive that a situation requires unfeminine coping behaviors. One purpose of the present study was to empirically discover which stressors women appraise as more threatening and challenging than men. Previous hypotheses suggest that situations experienced as more stressful for women than men may be related to weight control, unrewarding traditional family roles, and the often contradictory demands of career and family.

Women in our society are often expected to live up to arbitrary and unrealistic standards of feminine beauty. Current standards for women which dictate that an appealing body has the shape of a prepubescent teenager are not only physically unhealthy, but relatively impossible for many women to achieve (Attie & Brooks-Gunn, 1987). Other sources of stress in women's lives may be the result of their typically unchallenging, undervalued traditional role in the family. Gove and Tudor (1973) hypothesized about potentially depressogenic features of being a housewife, most notably boredom, free time to ruminate about one's

troubles, and frustrations with the unrewarding and "invisible" nature of household tasks.

Increasing numbers of women are seeking paid work outside the home due to economic necessity and for self-fulfillment. Most women with families who work full-time outside the home are responsible for the majority of the housework and childcare. This disparity between the relative contribution of men and women to household responsibilities limits the amount of time women have to pursue self interests and decreases their satisfaction with marital relationships (see Scarr, Phillips, & McCartney, 1990, for a review). In addition, just about all women in the workforce are required to exhibit assertive coping skills and attributes which violate feminine norms of passivity and acquiescence.

The present study proposes that FGRS appraisal leads to additional stress in women's lives that may increase their vulnerability to maladaptive physical and psychological outcomes. Additionally FGRS appraisal style may predispose women to develop specific mental health problems, such as depression, eating disorders, and anxiety, which disproportionately afflict women (DSM III-R, 1987).

Many features of the female gender role are consistent with the manifestations of these disorders. For instance, the female role dictates that women should be timid,

fearful, passive, emotional, dependent, and concerned with their appearance. Correspondingly these disorders are characterized by inactive and avoidant coping, rumination, negative affect, and an obsession with body image. Based on findings that in response to depression, men said they would engage in physical activity and illicit drug use in order to distract themselves from their feelings, while women reported they would engage in ruminative, inactive behaviors in order to concentrate on their feelings (Nolen-Hoeksema, 1987; Kleinke, Staneski, & Mason, 1982; Funabiki, Bologna, Pepping, & Fitzgerald, 1980; Chino & Funabiki, 1984), Nolen-Hoeksema (1987) proposed that men may be less likely to become depressed because their active, distraction oriented responses are inconsistent with classic depressive symptomatology. Additional research supports this hypothesis. In studies that assessed actual coping behavior, women reported using more emotion-focused coping, including attempts to alter their internal, affective state, while men reported using problem-focused coping more often, including attempts to directly change the stressful situation (for a review, see Miller & Kirsch, 1987). The symptoms that characterize anxiety and depression may represent gender specific patterns of maladaptive coping responses. Women may tend to develop these mental health problems because they respond to stressful events with the

available coping behaviors most consistent with their gender role training. FGRS appraisal may contribute to women's vulnerability to these disorders because it reflects a tendency to feel threatened when faced with situations that call for unfeminine coping behaviors.

The purpose of the present study was to develop a measure of women's tendency to exhibit FGRS appraisal style and investigate its' psychometric properties. By empirically investigating gender relevant stressors it is possible to develop scales that are highly salient for a particular gender. Such scales may yield a more meaningful and individualized assessment of the relationship between stress, appraisal, and maladaptive outcomes.

This paper will describe the development, factor analysis, and preliminary validation of the FGRS scale, which consists of items representing situations perceived as more stressful by women than men. Exploratory factor analysis of FGRS was performed using the common factor model to examine the underlying dimensions of this construct.

In order to assess the convergent validity between FGRS and related constructs, the proposed study investigated the relationship between FGRS appraisal and exposure to daily minor stressors, measured by the Hassles scale (Kanner, Coyne, Schaefer, & Lazarus, 1981). Moderate correlations demonstrating convergent validity between these scales, were

expected as they each measure the respondents tendency to experience stress. However, correlations should not be too high since the FGRS scale taps cognitive appraisal style, while the Hassles scale focuses on the frequency and stressfulness of actually experienced events.

Discriminant validity was assessed between the FGRS and three other scales, the Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974), a measure of femininity, the MGRS scale, a measure of the tendency to perceive situations associated with failing to fulfill the imperatives of the male gender role as highly threatening, and the Cook-Medley Hostility Scale (CMHO; Cook & Medley, 1954).

Concurrent validity for FGRS and anxiety and depression, measured by the State-Trait Anxiety Inventory (STAI; Spielberger, Gorshuch, Lushene, Vagg, & Jacobs, 1983), and the Beck Depression Inventory (BDI; Beck & Steer, 1987), was also investigated. Moderate correlations were expected, revealing the relationship between FGRS appraisal and women's vulnerability to disorders which disproportionately afflict women (DSM III-R, 1987).

SCALE DEVELOPMENT

Item Generation

Two-hundred and five undergraduates (87 males and 118 females), aged 18 to 24 years, participated in initial item generation, responding to a sentence completion technique designed to elicit events or situations perceived as stressful for women. Based on these data 55 items were written, each representing a potentially stressful situation for women.

An additional 44 items were written, based on interviews with 16 women, aged 24 to 56, including students, young mothers, professionals, homemakers, and grandmothers, who discussed events or situations they had experienced as stressful in relation to being female. Thus, the initial version of the FGRS scale contained a total of 99 items.

Item Selection By Raters

In further refinement of the scale, these items were given to 13 faculty members and 30 graduate students in the Department of Psychology at VPI & SU, who evaluated the stressfulness of each situation, separately for the "average woman" and the "average man", on a 6 point Likert-type scale (5, "extremely stressful" and 0, "not at all stressful"). Two criteria were used to retain items for subsequent factor analysis. First, only those items rated by both male and

female raters, as significantly more stressful for women than men ($p < .01$, on paired t tests), were retained in order to eliminate events which are universally stressful for men and women. Second, only those items evaluated by females raters as at least "moderate to highly stressful for women" (e.g. mean rating of 3 or above), were kept. Thus, the 63 items which met both criteria represented situations appraised as being more stressful for women and at least moderately stressful.

STUDY #1

Subjects

Two-hundred fifty three undergraduate females ranging in age from 17 to 51 years (mean age = 19) provided data for factor analysis. These subjects were enrolled in psychology courses at VPI & SU and received extra credit points for their participation. Ninety-seven of these participants, aged 18-42 (mean age = 19) also provided data for test-retest analysis.

Method

The FGRS Scale was administered to all subjects in group sessions of about 40 subjects each. In order to assess its test-retest reliability, the FGRS scale was readministered to the first 97 subjects two weeks later.

Common factor analysis was applied to data in order to investigate the meaningful components or dimensions underlying FGRS appraisal, while eliminating specific and error variance from total variance in statistical analyses (Hair, Anderson, & Tatham, 1987). Factor loadings were obtained using an orthogonal rotational procedure (Varimax; Statistical Analysis System Institute, 1982). Ten factors met the minimum eigen value criteria of 1.00. All factor solutions between 2 and 10 were generated, and the five factor solution was subjectively selected as the most

interpretable. Thirty-nine individual items with factor loadings equal to or greater than .35 were considered in the interpretation of factors.

Results

Factor 1 is identified as Emotional Detachment and reflects failure to develop emotionally close, trusting intimate relationships. Stressors, including "having an intimate relationship without any romance", "your mate will not discuss your relationship problems", and "not being able to meet your family's emotional needs" clearly reflect emotional detachment in intimate relationships. The item "having others believe you are emotionally cold", also supports this theme. Other stressors on this factor involve having sexual relations with someone who is emotionally distant.

Factor 2 highlights women's concerns about Physical Unattractiveness, associated with unfeminine physical attributes, including large body size and to a lesser extent maturity. High scores on this factor reflect challenge appraisals related to achieving and maintaining the diminutive ideal female body prescribed by society and threat appraisals associated with failing to do so. As such, this factor may be strongly associated with vulnerability to body image distortion and eating disorders in women. In the context of this theme, the items "turning

middle-aged and being single" and "being unable to change your appearance to please someone", suggest that women associate social rejection with failure to attain feminine standards of physical attractiveness.

The third factor, labelled Fear of Victimization, contains items representing situations in which women are exposed to potential harm or violence. Women who score highly on this factor may appraise themselves as unable to effectively prevent victimization by carrying out the physically aggressive defensive coping these situations call for. A general theme of helplessness seems common to most of the items, particularly those which describe the respondent as alone in unusual or threatening circumstances.

Factor 4 is titled Unassertiveness. Generally items on this factor describe interpersonal confrontations and transactions requiring assertive coping behavior. These situations may be threatening for many women because they call for a violation of gender consistent commitments to passivity and acquiescence. Many of these situations are job related and may reflect women's appraisal of stress related to interacting in an environment that favors self-assertion and promotion. In this context, the item "trying to be a good parent and excel at work" may more generally represent the difficulty of striving for self promotion through occupational success, while managing traditional role demands, such as childrearing, which entail promoting

and supporting others.

The fifth factor is labelled Failed Nurturance. Many items on this scale describe failure on the part of a woman to be a competent, desirable mother (or friend in one case). Items involving losing custody of one's children, losing a friend, having someone else raise one's children, and leaving one's newborn infant, all support this theme. Other items describe failures and inadequacies in one's mate and/or child. In both traditional psychotherapy and in society, mothers have typically been blamed when their children are troubled. In this context, these items, describing chronic problems in significant others' lives, such as "your husband is out of work and cannot find a job" and "your child is disliked by his/her peers", are interpreted as indicating a woman's failure to adequately fulfill her culturally prescribed family role as helpmate and nurturer.

Internal Consistency and Test-Retest Reliability

The conceptual validity of these five factors is supported by Cronbach's alpha coefficients of .83, .81, .77, .80, and .73 for factors 1 through 5 respectively, indicating good internal consistency. Additionally, the test-retest reliability of the FGRS scale over two weeks was high ($r = .82$), demonstrating its ability to tap stable cognitive characteristics of the respondents.

Table 1.

Factor Analysis Pattern Matrix

<u>Item</u>	<u>Loading</u>
FACTOR 1 (Emotional Detachment)	
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 (Physical Unattractiveness)	
Being perceived by others as overweight	.72
Finding 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
<u>(continued)</u>	

Table 1 Continued

<u>Item</u>		<u>Loading</u>
	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 (Unassertiveness)	
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 (Failed Nurturance)	
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

STUDY #2

Subjects

One-hundred fifty-two undergraduates (69 males and 83 females) aged 17-22, who were enrolled in psychology courses at VPI & SU, provided data for the preliminary validation of the scale. Subjects received extra credit points in their psychology courses for participation.

Materials

The Female Gender Role Stress Scale (Appendix C)

The version of the FGRS scale to be used in preliminary validation consisted of the 39 items retained following item selection and factor analysis. Each item represents 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 (5, being "extremely stressful" and 0, being "not at all stressful"). These ratings are then summed to produce a score for each subject with higher scores indicating a greater tendency for respondents 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 coping behaviors outside their gender role.

The MGRS Scale (Eisler & Skidmore, 1987; Appendix D)

The MGRS scale contains 40 items, each representing situations judged to be more stressful for men than women. Respondents rate how stressful each situation would be for them on a six-point Likert-type scale from 0, "not stressful" to 5 "extremely stressful". These ratings are added to produce a score for each respondent. Higher scores indicate a tendency to appraise these situations as stressful. The MGRS is based on the notion that men will feel threatened to the extent that they believe they are unable to fulfill the imperatives of the male gender role or they perceive that a situation requires them to exhibit unmasculine or feminine coping behaviors. The MGRS has exhibited good internal consistency (alpha coefficients in the low .90's) and good test-retest reliability for a two-week interval ($\underline{r} = .93$) for males (Eisler & Skidmore, 1987).

Men's scores on the MGRS are positively correlated with their scores on the Cook-Medley Hostility Scale (CMHO; Cook & Medley, 1954), $\underline{r} = .37$, and the "trait" form of the State-Trait Anxiety Inventory (Spielberger, et. al., 1983), $\underline{r} = .22$. Additionally, high scoring MGRS men showed greater cardiovascular reactivity to the cold-pressor task than low scoring MGRS men when the task was presented as a masculine challenge, but not when masculine challenge was minimized

(Lash, Eisler, & Schulman, 1990).

The Hassles Scale (Kanner, Coyne, Schaefer, & Lazarus 1981; Appendix E).

The Hassles scale is a self report measure, designed to estimate "life stress in divergent populations and individuals" (Kanner et. al., 1981, p. 23). Thus, the 53 items on the shortened version of this scale represent hassles or minor daily stressors relevant to most individuals, regardless of gender. Respondents indicate the extent to which each hassle is bothersome for them by circling either 0, 1, 2, or 3, corresponding to "none or not applicable", "somewhat", "quite a bit", and "a great deal", for each item. Several hassles listed as items on the scale include: "meeting deadlines or goals", "your physical appearance", and "your job security".

With a community sample of middle-aged adults, Kanner et. al. (1981) reported test-retest reliability coefficients of .79 for frequency of hassles and .48 for their intensity, over one month. With the same sample, they also demonstrated good concurrent validity for the Hassles scale. Correlations between frequency of daily hassles and respondents' negative affect were .22, while those between hassles and psychological symptoms were .60.

Beck Depression Inventory (BDI; Beck & Steer, 1987; Appendix

F).

The BDI is self report measure of depressive affect, which covers cognitive, behavioral, and somatic symptoms related to depression. This scale contains 21 items, each consisting of four statements, which describe the respondents mood or behavior in terms of increasing abnormality and/or negativity. Each item begins with a statement representing relatively normal behavior or thoughts for the respondent, with consecutive statements representing more disordered and deviant functioning. For example, one item consists of the statements:

I do not feel sad.

I feel sad.

I am sad all the time and I can't snap out of it.

I am so sad or unhappy that I can't stand it.

On each item the respondent selects the statement which best describes her or his condition during the past week. Each statement receives a numerical weight (0 through 4, 0 indicating normal or adequate functioning and 2 through 4 indicating increasing depressive psychopathy). The sum of the numerical values (one per item) corresponding to the statements indicated by the respondent, are used to create a score which represents the severity of the respondent's depression.

Test-retest reliability coefficients for the BDI fluctuate among studies using different samples and different time periods. Beck, Steer, and Garbin (1987) reported two week test-retest coefficients as high as .90 among college students. However, another study yielded a lower coefficient of .64 among college students over a one week interval.

In previous investigations of its construct validity, the BDI has been compared to several other scales, using different subject populations. Pearson's correlational coefficients between the BDI and the Hopelessness Scale were .38, .63, & .65, with samples consisting of 113 individuals suffering from a single episode of major depression, 168 persons suffering from recurrent episodes of major depression, and 99 persons suffering from dysthymic disorder, respectively. Concurrent validity assessed using meta analysis procedures revealed a Pearson's correlational coefficient of .72 between the BDI and clinical ratings of depression, using a clinical sample (Beck, Steer, & Garbin, 1987).

State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983; Appendix G).

The STAI consists of two scales assessing state and trait anxiety for the respondent. Trait anxiety is

concerned with more stable, consistent tendencies to respond to threatening situations with intensification of feelings of anxiety. On the Trait Anxiety scale (T-Anxiety), respondents describe "how they generally feel" by indicating the frequency of their anxious feelings. Ratings of frequency are obtained by having respondents choose from among four phrases, 1, "almost never", 2, "sometimes", 3, "often", and 4, "almost always" in response to statements, such as "I feel pleasant", "I feel calm, cool, and collected", and "Some unimportant thought runs through my mind and bothers me".

Test-retest reliability for the STAI was assessed with among male and female high school students. Subjects who completed the scale participated in an hour long series of experimental procedures, including a relaxation exercise, an IQ test, and a film showing serious accidents, after which they completed the STAI a second time. From these data, Spielberger et. al. (1983) reported test-retest reliability coefficients ranging from .65 to .75 for the T-Anxiety scale.

Internal consistency of the STAI appears to be excellent. Cronbach's alpha coefficients for the T-anxiety scale ranged from .89 to .91 across four large samples, including working adults, college students, high school

students, and military recruits.

Construct validity of the STAI T-Anxiety scale was demonstrated through its ability to distinguish between various groups of normal controls and neuropsychiatric patients with prominent symptoms of anxiety. The T-Anxiety scale also discriminated between normal general medical surgery patients and general medical surgery patients with psychiatric complications. In both comparisons, mean T-Anxiety scores were significantly higher for the patients with psychiatric symptoms than for control subjects.

Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974; Appendix H).

The PAQ is a 55-item, self report index, which measures respondents' self-perceived possession of stereotypical masculine and feminine attributes. For each item, respondents select a number from 1 to 5, to indicate the degree to which they possess a particular quality associated with either masculine or feminine characteristics. For each item, the numbers 1 and 5 represent extreme and opposite tendencies for an attribute. For example, two items read:

not at all aggressive 1...2...3...4...5 very aggressive
 always takes a stand 1...2...3...4...5 never takes a stand

The respondent receives two scores, signifying her or his relative degree of masculinity and femininity. These

scores are based on the sum of the numbers corresponding to either a masculine or feminine attribute respectively, selected by the respondent on each item.

This scale exhibited good internal consistency, with alpha coefficients of .73 and .91, for men and women, respectively. Test-retest reliability coefficients were also adequate ($r = .80$ and .91, for men and women, respectively), with a subsample of 31 individuals from the original sample, over a 13 week interval.

The Cook-Medley Hostility Scale (CMHO; Cook & Medley, 1954; Appendix I).

The Cook-Medley Hostility Scale consists of 50 items from the Minnesota Multiphasic Personality Inventory (MMPI). These items were selected based on content and their ability to differentiate among school teachers who had good versus bad rapport with their students. For each item the subject indicates whether a statement describing suspicious, hostile beliefs about others is true or false. One item reads as follows: "When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing". High scoring individuals generally perceive others as immoral and deceitful, and are characterized by resentment and animosity, according to Cook and Medley (1954).

Barefoot, Dahlstrom, and Williams (1983) reported excellent test-retest reliability for this scale over one year ($\underline{r} = .85$). An internal consistency coefficient of .86 reported by Cook and Medley (1954) is also good.

Additionally, Smith and Frohm (1985) reported high convergent validity between the CMHO and the Resentment and Suspicion subscales of the Buss-Durkee Hostility Inventory as well as trait anger on the State-Trait Anger Inventory ($\underline{r} = .60, .65, \text{ and } .61$, respectively). Discriminant validity was indicated by significantly lower correlational coefficients between the CMHO and measures of depression ($\underline{r} = .38$) and anxiety ($\underline{r} = .26$).

Procedure

All seven questionnaires were administered to each subject, in group sessions of about 40 subjects each.

Results

FGRS appraisal scores significantly discriminated males from females. Means and standard deviations are presented in Table 2.

The following results involve the 83 female participants in preliminary validation procedures.

Convergent validity between FGRS and Hassles was demonstrated by a moderate correlation between these scales ($\underline{r} = .43, p < .01$). Additionally, an unexpected moderate

correlation between the FGRS and the MGRS scales was obtained among female subjects ($\underline{r} = .56$, $\underline{p} < .01$), reflecting their common measurement of cognitive appraisal.

As indicated in Table 3, concurrent validity between FGRS and depression was also good as expected ($\underline{r} = .31$, $\underline{p} < .01$). However, the FGRS scale demonstrated an unexpectedly low, nonsignificant correlation with Trait Anxiety on the STAI ($\underline{r} = .18$). Interestingly, factor 4, Unassertiveness, was correlated with anxiety in females ($\underline{r} = .24$, $\underline{p} < .05$). Factor 2, Unattractiveness, and Factor 4, Unassertiveness, were significantly related to depression scores ($\underline{r} = .34$, $\underline{p} < .01$ and $\underline{r} = .36$, $\underline{p} < .01$, respectively). All five FGRS factors were moderately correlated with Hassles. These correlational coefficients, in order of the respective factors, were .39, .47, .34, .51, and .37 ($\underline{p} < .01$).

Low correlations between FGRS and Femininity ($\underline{r} = .21$, $\underline{p} = .06$) indicated good discriminant validity between these constructs as predicted. Similarly, FGRS was not correlated with Hostility.

Multiple regression was performed, using subject's scores on the Hassles scale and FGRS factors two and four to predict their depression scores on the BDI. Each predictor was entered into a separate regression equation

and into a single regression equation containing all predictors, in order to evaluate their relative contributions to the model's ability to explain depression. These results are presented in Table 4. An R² coefficient of .16 indicates that 16% of the variance in depression scores was predicted by the Hassles scale alone. Similarly, a regression equation involving FGRS factors two and four, was able to explain 15% of the fluctuations in BDI scores.

When these predictors were combined, together they explained 19% of the variance in depression scores. Examination of T test statistics for each predictor in the full model provides an index of their individual contributions to the model's predictive power, taking all other predictors in the model into account. T values for both Factors Two and Four in the full model were nonsignificant. Among FGRS Factors Two and Four, and Hassles, only Hassles contributed a significant amount of predictive power ($t = 2.261, p < .05$) above that of the other predictors in the model.

Table 2.

Sex Differences on FGRS Appraisal

<u>Group</u>	<u>N</u>	<u>Mean Score</u>	<u>Std. Dev.</u>
Females	83	143.14*	24.12
Males	69	112.91	20.70

* $p < .01$

Table 3.

Intercorrelations Among Hassles, FGRS, FGRS Factor Two, FGRS Factor Four, and Depression

	1	2	3	4	5
FGRS		.83	.80	.43	.31
Factor Two (Unattractiveness)			.64	.47	.34
Factor Four (Unassertiveness)				.51	.36
Hassles					.40
Depression					

* $p < .01$.

Table 4.

Multiple Regression Statistics: Predicting Depression
from Hassles versus FGRS Factors Two* and Four**

Predictor:	<u>R²</u>	<u>F Ratio</u>	<u>Sig</u>
FGRS Factors1	.15	6.76	.002
Hassles1	.16	23.74	.0001
FGRS Factors and Hassles2	.19	6.45	.0007

1Entered into separate regression equations
2Forced into the same regression equation
*Physical Unattractiveness **Unassertiveness

Discussion

The purposes of the present study were to develop a measure of the tendency to experience stress as a result of female gender role socialization, when faced with threats and challenges to the feminine gender role, and investigate the psychometric properties of this scale. Factor analysis revealed five homogeneous categories of female gender role stressors, including (1) emotional detachment, (2) physical unattractiveness, (3) fear of victimization, (4) unassertiveness, and (5) failed nurturance.

These factors appear to reflect stressors which are particularly salient for women, as a result of personal commitments which may be learned through feminine gender role socialization. These commitments involve achieving feminine beauty standards related to diminutive body size, exhibiting passive, acquiescent behavior, forming emotionally close, trusting intimate relationships, and fostering the well-being of significant others. According to Lazarus and Folkman (1984), during primary appraisal if a situation involves an individual's deeply held commitments, he/she will perceive the situation as more meaningful for his/her well-being. By virtue of their gender role training, many women may appraise stressors which involve these feminine gender role commitments as highly relevant.

Challenge appraisals in these situations would indicate an individual's strivings to live up to the imperatives of the female role, by exhibiting behaviors and attributes consistent with these commitments, such as passivity, nurturance, and slenderness. Threat appraisals would be related to the violation of feminine gender role imperatives, by exhibiting behaviors or attributes which are inconsistent with these commitments. As Lazarus and Folkman (1984) note challenge and threat appraisals are not mutually exclusive. Thus, the stressful appraisal of situations on the FGRS scale, involving emotional detachment, evaluation of physical attractiveness, potential victimization, assertive coping, and evaluations of nurturance may reflect perceptions of challenge related to achieving these commitments and threats associated with violating them.

These five stressors also may be particularly salient for women due to secondary appraisal processes, in which the individual considers coping options and her or his ability to carry them out effectively. A woman would be more likely to appraise an encounter as stressful if it calls for coping behaviors outside her repertoire, for which she has low self-efficacy (Lazarus & Folkman, 1984). As demonstrated in the present study, the fear of victimization is differentially stressful for men and women. It may be that

situations involving potential victimization are particularly stressful for women because they have low self-efficacy for the physically aggressive coping behavior that these situations call for.

Secondary appraisal would also contribute to the perception that a situation is stressful if the situation calls for coping behaviors which are inconsistent with important commitments, because exhibiting these responses may be threatening for the individual. For instance, if a woman finds herself involved in an interpersonal exchange which requires her to exhibit assertiveness, she may have to violate important commitments to being cooperative, passive, and acquiescent towards others.

These factors support previous speculations about aspects of the feminine sex role that may be detrimental for women (Attie & Brooks-Gunn, 1987; Brodsky & Hare-Mustin, 1980; Brownmiller, 1984; Frieze, Parsons, Johnson, Ruble, & Zellman, 1978; Gilligan, 1982; and Hesse-Biber, 1987). It is proposed that FGRS appraisal represents an added source of stress in many women's lives, which predisposes them to stress-related illness. Additionally, women whose gender consistent commitments lead to inactive, ruminative, or avoidant coping may be predisposed to particular psychological disorders, characterized by maladaptive

feminine coping behaviors, such as depression, anxiety, and eating disorders.

In support of the construct validity of the FGRS scale as a measure of an enduring cognitive style, scores showed good reliability over time. Additionally, findings related to preliminary construct validation of the FGRS scale provided evidence that (1) responses on the FGRS scale distinguish females from males, (2) particular dimensions of FGRS are associated with women's mental well-being, and (3) convergent validity exists between FGRS and related stress questionnaires, and discriminant validity between FGRS and dissimilar personality characteristics.

The finding that women appraised situations reflected by items on the FGRS scale as significantly more stressful than men did, demonstrates that these stressors are particularly salient for women and supports the hypothesis that cognitive appraisal is influenced by gender role socialization.

Based on the hypothesized relationship between FGRS appraisal and vulnerability to stress related mental health problems, particularly those in which the female gender role has been implicated (Nolen-Hoeksema, 1987; Gove, 1979), concurrent validity was explored between women's scores on the FGRS scale and self-reported depression and anxiety.

Significant associations were found between self-ratings of depression on the BDI and FGRS factors reflecting stressors that involve physical unattractiveness and unassertiveness.

Most of the items on the physical unattractiveness factor concern failing to attain a diminutive body, considered ideal for women in our culture. Given the fact that achieving the ideal female figure represents one of the most important imperatives of the female role (Brownmiller, 1984; Hesse-Biber, 1987), and that this ideal is unrealistic for most women (Attie & Brooks-Gunn, 1987), the relationship between the FGRS unattractiveness factor and depression in women is not surprising. Achieving an ideal feminine figure represents a relatively uncontrollable stressor for most women. Normal physiological changes in a girl's body at puberty lead to the "fat spurt" or changes in physical appearance characterized by an increase in adipose tissue (Attie & Brooks-Gunn, 1987). This physiological proclivity toward weight gain makes it quite difficult for most healthy women to achieve the slender figure of models, centerfolds, and beauty contestants. Moreover, due to society's message that "a woman can never be too thin", even women who tend to be slim may never feel that they have achieved the ideal figure. In fact, it appears that most girls do not perceive themselves as living up to the slender feminine ideal for

body weight. Anywhere from fifty to eighty percent of females in high school express dissatisfaction with their body size and wish to lose weight (Freedman, 1986; Huenemann et. al., 1966; Dwyer et. al., 1966). Additionally, Silberstein et. al. (1988) found that 75% of women judged themselves to be heavier than the female ideal.

It seems that most women perceive themselves as failing to some extent to achieve the slender ideal female body. Women who score highly on the FGRS unattractiveness factor may be the most distressed by this failure, since their responses indicate a stronger commitment to attain this ideal. According to Lazarus and Folkman (1984), these women should be more vulnerable in situations where this commitment is at stake. Depression may be an emotional response to such situations, resulting from the perception that one has failed to adequately meet situational demands related to exhibiting a diminutive body. Because achieving this feminine ideal is extremely difficult for virtually all women, it is proposed that those women who have the strongest psychological investment in doing so will be the most vulnerable to negative psychological outcomes, such as depression.

High scores on the unassertiveness factor indicate a more stressful appraisal of situations requiring assertive

coping behavior. This relationship between unassertiveness and depression in women may be interpreted as supporting the hypothesis that men and women's tendency to engage in sex-role consistent coping behavior may contribute to the gender gap in depressive illness (Nolen-Hoeksema, 1987). Previous research suggests that men report relying on instrumental, action oriented coping strategies, while women report using more passive or emotion-focused coping behaviors (see Miller & Kirsch, 1987, for a review). Based on similar data, Nolen-Hoeksema (1987) proposed that women's reliance on gender-consistent passive coping responses, such as rumination and crying, which resemble classic depressive symptomatology, predisposes them to greater vulnerability to depression than men. The current results lend support to this hypothesis and suggest the need for further empirical investigation of this relationship.

The present study also found a small, but significant association between trait anxiety and the FGRS unassertiveness factor. This factor represents a tendency to appraise engaging in instrumental coping, in the form of assertive behavior, as stressful. Anxiety may be an emotional and/or behavioral response based on such an appraisal, involving the tendency to engage in avoidant, rather than instrumental coping responses in stressful

interpersonal situations. These correlations between FGRS and mental health disorders in women support the contention that particular features of the female gender role may be maladaptive and stressful for women.

Convergent validity demonstrated between the FGRS scale and the Hassles scale was interpreted as a reflection of their common measurement of the tendency to experience stress. Despite this similarity, there are differences in the conceptual bases of these instruments. The Hassles scale measures the frequency and intensity of acute events actually experienced by the respondent. Though the respondent's cognitive appraisal of the intensity of these stressors is elicited by the instructions, ratings may be highly dependent on the frequency of their occurrence. For instance, it is possible that if an individual rarely encounters or avoids situations that he or she finds stressful, these situations would not be reported by the individual as significant hassles in her/his day to day life. Moreover, frequency, but not intensity, ratings on the Hassles scale were correlated with negative affect (Kanner et. al., 1980).

In contrast the FGRS scale assesses the respondent's tendency to exhibit a characteristic style of cognitive appraisal associated with the deleterious aspects of the

feminine gender role. This appraisal style reflects the interaction of person characteristics and situational content, and is independent of the frequency of external events. In this sense, the FGRS scale is a measure of enduring, internal psychological processes, rather than fluctuating external variables. Thus, the moderate, but not high, correlation between the FGRS and Hassles scales reflects their different conceptual bases and in turn, their measurement of different variables related to the deleterious experience of stress.

Although unexpected, the moderate association between responses on the FGRS and MGRS scales for female participants is also interpreted as evidence of convergent validity between these two measures of appraisal. Each of these scales measure an individual's tendency to appraise situations as stressful. It is not surprising that the tendency to appraise situations related to feminine gender role imperatives as stressful is associated with a tendency to perceive other events as stressful too.

It was predicted that since these scales purport to measure the harmful effects of stress related to different sex roles, they should only have low correlations with each other. This prediction was based on the assumption that masculine and feminine stressors would be mutually

exclusive. However, this clearly was not the case. Although women and men's scores on the FGRS and MGRS differ significantly (in each case in the expected direction), many of the items on these scales represent situations that would be stressful in varying degrees, irrespective of gender.

Essentially, women who reported feeling threatened or challenged by stressors related to feminine gender role concerns also demonstrated a tendency to appraise situations associated with masculine concerns as stressful. In the present study, the demonstrated relationship between these constructs may reflect the fact that the commitments and values of male and female college students are more alike than among males and females in noncollege populations (Hammen & Padesky, 1977). In particular, women who pursue higher education may adopt masculine commitments to intellectual and occupational achievement, tapped by the MGRS scale (Eisler & Skidmore, 1987).

Consistent with the lack of correlation between MGRS appraisal and masculinity in men (Eisler & Skidmore, 1987), a low, nearly significant correlation was obtained between the FGRS and Femininity, as expected. Despite a shared association with feminine gender role attributes, these constructs differ in their approach. Responses on the FGRS

scale reflect the importance of achieving the imperatives of the female role, in terms of the individual's tendency to feel threatened or challenged when she fails to do so. This approach is based on the proposition that feminine commitments may influence a woman's appraisal of the relevance of a particular situation for her well-being and/or her coping efficacy in the situation.

Items on the FGRS scale consist of stressful situations related to the feminine gender role, and were created based on women's reports of what they find stressful about being female. In contrast, items on the PAQ Femininity scale represent stereotypical feminine characteristics.

Femininity measured by the PAQ, represents a static index of the respondent's self-reported feminine characteristics. Since the PAQ does not assess the relative importance of these attributes to the respondent, it is unclear to what extent they reflect the personal commitments of respondents.

Though the PAQ measures an individual's self-perceived femininity, it fails to tap the meaningfulness of situations which involve feminine attributes for the respondent. One woman may describe herself as very unfeminine on the PAQ. Another woman may report that she possesses a large number of feminine traits. If neither woman cares very deeply about trying to live up to feminine imperatives or failing

to do so, then neither woman would be particularly vulnerable in situations that involve these imperatives.

The results of the present study also indicated a lack of correlation between FGRS and Hostility among female participants, as predicted. Hostility or the expression of anger and mistrust toward others is inconsistent with feminine commitments toward passivity, acquiescence, and the development of nurturant relationships.

The potential diagnostic utility of the FGRS scale in predicting depression was suggested by the significant association between depression and FGRS appraisal, as well as by the ability of the FGRS unassertiveness and unattractiveness factors to explain a significant proportion of the variance in depression scores. However, additional findings cast doubt on the diagnostic utility of the FGRS as a predictive tool. The Hassles scale showed similar predictive power for depression in female participants in the current study. Furthermore, when forced together into a single regression equation, the FGRS factors did not offer additional predictive utility for depression beyond the widely used Hassles scale. In fact, the Hassles scale did predict additional variance in depression scores above that explained by the FGRS factors.

This finding is consistent with the hypothesis that

FGRS appraisal is a predisposing factor which interacts with one's actual experiences to determine negative physical and psychological outcomes. The FGRS appraisal tendency will only lead to feminine role stress in situations that threaten or challenge important feminine commitments. This hypothesis was upheld in a laboratory investigation of the effects of MGRS appraisal style on physiological reactivity in men. Men with high scores on the MGRS scale demonstrated greater blood pressure reactivity than men with low scores on the scale to a task presented as a masculine challenge, but not when masculine challenge was minimized.

Based on this hypothesis, the Hassles scale, which reflects an individual's actual day to day encounters with stressful events, should be more closely associated with stress-related psychological outcomes. Nonetheless, the measurement of FGRS appraisal may have important implications for clinical assessment and treatment of stress-related difficulties. If an individual exhibits a particular style of appraisal which renders her/him vulnerable in certain situations, changing her or his environment to minimize exposure to these situations may often be unrealistic and nontherapeutic. Intervention to reduce vulnerability should more appropriately focus on appraisal, by helping the individual to recognize and modify

unrealistic commitments, beliefs, and values, and increase her or his ability to effectively execute gender inconsistent coping behaviors that may be unfamiliar. The FGRS appraisal scale provides a unique assessment instrument for use with clinically disturbed women when feminine gender role conflicts are suspected.

Finally, several limitations of the present study, should also be considered in drawing conclusions about these results. One possible limitation is related to the concern that self-report measures, such as the BDI do not provide a stable measure of depression in nonclinical samples (Hammen, 1980). It has been suggested that in nonclinical samples, self-reported depression scores may often reflect transitory mood states unrelated to more severe clinical depression (Coyne & Gotlib, 1983). If this is the case, it is likely that transitory negative moods would be more closely linked to fluctuations in external events measured by the Hassles scale, than to respondents' enduring cognitive styles, tapped by the FGRS scale.

The correlational nature of the present findings limits inferences about cause and effect relationships among variables. It is possible that the self-defeating cognitive style characteristic of depression (Beck, Rush, Shaw, & Emery, 1979), leads one to appraise challenging situations

on the FGRS and Hassles scales as insurmountable and devastating, in other words, as stressful.

Additionally, the results of this study pertain to a fairly homogeneous population of predominantly single, white, upper middle-class, college students. As such, these findings may not be applicable for other populations of women, who are older or from different races and social classes.

The sample of young college females used in the present study may have provided a more conservative estimate of the relationship between FGRS and psychological outcomes. Gender role conflicts related to assertiveness may be more stressful for women after they enter the work force, where this type of behavior is more often called for. Similarly, a woman's concerns about her ability to adequately nurture her family should be more pronounced after she marries or has children. On the other hand, most college-aged women have recently moved out of their parents' home for the first time, gaining freedom to participate in sexually intimate relationships. As such, they may be more concerned about developing emotional closeness and avoiding sexual exploitation in these relationships. Clearly, the validity and reliability of the FGRS scale must be replicated with other populations and these considerations underscore that

need.

The purpose of the present study was to carry out a preliminary exploration of the FGRS scale's relationship to other self-report measures. It was beyond the scope of this initial study to firmly establish the construct validity of this scale. For as Anastasi (1982) points out, establishing the construct validity of a psychological measure is a gradual process, requiring "the accumulation of information from a variety of sources". A more stringent investigation of the validity of the FGRS scale might assess its ability, as a measure of gender specific cognitive appraisal, to predict diagnosis of disorders that disproportionately afflict women, including anorexia, bulimia, agoraphobia, and unipolar depression, in clinically disturbed groups.

Specifically, further research is needed to explore the relationship between the FGRS unattractiveness factor and eating disorders in women. High scores on this factor indicate strong commitment of attaining the diminutive body considered ideal for women. The appraisal of challenge or threat in situations involving body weight may result in restriction of food intake or dieting, a coping behavior used by many adult and adolescent females that may lead to the bizarre eating patterns characteristic of bulimia and anorexia (Attie & Brooks-Gunn, 1987).

Additionally, laboratory studies could be used to directly test hypotheses about the relationship between appraisal of and physiological reactivity to various acute stressors. Specifically, the model proposed by Lazarus and Folkman (1984) would predict that females who demonstrate high FGRS appraisal scores should exhibit greater physiological reactivity than females with low FGRS appraisal scores, to gender relevant but not gender neutral stressors. This could be tested by using changes in blood pressure between baseline and experimental conditions, cardiovascular reactivity, as a dependent measure of a physiological response to stress. The cardiovascular reactivity of females with high FGRS scores could be compared with that of low scoring females, across different experimental conditions. Instructions could be varied, so that in one condition a task is presented as highly relevant to a commitment associated with the female role. In this condition, high scorers should appraise the situation as more challenging than low scorers and corresponding significant differences in reactivity between the two groups would be expected. In the second condition the task could be presented as irrelevant to feminine commitments and no differences between groups would be predicted.

Similar methodology could be used to compare the

reactivity of males and females across gender relevant and gender neutral tasks. Females should demonstrate greater physiological reactivity than males to stressors related to female gender role concerns, but not to gender neutral or masculine gender role stressors.

Summary

The present study was based on the hypothesis that socialization into the female gender role affects women's vulnerability to particular stressors. A measure of cognitive appraisal of stressful situations related to the feminine role was developed and female participants demonstrated a tendency to appraise the situations on this scale as more stressful than male participants. The stressors on this scale clustered into five homogeneous categories, reflecting concerns about emotional detachment, physical attractiveness, fear of victimization, unassertiveness, and failed nurturance.

Women's who tend to appraise situations on the FGRS scale as stressful, also tend to appraise other events as stressful, including masculine challenges and threats, and daily hassles. Laboratory studies which manipulate the gender relevant content of acute stressors could test the hypothesis that FGRS appraisal style is related to increased stress responses to feminine challenges but not gender

neutral challenges.

Correlations between FGRS appraisal and self reported depression and anxiety reflected the maladaptive features of feminine gender role identification. Future investigations of the construct validity of FGRS appraisal should explore its relationship to clinical psychopathology in women.

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Appendices

Appendix A: Informed Consent Form

Questionnaires 1: Informed Consent Form

The purpose of this study is to examine the stressfulness of everyday events. This study involves two testing sessions. In the first session you will complete a questionnaire. The second session will take place two weeks after the first session. During the second session you will complete another questionnaire. Each session should take about twenty minutes and you will receive two extra credit points for participation in both sessions.

All information is confidential and will be seen by the examiner only. Although subjects' names and student numbers are required to assure credit, they are deleted afterwards. In this way, individual subjects will not be identified by name, and your name will not be associated with any of your responses on the questionnaires. You may withdraw from the study AT ANY TIME without penalty. However, extra credit can only be given to students who complete the experiment.

This research project has been approved by the Human Subjects Research Committee and the Institutional Review Board. Questions about this study should be directed to:

Betty L. Gillespie-----552-0719
(Graduate Assistant)

Richard M. Eisler, Ph.D.-----231-6914
(Advisor and Principle Investigator)

Helen Crawford, Ph.D.-----231-6520
(Chair, Human Subjects Research Committee)

I voluntarily agree to participate in the research project described above.

Signed: _____ Student ID # _____

Appendix B: Informed Consent Form

Questionnaires 2: Informed Consent Form

The purpose of this study is to examine different individuals' moods, thoughts, self perceptions and experiences. You will be asked to answer several questionnaires, asking you about these aspects of your life. It should take you about one hour to complete the forms. You will be given one extra credit point for completing the questionnaires.

Each questionnaire has its own set of instructions. REMEMBER -PLEASE READ THE INSTRUCTIONS ON EACH QUESTIONNAIRE CAREFULLY and ask the examiner if you have any questions while you are filling them out.

All information is confidential and will be seen by the examiner only. Although subjects' names and student numbers are required to assure credit, they are deleted afterwards. In this way, individual subjects will not be identified by name, and your name will not be associated with any of your responses on the questionnaires. You may withdraw from the study AT ANY TIME without penalty. However, extra credit can only be given to students who complete the experiment.

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Betty L. Gillespie-----552-0719
(Graduate Assistant)

Richard M. Eisler, Ph.D.-----231-6914
(Advisor and Principle Investigator)

Helen Crawford, Ph.D.-----231-6581
(Chair, Human Subjects Research Committee)

I voluntarily agree to participate in the research project described above.

Signed: _____ Student ID # _____

Appendix C: FGRS Scale

Please read the descriptions of the following situations. Then rate how stressful the situation would be for you. Give each item a rating on the scale from 0 to 5, ranging from not stressful to extremely stressful.

NOTE: The term "mate" refers to either a spouse or a partner in an intimate relationship.

For example: Driving a car 0
 Discovering you have a serious illness 5
 Losing your keys 2

Not At All Stressful Extremely Stressful
 0-----1-----2-----3-----4-----5

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 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. Having to move 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 ___

Not At All Stressful Extremely Stressful
 0-----1-----2-----3-----4-----5

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 D: MGRS Scale

Please read the descriptions of the following situations. Then rate how stressful the situation would be for you. Give each item a rating on the scale from 0 to 5, ranging from not stressful to extremely stressful.

For example: Driving a car 0
 Discovering you have a serious illness 5
 Losing your keys 2

Not Stressful Extremely Stressful
 0-----1-----2-----3-----4-----5

1. Feeling that you are not in good physical condition _____
2. Telling your spouse that you love her/him _____
3. Being outperformed at work by a woman _____
4. Having to ask for directions when you are lost _____
5. Being unemployed _____
6. Not being able to find a sexual partner _____
7. Having a female boss _____
8. Having your lover say that she/he is not satisfied _____
9. Letting a woman take control of the situation _____
10. Not making enough money _____
11. Being perceived by someone as "gay" _____
12. Telling someone that you feel hurt by what they said _____
13. Being married to someone who makes more money than you _____
14. Working with people who seem more ambitious than you _____
15. Finding you lack the occupational skills to succeed _____
16. Losing in a sports competition _____
17. Admitting that you are afraid of something _____
18. Being with a woman who is more successful than you _____
19. Talking with a "feminist" _____
20. Being unable to perform sexually _____
21. Being perceived as having feminine traits _____
22. Having your children see you cry _____

Not At All Stressful Extremely Stressful
 0-----1-----2-----3-----4-----5

23. Being outperformed in a game by a woman _____
24. Having people say that you are indecisive _____
25. Being too tired for sex when your lover initiates it _____
26. Appearing less athletic than a friend _____
27. Talking with a woman who is crying _____
28. Needing your spouse to work to help support the family _____
29. Having others say that you are too emotional _____
30. Being unable to become sexually aroused when you want _____
31. Being compared unfavorably to men _____
32. Comforting a male friend who is upset _____
33. Admitting to your friends that you do house work _____
34. Working with people who are brighter than yourself _____
35. Getting passed over for a promotion _____
36. Knowing that you cannot hold your liquor as well as others _____
37. Having a man put his arm around your shoulder _____
38. Being with a woman who is much taller than you _____
39. Staying home during the day with a sick child _____
40. Getting fired from your job _____

Appendix E: The Hassles Scale

Hassles are irritants-- things that annoy or bother you; they can make you upset or angry. Some hassles occur on a regular basis and others are relatively rare. Some have a slight effect, others have a strong effect. This questionnaire lists things that can be hassles in day-to-day life. Please think about how much of a hassle each item is for you typically in your day-to-day life. Please indicate how much of a hassle each item is by filling in the appropriate number.

How much of a hassle is this item for you?

0=None or not applicable 1=Somewhat 2=Quite a bit 3=A great deal

1. Your child(ren)
2. Your parents or parents-in-law
3. Other relative(s)
4. Your spouse
5. Time spent with family
6. Health or well being of a family member
7. Sex
8. Intimacy
9. Family-related obligations
10. Your friend(s)
11. Fellow workers or students
12. Clients, customers, patients, etc.
13. Your supervisor or employer or teachers
14. The nature of your work.
15. Your work load.
16. Your job security.
17. Meeting deadlines or goals.
18. Enough money for necessities (food, clothing, housing, health care, taxes, insurance, etc.)
19. Enough money for education
20. Enough money for emergencies
21. Enough money for extras (entertainment, recreation, vacations)
22. Financial care for someone who doesn't live with you.
23. Investments
24. Your smoking
25. Your drinking
26. Mood altering drugs
27. Your physical appearance
28. Contraception
29. Exercise(s)
30. Your medical care
31. Your health
32. Your physical abilities
33. The weather
34. News events
35. Your environment (quality of air, noise level, greenery,

- etc.)
36. Political or social issues
 37. Your neighborhood (neighbors, setting, etc.)
 38. Conservation (gas, electricity, water, gasoline, etc.)
 39. Pets
 40. Cooking
 41. Housework
 42. Home repairs
 43. Yardwork
 44. Car maintenance
 45. Taking care of paper work (paying bills, filling out forms)
 46. Home entertainment (TV, Music, reading, etc.)
 47. Amount of free time
 48. Recreation and entertainment outside the home (movies, sports, eating out, walking, etc.)
 49. Eating (at home)
 50. Church or community organizations
 51. Legal matters
 52. Being organized
 53. Social commitments

Appendix F: 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 G: State-Trait 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 to the right of the statement to indicate how you generally feel.

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

1. I feel pleasant.
2. I feel nervous and restless.
3. I feel satisfied with myself.
4. I wish I could be as happy as others seem to be.
5. I feel like a failure.
6. I feel rested.
7. I am "calm, cool, and collected".
8. I feel that difficulties are piling up so that I cannot overcome them.
9. I worry too much over something that really doesn't matter.
10. I am happy.
11. I have disturbing thoughts.
12. I lack self-confidence.
13. I feel secure.
14. I make decisions easily.
15. I feel inadequate.
16. I am content.
17. Some unimportant thought runs through my mind and bothers me.
18. I take disappointments so keenly that I can't put them out of my mind.
19. I am a steady person.
20. I get in a state of tension or turmoil as I think over my recent concerns and interests.

Appendix H: Personal Attributes Questionnaire

Rate yourself on the following sets of opposite psychological characteristics, using this 5-point scale, with the number 1 corresponding to the characteristic on the left side of the hash mark and the number 5, corresponding to the characteristic on the right side of the hash mark. Please be sure to answer every item.

1.....2.....3.....4.....5

1. Not at all aggressive / Very aggressive
2. Not at all independent / Very independent
3. Not at all emotional / Very emotional
4. Does not hide emotions at all / Almost always hides emotions
5. Nonconforming to social expectations / Conforming to social expectations
6. Not at all considerate / Very considerate
7. Not at all easily influenced / Very easily influenced
8. Very ungrateful / Very grateful
9. Very submissive / Not at all submissive
10. Dislikes math and science / Likes math and science very much
11. Poor at sports / Good at sports
12. Not at all excitable in a major crisis / Very excitable in a major crisis
13. Not at all excitable in a minor crisis / Very excitable in a minor crisis
14. Very passive / Very active
15. Not at all able to devote completely to others / Able to devote self completely to others
16. Very blunt / Very tactful
17. Weak conscience / Very strong conscience
18. Very rough / Very gentle
19. Not at all helpful to others / Very helpful to others

20. Not at all competitive / Very competitive
21. Very home oriented / Very worldly
22. Not at all skilled in business / Very skilled in business
23. Knows the way of the world / Does not know the way of the world
24. Not at all kind / Very kind
25. Low mechanical aptitude / High mechanical aptitude
26. Indifferent to others' approval / Highly needful of others' approval
27. Feelings not easily hurt / Feelings easily hurt
28. Not at all adventurous / Very adventurous
29. Not at all aware of others' feelings / Very aware of others' feelings
30. Not at all religious / Very religious
31. Not at all outspoken / Very outspoken
32. Not at all interested in sex / Very interested in sex
33. Can make decisions / Has difficulty making decisions
34. Gives up very easily / Never gives up easily
35. Very shy / Not at all shy
36. Never cries / Cries very easily
37. Almost never acts as a leader / Almost always acts as a leader
38. Very neat in habits / Very sloppy in habits
39. Very quiet / Very loud
40. Not at all intellectual / Very intellectual
41. Not at all self-confident / Very self-confident
42. Feels very inferior / Feels very superior
43. Not at all creative / Very creative

44. Always sees self as running the show / Never sees self as running the show
45. Always takes a stand / Never takes a stand
46. Not at all understanding of others / Very understanding of others
47. Very cold in relations with others / Very warm in relations others
48. Very little need for security / Very strong need for security
49. Not at all ambitious / Very ambitious
50. Dislikes children / Likes children
51. Does not enjoy art and music at all / Enjoys art and music very much
52. Easily expresses tender feelings / Does not express tender feelings at all
53. Goes to pieces under pressure / Stands up well under pressure
54. Retiring / Forward
55. Not at all timid / Very timid

Appendix I: Cook-Medley Hostility Scale

If a statement is true or mostly true, as applied to you, circle the letter T. If a statement is false or usually not true about you, circle the letter F. Try to give a response to every statement.

1. T F When I take a new job, I like to be tipped off on who should be gotten next to.
2. T F When someone does me wrong I feel I should pay him or her back if I can, just for the principle of the thing.
3. T F I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
4. T F I have often had to take orders from someone who did not know as much as me.
5. T F I think a great many people exaggerate their misfortune in order to gain the sympathy and help of others.
6. T F It takes a lot of argument to convince most people of the truth.
7. T F I think most people would lie to get ahead.
8. T F Someone has it in for me.
9. T F Most people are honest chiefly through fear of getting caught.
10. T F Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
11. T F I commonly wonder what hidden reason another person may have for doing something nice for me.
12. T F It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
13. T F I feel that I have often been punished without cause.
14. T F I am against giving money to beggars.
15. T F Some of my family have habits that bother and annoy me very much.
16. T F My relatives are nearly all in sympathy with me.
17. T F My way of doing things is apt to be misunderstood by others.
18. T F I don't blame anyone for trying to grab everything he or she can get in this world.
19. T F No one cares much what happens to you.
20. T F I can be friendly with people who do things which I consider wrong.
21. T F It is safer to trust nobody.
22. T F I do not blame a person for taking advantage of someone who lays him or herself open to it.
23. T F I have often felt that strangers were looking at me critically.
24. T F Most people make friends because friends are likely to be useful to them.

25. T F I am sure I am being talked about.
26. T F I am likely not to speak to people until they speak to me.
27. T F Most people inwardly dislike putting themselves out to help other people.
28. T F I tend to be on my guard with people who are somewhat more friendly than I had expected.
29. T F I have sometimes stayed away from another person because I feared doing or saying something that I might regret afterwards.
30. T F People often disappoint me.
31. T F I like to keep people guessing what I'm going to do next.
32. T F I frequently ask people for advice.
33. T F I am not easily angered.
34. T F I have often met people who were supposed to be experts who were no better than I.
35. T F I would certainly enjoy beating a crook at his own game.
36. T F It makes me feel like a failure when I hear of the success of someone I know well.
37. T F I have at times had to be rough with people who were rude or annoying.
38. T F People generally demand more respect for their own rights than they are willing to allow others.
39. T F There are certain people whom I dislike so much that I am inwardly pleased when they are catching it for something they have done.
40. T F I am often inclined to go out of my way to win a point with someone who has opposed me.
41. T F I am quite often not in on the gossip and talk of the group I belong to.
42. T F The man who had most to do with me when I was a child (such as my father, step-father, etc.) was very strict with me.
43. T F I have often found people jealous of my good ideas, just because they had not thought of them first.
44. T F When a man is with a woman he is usually thinking about things related to her sex.
45. T F I do not try to cover up my poor opinion or pity of a person so that he or she won't know how I feel.
46. T F I have frequently worked under people who seem to have things arranged so that they get credit for good work but are able to pass off mistakes onto those under them.
47. T F I strongly defend my own opinions as a rule.
48. T F People can pretty easily change me even though I thought that my mind was already made up on a subject.
49. T F Sometimes I am sure that other people can tell what I am thinking.
50. T F A large number of people are guilty of bad sexual conduct.

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