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ATTRIBUTIONAL STYLE AND DEPRESSION IN TRADITIONAL VS NON-TRADITIONAL COLLEGE WOMEN

by

KAREN M. LATZA

A THESIS Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
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VITA

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CHAPTER I

INTRODUCTION

Amidst the considerable body of research comparing rates of mental illness for the two sexes, it seems widely accepted that depression is more prevalent in women than in men. Numerous epidemiological studies attest to this striking gender difference. Although the results of these studies have been criticized on methodological and theoretical grounds (Hammen, 1982), the "lore" surrounding sex differences in depression continues to stimulate and guide research. That is, as Hammen points out, it is still of interest to explore differential causes for depression; to ask, under what specific conditions might women experience, express, and seek help for depression?

A number of theories have been offered to account for gender differences in the etiology of depressive phenomena, which are reviewed by Hammen (1982). One such view is that differences in "illness behavior" among men and women may contribute to observed sex differences in depression. Illness behavior includes symptom recognition and labeling, symptom expression, and "coping" via seeking help and social support. These processes, the theory contends, may be differentially experienced and reinforced in women and men. Thus, men's depressive experiences may take somewhat different forms, and lead to different interpretations and outcomes. Data from a small number of studies have supported this view (e.g. Padesky & Hammen, 1981).

Less well-supported have been biological/genetic theories of gender differences in depression. Evidence for an x-chromosome linked transmission of depression has been mixed (Hammen, 1982). Endocrinological perspectives have also received little support.

Sociological theories were first to call attention to social roles as possible determinants of depression. They argue that less rewarding roles available to women predispose them to various forms of psychological maladjustment, as expressions of their discontent and oppression. Similarly, theories focusing on the relationship between social stressors and depression have suggested that women's lives may contain more of the type of stressors which would predispose them to affective disorder. Although these perspectives have found limited support through research, Hammen (1982) points out that conclusions regarding stressful experiences as precipitants of depression await further, more methodologically refined study.

Theories of intraindividual determinants of depression which have relevance to the gender issue include psychodynamic formulations, and cognitive theories. Psychodynamic theories, specifically pertaining to "object loss", and the "aggression turned inward" hypothesis, are reviewed by Cox and Radloff (1984). These authors conclude that there is very limited support for the pschoanalytic descriptions of both the depressed and female personalities, and that these formulations are not very amenable to empirical testing.

Coyne and Gotlib (1983) have pointed out that the historical resurgence of cognition in psychology is exemplified by a vast, growing, and promising research literature on cognitive conceptions of depression. One of the most provocative models of depression, which has

implications for the study of gender differences, has been derived from the work of M.E.P Seligman. Seligman began by studying the relationship between "depressive-like" behavior and induced (learned) helplessness among infrahuman subjects, later extending the perspective to the study of depression in humans. Learned helplessnes was defined by Seligman and his colleagues as a perceived lack of contingency between responses and outcomes. The model, as a cognitive basis for depression in humans, underwent a reformulation (Abramson, Seligman, & Teasdale, 1978) based in revised attribution theory. These authors suggested that once people perceive noncontingency, they attribute their helplessness to a cause. It is the pattern, or "style" of such causal ascriptions to everyday events, which may be a crucial cognitive predisposing factor toward depression. Specifically with respect to gender and depression, a demonstrable difference in patterns of causal attributions among the sexes may begin to shed light on the issue, and provide new directions for inquiry.

This study examined the issue of gender and depression in theoretical context provided by Seligman and his colleagues. Furthermore, both the sociological and psychological literature appear to concede that the differential socialization experiences of males and females are the relevant dimensions to the study of gender differences in psychopathology, rather than the mere biological/genetic distinction between them (Gilbert, 1981; Hammen, 1982; Radloff & Monroe, 1978; Weissman & Klerman, 1977;1979). In accordance, an analysis of sub-groups of women based on gender-role orientation is offered.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Learned Helplessness, Depression, and Gender

The theoretical relationship between learned helplessness and the female role was first proposed by Radloff and Monroe (1978), expanded in Radloff and Rae (1979) and Radloff (1980). These authors essentially proposed that the learned helplessness "style" is a female one; that through various aspects of their socialization women learn less instrumental coping styles than men. Radloff and Monroe review several areas of research literature such as studies of stereotypes, child-rearing practices, "fear of success", and small group influence processes in order to buttress their argument that females receive systematic, direct, "training in helplessness". Most of this research suggests that the expectation of a female's behavior is that she is passive, submissive, and in need of help and protection by parents, teachers, media, and even mental health professionals. Through these societal agents, active, goal-oriented behavior, and the development of assertiveness and competence in the female is ignored, punished, or disregarded. To summarize, Radloff and Monroe suggested that if females are more likely than males to learn helplessness by lack of reinforcement of instrumental actions, and helplessness contributes to depression, then it may be seen as a mediator of the greater incidence of depression in women.

Several empirical studies have been carried out which (in part)

have sought a relationship between women, learned helplessness behavior, and depression. Klein, Fencil-Morse, and Seligman (1976) was one such study, and will be reviewed in more detail in a later discussion pertaining to attributional style. Briefly, however, these authors investigated whether laboratory-induced helplessnesss would produce response initiation and cognitive deficits parallel to those shown by depressed subjects without helplessness training. Helplessness was induced via exposing college student subjects to unsolvable cognitive discrimination tasks; within depressed and non-depressed groups, subjects were assigned to either unsolvable, solvable, or control groups. Following the experience of failure (by the "unsolvable" group) vs. success, subjects' performance on a set of anagram tasks was assessed. Overall, the predictions of the learned helplessness model were confirmed. Depressed controls and nondepressed subjects who were "trained" in helplessness showed poorer anagram performance than nondepressed controls. However, statistical analyses revealed no main effects or interactions involving gender.

A later study by Abramson, Garber, Edwards, and Seligman (1978) examined changes in expectancy following success and failure in skill and chance tasks in a clinical population. Their experimental strategy is typical of many studies testing the original model of learned helplessness and depression in humans. Based on the model, it was hypothesized that because of their general belief in response-reinforcement noncontingency, depressed subjects would respond to skill tasks as if outcomes were governed by chance. Therefore, relative to the expectancies of nondepressed subjects, the expectancies of depressed subjects in skill tasks should increase less after success and decrease less after

failure. Four experimental groups were composed of unipolar depressives, depressed and nondepressed schizophrenics, and normal controls. The results indicated that unipolar depressives showed smaller changes in expectancy of future success after failure in the skill task, than did the normal controls and both schizophrenic groups. The authors interpreted this as lending partial support to the relationship between depression in a clinical population and learned helplessness, and as supportive of their contention that learned helplessness is not a general aspect of all psychopathology. However, as with Klein et al. (1976), Abramson et al. failed to find any sex differences in laboratory-induced helplessness.

An interesting study conducted by Baucom and Danker-Brown (1979) suggested that regardless of a person's sex, he or she may be more susceptible to learned helplessness and depression depending on the degree to which stereotypical sex role behaviors and attributes are adopted. These authors divided 160 subjects into four sex role "types"; androgynous, masculine sex-typed, feminine sex-typed, and undifferentiated. Each group was composed of 20 males and 20 females. The methodology used was similar to other studies of laboratory-induced helplessness (e.g. Klein, Fencil-Morse, & Seligman, 1976), where "helpless" subjects were exposed to unsolvble concept formation tasks, and the dependent measures were performance on anagram tasks and a self-report measure. As they predicted, Baucom and Danker-Brown found that the four sex role types were affected differently by the helplessness condition. stereotypic role types - masculine and feminine, performed similarly to each other throughout the experiment and were affected on all dependent measures by the helplessness condition (i.e. made more anagram errors,

showed motivational deficits, and complained of dysphoria). However, the anagram performances of the androgynous and undifferentiated groups were not affected by the helplessness condition. When analyzed strictly by sex (rather than sex role), women were not affected more than men by induced helplessness. Thus, once sex roles were taken into account, females were not more susceptible than males to learned helplessness, as an analog to depression.

In summary, there have been a lack of definitive results in studies which have examined sex differences in helplessness. This is paralleled by the overall inconsistency in research investigations which have extrapolated the learned helplessness model of depression to humans, as reported by Smolen (1978), Costello (1978), and Coyne and Gotlib (1983). By 1978, the model had increasingly come under fire by critics. Criticisms by Buchwald, Coyne, and Cole (1978) and Costello (1978) focused particularly upon the methodological inadequacies of research which had purported to support the learned helplessness viewpoint. For example, Costello suggested that there is a plausible alternative motivational hypothesis which could account for subjects' decreased performance on tasks following induced helplessness. Costello also questioned the relevance of laboratory experience of induced helplessness to naturally occurring events in the depressed person's life.

Helplessness Theory: Reformulation

Abramson, Seligman, and Teasdale (1978), in their "reformulation", addressed what they conceded were the two major conceptual flaws of the learned helplessness model. First, they stated, it did not distinguish between cases in which an individual lacks requisite controlling respon-

ses that are available to other people, and cases in which the individual and all others do not possess controlling responses; i.e., "personal" vs. "universal" helplessness. Secondly, the model failed to explain when helplessness is general vs. specific, or chronic vs. acute; dimensions which are likely to be relevant to depression.

The focus of the reformulated perspective was to be a revision in terms of attribution theory, and its direction was already evident in the earlier study conducted by Klein, Fencil-Morse, and Seligman (1976). One of their research questions was "...does it matter if the individual blames his own incompetence or the harshness of the environment for failure ?" (p.509). That is, they wished to investigate whether attributions of failure to an internal or external ("personal" vs. "universal") cause mediated the effects of learned helplessness. Klein et al. manipulated attribution in the following manner: One third of the subjects received instructions designed to increase the likelihood of internal attribution, i.e., they were told that most people could solve the unsolvable problems. One third were told that no one could solve the problems, thereby increasing the likelihood of external attribu-One third received no attribution of failure instructions. authors found that performance deficits associated with "helplessness training" could be eliminated by instructions which were designed to enhance the possibility of external attributions.

Klein et al.'s (1976) results were clearly a foreshadowing of the reformulated hypothesis. Abramson, Seligman, and Teasdale (1978) essentially proposed that when helplessness is experienced, a person naturally makes causal inferences. These causal ascriptions occur over several relevant dimensions which were proposed to be orthogonal to one

another. The first dimension is internality- externality. The second dimension accounts for the fact that helplessness deficits may occur over a broad range of situations, or be restricted to a few or single situations; thus, the globality-specificity continuum. The third dimension pertains to the issue of helplessness deficits as either being long-lived and recurrent, vs. brief and transient. This is the dimension of stability-instability. Abramson et al. suggested that patterns of causal attribution which reflect more internal, stable, and global ascriptions should be more likely to resut in greater helplessness deficits, and presumably a greater likelihood for depression.

Attributional Style and Depression

The reformulation of Seligman's model was put to test by numerous researchers in search of a relationship between depression and causal attributions of life events, i.e., a "depressogenic" attributional style. One of the earliest of these studies (Seligman, Abramson, Semmel, and vonBaeyer, 1979) is remarkable in two respects. First, it represented a departure from laboratory-task based studies of helplessness/attribution phenomena, perhaps as a response to cogent criticisms of authors such as Costello (1978). Also, Seligman et al. utilized the newly designed Scale of Attributional Style, consisting of 12 hypothetical life situations, which subjects rated for internality, stability, and globality of cause.

It is the case that numerous further studies have been carried out using laboratory settings and alternative methods of measuring attributional style. However, since the present study sought to directly test extensions of Seligman's reformulation, the remaining sections of liter-

ature review will bew restricted to those studies with similar methodology to Seligman, Abramson, Semmel, and yonBaeyer (1979).

Seligman et al. (1979) administered the SAS, the Beck Depression Inventory, and the Multiple Affect Adjective Checklist (MAACL) to 143 college students. They found that relative to nondepressed students, depressed students (with BDI scores >6) attributed bad outcomes to more internal, stable, and global factors. They also attributed good outcomes to unstable, external factors compared to nondepressed students. The authors concluded that their study provided tentative support for the reformulation of learned helplessness and depression.

In a later study, Blaney, Behar, and Head (1980) reported correlational coefficients for the SAS and BDI which were less encouraging for the model. The most robust finding was that of the globality scores for negative events, shown to be correlated .30 with BDI scores. Correlational results for internality and stability dimensions, however, were appreciably lower than those found by Seligman et al. (1979). Blaney, Behar, and Head also found that depressed subjects attributed positive events to less internal and stable causes than nondepressed subjects. Although this finding was statistically significant, and supported the attributional model, the authors concluded that, as with most of their results, it was "unimpressive in absolute terms" (p.679).

Golin, Sweeney, and Shaeffer (1981) designed a more complex study which sought evidence for a "depressogenic" attributional style and sought to test the causal role of attributions for depression. To do this, they employed a cross-lagged panel correlational analysis. On two occasions separated by one month, student subjects were administered a battery of tests which included Seligman's attributional questionnaire

(SAS) and the BDI. The attributional dimensions of internality, stability, and globality were found to be correlated with depression in the predicted direction. However, the authors noted that the relationships were small in magnitude, and far smaller than those reported by Seligman et al. (1979). In the causal analysis, Golin, Sweeney, and Shaeffer found significant differences between the cross-lagged correlations for the the stability and globality measures for negative events. These findings were in accord with the view that such attributions are causes of depressive symptoms. There was, however, no support for the hypothesis that internal attributions for negative events play a similar causal role. With respect to good outcomes, Golin et al. found support for only the contention that unstable attributions may play a causal role in depression.

Metalsky, Abramson, Seligman, Semmel, and Peterson (1982) argued that the attributional model of depression should apply to the development of transient depressive affect in response to negative life events. They utilized a prospective, quasi-experimental design in a naturalistic setting, to test the hypothesis that students showing a generalized tendency to make internal, stable, and global attributions for negative events would be more likely than students not showing such tendencies to experience depressed mood upon receiving a low grade on an exam. The Scale of Attributional Style and Multiple Affect Adjective Checklist (MAACL) were administered before and after the receipt of a midterm grade. The authors found that internality and globality subscales correlated significantly with MAACL changes in the students who received low grades. That is, the analysis supported the experimental hypothesis for these two dimensions, but not for the stability subscale.

Johnson, Petzel, and Sperduto (1983) conducted an additional correlational study, which sought to improve sampling and measurement procedures, in order to help resolve inconsistencies in the earlier research. The 144 student subjects were equally distributed as to gender and race within each of four groups, depending on level of depression. Subjects completed the BDI and the SAS. The investigators found that none of the correlations in the study reached significance, thereby lending no support for the existence of a particular attributional style in depressives. Furthermore, they noted that the SAS accounted for very little of the variance in the data. Similar figures in prior research (e.g. Blaney et al., 1980) caused Johnson et al. to conclude that the effectiveness of the SAS in measuring attributional concomitants of depression should be questioned.

A later study by Johnson, Petzel, and Munic (in press) utilized the SAS and BDI and sampled from a clinical population of depressed patients. In contrast to the earlier study (Johnson, Petzel, & Sperduto, 1983), the investigators were able to demonstrate evidence for the depressogenic attributional style, particularly in the context of negative events. Johnson et al. also assessed levels of global pathology in their sample, using Peterson's signs off the MMPI. They did so in order to determine whether global pathological features in such a population were the distinctive subject characteristics which inflated the relationship between depression and attributions. Their results suggested that the depressive "style" which was observed was a function of depression per se rather than the manifestation of global psychopathology. Ultimately, this finding allowed, for the authors, a return of cautious optimism for the attributional model as a partial explanation

for depressive phenomena.

Gong-Guy and Hammen (1980) argued that studies such as Seligman et al.'s (1979) are limited in generalizability because, although they are not laboratory-task situations, they nevertheless use "hypothetical situations...with limited personal meaningfulness" (p.662). Hammen and her colleagues have explored the possibility of a "depressogenic" attributional style by using an alternative methodology which assesses causal attributions for subjects' actual life events.

Gong-Guy and Hammen (1980) sampled 65 clients in an outpatient psychology clinic. They administered the BDI, a Life Events Inventory, and the newly designed Attribution Questionnaire. The attribution measure required subjects to choose the five most stressful events from among those they listed in the Life Events Inventory, and to make causal ascriptions similar to those required by the SAS. The investigators found no important differences (between depressed and nondepressed subjects) in attributional style, when all five events were included in the analysis. However, when only the "most upsetting" event was analyzed, depressed clients made significantly more internal attributions than the nondepressed clients, and differences in globality and stability approached significance.

A later study by Hammen, Krantz, and Cochran (1981) also attempted to test the attribution hypothesis regarding depression, in the context of personally significant recent stressful events. Comparisons between nondepressed and mildly depressed (BDI>9) groups of college students on causal ascriptions were made for two specific events, and for mean attributions across all five events. The two specific events were the commonly reported issues of "starting college" and "problems in a roman-

tic relationship". In both the event-specific and general comparisons, the only dimension of causality which was significantly related to depression was globality.

An additional study with similar methodology was reported by Hammen and Cochran (1981). Their sample of 400 college students was divided into three groups based on BDI scores and reported number of stressful life events. The first group was composed of persons scoring above 16 on the BDI; the second was a nondepressed group with high levels of recent stressors, and the third was a control group of nondepressed subjects with stressors matched approximately with the depressed group. Results indicated that the three groups did not differ overall in their attributional ratings of their five most distressing events. Also, when an analysis of the subjects' single most distressing event was completed, no significant group differences in attributional style were found.

In conclusion, studies of the relationship between attributional style and depression have shown at times tentative support for the model, but are in general inconsistent in their findings. The most encouraging evidence for a depressogenic style has emerged from studies of clinical populations (Gong-Guy & Hammen, 1981; Johnson, Petzel, & Munic, in press). A fairly consistent finding in the research thus far, has been that the Negative outcome-Globality dimension is the strongest causal dimension in the attributional model.

Several methodological issues remain salient for this area of research. With the notable exception of Golin, Sweeney, and Shaeffer (1981), most studies have been correlational in design, and have not addressed the issue of causality implied by Abramson et al.'s (1978)

reformulation. Also, the question remains as to whether actual life events, as opposed to hypothetical life events (e.g. SAS) are more sensitive to attributional differences between depressed and nondepressed subjects. No research has been conducted utilizing both modes of assessment.

Incidence of Depressogenic Style in Women

Few studies have been carried out which explore the incidence of a depressogenic attributional style among specific groups of women. One study, by Peterson, Schwartz, and Seligman (1981) utilized the BDI and an expanded version of the SAS, with a group of 87 female college students. Since this study was actually a test of an alternative but related causal model (Janoff-Bulman, 1979), it did not provide direct evidence for the attributional pattern predicted by Abramson et al. (1978). However, the investigators found that external attributions for negative events were incompatible with depressive symptoms, which would be predicted by the model.

Manly, McMahon, Bradley, and Davidson (1982) studied the attributional hypothesis in the context of women's adjustment following child-birth. They administered the SAS, the BDI, the Depressive Adjective Checklist, and an experimental depression measure to 50 women whose pregnancies and births were healthy and uneventful. Attributional style and depression were assessed concurrently in the third trimester, and depression was assessed three days postpartum. Results did not support the attributional style hypothesis either as concomitant, or as predictive of depressive symptoms in their sample.

Manley et al.'s study has been criticized because it measured

depression only three days postpartum, when there are hormonal changes in all women which are potentially depressogenic. In a later study by Cutrona (1983), eighty-five women were followed from the third trimester of pregnancy through the second month after childbirth. Initial attributional style was assessed, using the six negative events from the SAS. Women were assessed for level of depression (BDI + 9) at three separate time points; during third trimester, two weeks postpartum, and eight weeks postpartum. Cutrona found that pregnancy scores on the SAS did predict level of postpartum depression among women who were not depressed during pregnancy. However, among women who were depressed during pregnancy, attributional style was not a significant predictor of depression.

In one sense, the childbirth studies can be seen as "parallels" to the efforts by Hammen and her colleagues to provide "real life", event-specific analyses for attributional style and depression. However, the results must be interpreted cautiously (in terms of generalizability), since it may be that postpartum depression is a distinct clinical entity from non-pregnancy related depression.

Sex Differences in Attributional Style and Depression

The attributional model has been examined in the course of several research investigations as having potential explanatory value for the previously observed sex difference in the epidemiology of depression (Weissman & Klerman, 1977). However, in three studies discussed above (Blaney, Behar, & Head, 1980; Hammen, Krantz, & Cochran, 1981; Johnson, Petzel, & Sperduto, 1983), no differences in male and female subjects! causal attributions for stressful life events were found.

Summary: Relevant Literature

In summary, the relevant literature reveals that the proposed relationship between attributional style and depression, as well as their relationship to gender, has generated unclear and inconsistent findings. Several reasons have been proposed to account for the inconclusiveness of the prior research. First, many authors have taken issue with the measurement of relevant variables. Hammen, Krantz, and Cochran (1978), Gong-Guy and Hammen (1980), and Johnson, Petzel, and Sperduto (1983) offered criticisms of the Scale of Attributional Style initially created by Seligman and his colleagues. Criticism has centered around two areas; first, the relevancy and personal meaningfulness of hypothetical life situations. Secondly, it has been noted that Seligman's negative life situations are primarily failure situations in achievement-Hammen and Cochran (1981) suggested that the SAS does related tasks. not address causal attributions for loss, and other kinds of personally disruptive events.

The measurement of depression has also been a target for criticism. Depue and Monroe (1978) pointed out that definitions of depression in the research have ranged from mild "blues" complaints, and transient depressive reactions (e.g. Metalsky et al., 1982) to full-blown Major Depression(e.g. Gong-Guy & Hammen, 1980). This range of description, they argue, has essentially obscured meaningful and integrative conclusions about cognition and depression.

Coyne and Gotlib (1983) have pointed out that there are always conceptual and methodological difficulties in unambiguously demonstrating "natural" processes of cognition in experimental contexts.

Lastly, the critical issue has been raised that studies of cogni-

tions. Experimenters who have "heeded this call" (e.g. Johnson, Petzel, & Munic, in press) have provided encouraging support for the attributional perspective on depression.

With respect to gender and depression, women have generally been studied as a homogeneous group, which, it is argued here, may have obscured actual differences among them, and between men and women. It may be that the "gender issue" in depression is not primarily an issue of gender, but rather of gender-role orientation. This view was proposed even in the early epidemiological literature. Weissman and Klerman (1977) suggested that elements of the *traditional* female role play an important role in the vulnerability of women to depression. Radloff and Monroe (1978) suggested that "it is plausible... that certain groups of women are less likely to have internalized the 'helplessness' aspects of femininity; for example, women who attain advanced education, high status careers, high income, and women who do not marry" (p.207). That is, Radloff and Monroe expected to see less cognitive correlates of depression in women who are socialized to be more "non-traditional".

Other precedents have been set for the study of gender-role and depression. Differences in sex-role orientation have been studied with respect to other personality variables presumably related to good adjustment, for example, self-esteem (Lobbia, 1983); Stericker & Johnson, 1977), and achievment motivation (Dweck & Goetz, 1978; Ickes & Layden, 1978; Taggart-Davies, 1980).

Finally, it has been suggested that there is a need for a more diversified model of depression which would take into account a wider variety of cognitive variables. For example, social learning literature

suggests that cognitions about consequences of stressful life events may be an additional determinant of depression. Bandura (1978; 1984) in particular writes extensively regarding self-efficacy expectations and "human despondency". Gong-Guy and Hammen (1980) envisioned "a complex, highly reciprocal interaction model of stresses, causal attributions, cognitions about consequences, and coping..." (p.668). These authors were cognizant of the need to study the relationships between depression and several cognitive dimensions simultaneously, as a beginning to specify the parameters of such a model.

Statement of the Problem

The present study was designed to further explore the capacity of the attributional model to elucidate differential patterns of cognition and depression among college men and women. It has been noted that the study of hypothetical life events (e.g. as measured by the SAS) versus subjects' actual life events is a controversial issue in attribution research. It is not clear which methodology is preferred for examining "real" effects of attributional style upon depression, since research typically uses one or the other, but not both. The present study tested major hypotheses with respect to both types of events.

In addition, the present study recognized that the focal issue in the study of gender differences in depression may actually be gender-role orientation. The literature reviewed here suggested that aspects of the "traditional" female role may be causally relevant to depression. Accordingly, a subdivision of female subjects into "traditional" vs. "non-traditional" sex-role orientations was attempted.

Lastly, critics of the attributional model of depression seem to

concur that causal attributions are probably only one of several domains of cognition which are relevant to depressive phenomena. Several authors have suggested that self-efficacy may be an additional determinant of depression, or may offset the impact of other, presumably "depressogenic" cognitions. The present study included a preliminary exploration of the role of self-efficacy with respect to attributional style, and depression.

Hypotheses

The present investigation was designed to examine the relationship between attributional style and depression in three groups of subjects: Traditional women, non-traditional women, and men. The following hypotheses pertain to this issue:

- Traditional women score higher on a measure of depression than non-traditional women.
- 2. Traditonal women report more depression than men.
- Traditional women demonstrate more internal, stable, and global attributions for negative life events than either nontraditional women or men.
- 4. With respect to positive outcomes, it is hypothesized that traditional women are more likely to attribute causes to external, unstable, and situation-specific factors than either non-traditional women, or men.
- 5. It is predicted that composite scores on the attributional style questionnaires show greater conformation to the depressive pattern in traditional, depressed women, than in depressed subjects from the other two groups.

CHAPTER III

METHOD

Subjects and Procedure

The subjects who took part in this study were 50 female and 28 male undergraduate students, age 20 and over, at Loyola University of Chicago. Most of the subjects participated in order to fulfill a requirement for an introductory psychology course in which they were enrolled. However, approximately 1/3 volunteered to participate as a result of informal recruitment from other undergraduate psychology courses. Female subjects ranged in age from 20-49 years (M = 23.50, SD = 5.90). Male subjects ranged in age from 20-39 years, (M = 22.70, SD = 4.90).

One selection criterion was decided upon for the sample. The attitudinal measures in the study surveyed opinions regarding personally relevant adult roles. For this reason, the subject sample was restricted to individuals in their post-teen years, as they were presumably closer to the "reality" of having to adopt the role behaviors which they endorsed.

Following screening for age, subjects were assembled by the experimenter in groups of up to ten individuals. They were informed that they were participating in a study of "feelings, beliefs about oneself, and the way people interpret everyday events". The subjects were then asked to complete a series of questionnaires, which took approximately 1

to 1 1/2 hours. The self-report measures were administered with counterbalancing via random starting order with rotation, to control for testing effects.

Self-Report Measures

Male subjects completed only the following four instruments:

Beck Depression Inventory. The BDI (Beck, 1967) is a 21-item multiple choice format questionnaire designed to assess level of depression.

The Self-Efficacy Scale. The SES is a 30-item rating scale which consists of a 17-item General Self-Efficacy subscale, a 6-item Social Self-Efficacy subscale, and seven filler items. (See Appendix A for content). Only the General Self-Efficacy scores were used in the present study. For information regrding the psychometric properties of this instrument, see Sherer and Maddux (1982).

The Scale of Attributional Style. The SAS (Seligman, Abramson, Semmel, & vonBaeyer, 1979) presents the subjects with 12 hypothetical life situations which have either positive, or negative outcomes. The subject provides a written causal explanation for each outcome, and then rates the cause on the dimensions of internality, stability, and globality. The scale, therefore, yields six scores; three attributional scores for positive events, and three for negative events.

The Attribution Questionnaire. This measure was adapted from the methodology of Gong-Guy and Hammen (1981) who asked subjects to choose five of their own most stressful, recent life events and make attributions similar to those required by the SAS. Thus far, persuasive evidence for a depressive attributional style in the study of actual life

events has emerged only when subjects' most stressful events are analyzed alone (Gong-Guy & Hammen, 1980). Consequently, in the present study, subjects were requested to rate only their most positive, and most distressing recent life events.

Female subjects completed all of the aforementioned instruments, as well as two others, which are described below.

Attitudes Toward Women Scale. The AWS-short form is a 25-item Likert-type scale which contains statements about the rights and roles of women in several areas (Spence, Helmrich, & Stapp, 1973). It contains items pertaining to vocational, educational, and intellectual pursuits, as well as marital relationships, dating, and sexual behavior. Items have four response alternatives, ranging from agree strongly to disagree strongly. Each item is given a score from 0 to 3, with 0 representing the most traditional and 3 the most non-traditional, profeminist response.

Feminine Interest Questionnaire. The FIQ is a research instrument which was developed by Miller (1977) and associates for use in studying the psychology of reproduction. The author described the instrument as an "attitudinal trait measure" for the assessment of dispositional orientation toward female roles. Although the FIQ contains seven subscales, one primary scale appears to reflect an overall orientation to the female role, and has been called the "Modern-Traditional Role Orientation" scale. It is this scale which was scored and utilized in the present study. (See Appendix B for content).

Female subjects also completed a brief data "face sheet", and example of which is included in Appendix C.

Design Overview

The first task of this investigation was, as proposed earlier, to subdivide female subjects into experimental groups based on gender-role orientation. The non-traditional versus traditional dimension contained in the AWS and FIQ scales provided the basis for doing so. The third experimental group consisted of 28 males.

The present investigator noted that the item content of the AWS-Short form appears to focus heavily (in 16/25 items) on contractual/legal rights and women's functioning in vocational and educational arenas. The FIQ, although it purports to measure overall "traditionality" of gender-role orientation, appears to have a different content emphasis. Because it was designed for reproductive research, many FIQ items focus upon role functioning in the home and family spheres. It also appears to have a more self-referential tone to the items than the AWS. Because of its innovative nature and relative scarcity of information regarding its concurrent validity with other gender-role measures, it was decided to include the FIQ in the operationalization of traditionality and non-traditionality for the present study.

In the present research, a significant correlational relationship in the expected direction, r (48)= .473, ρ < .001, was found between the two measures. Experimental groups were then formed by standardizing subjects' scores on each measure, forming an additive composite and then partitioning the groups based on the median split of this composite. The means and standard deviations for the two groups on the composite score are as follows: traditional, M = -.655, SD = .658; non-traditional, M = .655, SD = .419.

Design

To examine the first two hypotheses, which pertained to group differences in depression, one-way analyses of variance were used. Hypotheses 3 and 4 pertained to group differences in attributional dimensions of internality, stability, and globality. These were analyzed via a 3(traditional-nontraditional-male) by 2(positive-negative events) by 3(internality-stability-globality) ANOVA with repeated measures on the second and third factor.

For the fifth hypothesis, a 3(groups) by 2(depressed-nondepressed) by 2(positive-negative composite attributional score) ANOVA with repeated measures on the third factor was utilized. Because of a fairly small sample size, relatively more and less depressed individuals were identified by median split, rather than the customary use of a cutoff score.

Both repeated measures analyses were performed first with attributional scores from the SAS, and then with the corresponding scores from the Attribution Questionnaire.

To explore the issue of self-efficacy, several analyses were completed. One-way analyses of variance examined for group differences and gender differences in self-efficacy. A partial correlational technique was employed to evaluate the possiblity of self-efficacy as a "moderator" variable between attributional style and depression. Correlations between dimensions of causal attributions and BDI scores were computed, and the effects of self-efficacy were partialed out.

CHAPTER IV

RESULTS

Evaluation of Hypotheses

The one-way analysis of variance for group differences in scores on the BDI was nonsignificant, F (2,75)= 1.08, p = n.s. This result did not support the hypothesis that traditional women differ from non-traditional women and males in level of depression. Additional analyses were performed after re-defining group membership, based on median splits of AWS and FIQ scores alone, rather than a composite gender-role orientation score. Neither the groups defined by the AWS, F (2,75)= 0.91, p = n.s., nor as defined by the FIQ, F (2.75)= 0.68, p = n.s., revealed a significant difference in level of depression.

The analysis of group differences in attributional style, using the SAS scores, yielded no significant group main effect, F (2,75)= 1.37, ρ = n.s. The two-way interaction between attribution and subject group also proved nonsignificant, F (4,150)= 1.02, ρ =n.s. These analyses did not lend support to the hypothesis that traditional women make more internal, stable, and global attributions for negative life events, when Seligman's hypothetical life situations from the SAS were examined. Identical analyses were performed with subjects' attributional ratings of their own most distressing, and most positive recent life events, from the Attribution Questionnaire. These results were also nonsignificant, F (2,75)=0.23, ρ = n.s., and F (4,150)= 1,48, ρ = n.s., respec-

tively.

The fifth hypothesis predicted that it is more likely to observe the "depressive" attributional pattern in relatively depressed, traditional women, than in depressed subjects from the other two groups. In the analysis with attributions measured by the SAS, the relevant interaction (i.e., Subject Group x Depression) was nonsignificant, F (2.72)= 1.33, p = n.s., which did not support the hypothesis. The corresponding Subject Group x Depression interaction for the two real life events was also nonsignificant, F (2,72)= 0.70, p = n.s.

In the analysis of variance with SAS events, the main effect for Depression, summed across groups was observed to approach significance, F (1,72)= 3.74, p = .057, suggesting that depressed individuals, regardless of group membership, differ in some way in their patterns of causal attributions. A significant interaction effect, F (1,72)=10.59, p < .01, was then observed for Depression x positive-negative attributional composites. The means and standard deviations for the four conditions included in this interaction are as follows: depressed subjectspositive composite, M = 91.15, SD = 12.73; depressed subjects-negative composite, M = 81.52, SD = 11.94; nondepressed subjects-positive composite, M = 92.11, SD = 10.26; nondepressed subjects-negative composite, M = 73.25, SD = 14.09. When pairwise comparisons were completed for the four possible simple effects, the most robust finding was that the relatively more depressed subjects had significantly higher composite scores in internality-stability-globality for negative events, F (1,76)= 10.04, p < .01. This finding is supportive of the literature which suggests that there exists a "depressive" attributional style (Seligman et al., 1979). No significant differences between relatively

depressed and nondepressed subjects, F (1,76)= 0.94, p = n.s., were observed in composite attributional scores for positive events.

Self-efficacy, Attributional Style, and Depression

Preliminary one-way analyses of variance indicated that there were no significant differences in self-efficacy between traditional women, non-traditional women, and males, F (1, 76)=1.33, p = n.s.

Correlational analyses revealed significant negative correlations between Depression scores and self-efficacy, in all three subject groups $(r \{23\} = -.66, p < .001; r \{23\} = -.50, p = .01; r \{26\} = -.50, p = .006,$ respectively). This negative relationship is in accordance with the theoretical expectations of Bandura (1984). In the beginning of this investigation, no formal hypotheses were offered with respect to selfefficacy. However, this correlational finding allows for some tentative speculations. One might expect that, if depression is (theoretically) positively correlated with internal, stable, and global attributions for negative events, and depression is negatively correlated with self-efficacy, then partialing out self-efficacy should lower the relationship of the attributional dimensions with depression toward zero. Conversely, if internality, stability, and globality are presumably negatively related to depression for positive events, then partialing out self-efficacy should detract from that relationship (shift it toward zero). Table 1 summarizes the zero-order correlations between depression and attributional dimensions from both the SAS and the AQ, and those same correlations controlled for self-efficacy.

Table 1

Correlations - BDI with Attributional Dimensions from SAS and AQ; Partial Correlations - r, controlled for self-efficacy

		SAS				AQ							
	,	Ē	Positive Negative			Positiv	<u>re</u>	Nega	tive				
·		I	S	G	I	S	G	Ι	S	G	I	S	G
Traditional Women	r Par-Corr	• -	03 .28			.10	.22		26 39		.42* .38	19 13	
Nontradition Women		-		-	.28 .32	.10 .18		•	•	•	05 .09	•	.13 .22
Males	r Par-Corr			01 .08	.35 .19	.51* .39*		09 .09			.12		.43* .28

I = Internality

S = Stability

G = Globality

 $^{*\}underline{p} < .05$

First, only three zero-order correlations between attributions and depression reached significance; negative event-stability for males on the SAS, negative-Globality for males on the AQ, and negative-Internality for traditional women on the AQ. Twenty-seven of the thirty-six correlations were in the expected direction, however, which is significantly greater than would be expected by chance, X (1)= 9.00, p = .05. Because of this, the power to disconfirm the proposed theoretical relationship between attributions and depression may be questioned. However, it nevertheless renders uninterpretable virtually all partial correlations which were then generated. Two exceptions may be noted. Self-efficacy was partialed out of the significant positive relationship between depression and negative event-stability from the SAS in male subjects. Upon doing so, the correlations shifted in the expected direction, and remained significant (r (25)= .39, p = .047). Also, the correlation between negative event-Globality (from the AQ) and depression, in males, lowered to nonsignificance when controlled for the effect of self-efficacy.

Disregarding statistical significance, Chi-square analyses were performed on the observed distribution of partial correlations which shifted in the expected direction, versus those which remained unchanged, and those which shifted in an opposite direction than predicted. This distribution did not deviate from that which would be expected by chance even when attributional dimensions were collapsed into composite attributional "pattern" scores for each type of event, X(2)=2.4, p=.05. This conclusion held for both hypothetical and actual life events. To summarize, if self-efficacy does moderate the effect of depressive cognitions in general, it was not clearly demon-

strated through this analysis.

CHAPTER V

DISCUSSION

The purpose of this study was to examine the effect of gender-role orientation upon attributional style and depression, as reflected by the major hypotheses. Also, a preliminary investigation of the impact of a related cognitive variable, self-efficacy, was carried out. Accordingly, this discussion is organized into two sections. The first deals with the implications of the findings from the five hypotheses. The remaining section pertains to the examination of self-efficacy in relation to attributional style and depression.

Gender-role, Attributional Style, and Depression

The present study did not find differences in level of depression between traditional and non-traditional women. As reviewed earlier, several authors (e.g. Baucom & Danker-Brown, 1979; Radloff & Monroe, 1978) have argued that the socialization of stereotypically feminine individuals predisposes them to depression. Conversely, it has been suggested by the same authors that women who have not internalized the traditional female role are less vulnerable to depression. The results of the present analysis did not support this perpective.

Level of depression was also not significantly different between both groups of women and a third group of male subjects. Although sample limitations (discussed later) do not make this a powerfully disconfirmatory finding, it did not support the "classic" epidemiological assertion (Weissman & Klerman, 1975) that there is a gender difference in the incidence and prevalence of depression.

The third and fourth major hypotheses examined differences in attributional style between the three groups. The predictions followed from several premises. As mentioned earlier, Radloff and Monroe (1978) suggested that gender-role orientation influences the development of learned helplessness, and subsequent vulnerability to depression. If the attributional theory of depression (Abramson, Seligman, & Teasdale, 1978) is a logically coherent extension of learned helplessness theory, then one might presumably observe differences in attributional style in the context of different gender roles. It was expected that traditional women would show more internal, stable, and global attributions for negative life events than either of the other groups. With respect to positive outcomes, traditional women were expected to demonstrate more external, unstable, and specific attributions than the other two groups. Neither hypothesis was supported by the present data.

Finally, it was predicted that composite scores on the attributional questionnaires would reflect greater conformation to the depressive pattern in depressed traditional women than in depressed subjects from the other two groups. The data did not reveal evidence which supported the expectation that causal cognitions differed in the relatively more depressed members of each group. However, when the effect of group membership was eliminated, and all relatively depressed subjects were studied together, a significant finding emerged. The more depressed individuals demonstrated a significantly greater tendency to make the internal, stable, and global pattern (based on a composite score) of attributions, with respect to negative events. This finding is in gen-

eral supportive of the predictions stemming from the attributional model of depression. More pertinent for the present investigation, however, is that the finding suggests cogently that gender role may not be as crucial a concomitant of depression, or depressive cognitions, as the present author proposes.

Another goal of the current study was to determine whether hypothetical life events (from the SAS) or actual life events (AO) were differentially sensitive to attributional differences between the experimental groups. In all of the above analyses (as well as in the self-efficacy analyses to be discussed later), the AQ did not elicit any different, or more convincing results than Seligman's SAS. In fact, the one significant finding with respect to attributional style and depression was observed with attribution scores from the SAS. This is not, of course, conclusive evidence of the relative superiority of the SAS, nor should it discourage the assessment of actual life events in attribution research. In this regard, it would be rather difficult, from a theoretical standpoint, to argue that personally relevant actual life events, if assessed carefully, would not be at least similarly adequate, if not superior than hypothetical events. The present finding merely does not unequivocally demonstrate the greater sensitivity of one measure over the other. Further issues with the assessment of causal attributions are discussed below.

The results reported thus far are better understood if one examines the methodological limitations and theoretical issues raised by the assessment of the relevant variables. The following segment of discussion will focus first on the assessment of depression, secondly on attributional style, and lastly on the categorical variable of gender-

role.

Depue and Monroe (1978) summarized the abundant criticisms surrounding the classification of depressed subjects in attribution research. A particular target for this criticism is the use of the BDI as a solitary "diagnostic" tool, as was done in the present study. For example, the BDI has been criticized because it is a self-report measure, rather than a tool for "clinical observation" of depressive phenomena. The theoretical question of what subtype or subtypes of depression are being modeled by attribution theory also remains a salient issue. Seligman (1978) agreed with the essential difficulties of using the BDI, and research is beginning to use multiple criteria for the determination of depression.

In terms of the more theoretical issue, it has been suggested (e.g. Depue & Monroe, 1978) that since more robust findings have emerged when clinical populations are studied, the experience of "mildly" depressed individuals (such as those often found in college student populations) is not being modeled by attribution theory. Furthermore, it is warned, findings from such samples should not be generalized to clinically depressed populations. Seligman (1978) has countered with the argument that mild depression need not be regarded as an analog to other "more real" syndromes, but is in itself a disorder worth study. addition, evidence which supported the attributional model of depression has been reported among mildly depressed college students (Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982). Nevertheless, these issues remain at the core of debate between Seligman and his critics. Furthermore, the present study is no exception to the "tangle" of issues usually involved in the study of depressive phenomena. The sample

herein was classified on a continuum of having "relatively more" depressive symptoms than "less depressed" counterparts, based on the median BDI score (6.0). Classically, BDI-depression literature calls for an absolute division of "nondepressed" and "depressed" groups based on the theoretically acceptable cutoff score of 10, on the BDI.

The present author was unable to do so in this manner, because the ratios of depressed to nondepressed in the traditional, non-traditional, and male groups were 5/25, 10/25, and 9/28 respectively. Interpretations of results based on such limited cell sizes would have been of questionnable meaningfulness. Even with the decided-upon group division, the small sample size and lack of extreme "clinical level" scores on the BDI may have contributed to the overall lack of variance in the experimental analyses. Certainly, they limit generalizability of findings to other, dissimilar populations. Johnson, Petzel, and Sperduto (1983), as reviewed earlier, have already commented extensively on the "perils" of homogeneous college populations, where there are relatively few clinically depressed subjects. For the future, the use of a more heterogeneous sample, which is preselected on level of depression, may be a more fruitful approach. It may be added, however, that given the limitations of the present study, it is all the more surprising that the attributional difference reported earlier, between "more" depressed and "less" depressed subjects, was observed at all.

Another area of concern, with respect to the discussion of the present findings, is the assessment of attributional style. For Gong-Guy and Hammen (1980) one of the justifications for devising the AQ was that the SAS items appeared to have an inordinate emphasis on success or failure in achievement situations. Recall that the attributional

research is steeped in a tradition of examining subjects' cognitions regarding success or failure in laboratory task situations (e.g. Klein, Fencil-Morse, & Seligman, 1976). Hammen and colleagues have made the provocative suggestion that different types of causal attributions may arise from different kinds of events, i.e., that the positive-negative distinction is simply not conceptually rich enough to test the model. Unfortunately, the open-ended AQ, and in general, efforts to analyze actual life events by these investigators, have not thus far attempted to assess multiple categories of positive and negative events. example of the problems engendered; often subjects perceive as their most stressful negative event, an event such as the death of a significant other. Even though a legitimate negative event, it "pulls" for certain attributions; unless the subject is a felon, external and specific causality is necessarily ascribed. Future research might include a strategy for subdividing events into classes; for example, the negative event dimension might include loss, (victim) trauma, illness, interpersonal strife, and failure in achievement situations. Furthermore, it seems that before judgements can be made concerning the pathogenic nature of causal attributions, some subsequent methodology should be implemented to examine types of attributions which are "typically" elicited (in affectively non-disturbed individuals) by specific classes of events. As a persuasive illustration, evidence has emerged that one causal dimension, internality, may or may not be depressogenic in the context of a certain class of negative event. Janoff-Bulman (1979) and later Miller and Porter (1983) have shown that for victims of violent crime, internalizing blame may be an adaptive coping response which helps the traumatized person restore a sense of control and mastery to his or her life.

Brief mention should also be made of another issue with regard to attributional style. In a vast majority of research in attributional style and depression, the measures and the methodologies have not permitted causal inferences regarding attributions as cognitive determinants of depression. As with the present study, inferences can only be made regarding the concomitance of the two.

The third, and probably most salient area of discussion in terms of understanding the present results, is the subject categorization based on gender-role orientation. Attempts to study gender-role orientation have, over the years, yielded a bewildering array of instruments and strategies with varying degrees of integrity (Beere, 1979). task for this investigation was to arrive at some workable distinction between women whose socialization endeared them toward a more, or less traditional notion of the appropriate female role. The literature. according to Beere (1979) is characterized by three major strategies. One is to assess role-preference by examining one or more behavioral indices, for example, occupational choice. This strategy is of obviously questionnable validity, given the present-day freedom of occupational choice afforded most women and men. Also, the "status" of certain professions has changed; for example, Nursing, a traditonal female occupation, has undergone a "professionalization" process which has quite probably changed the distribution and kind of persons it attracts. In general, it can be argued that behavioral indices are of limited reliability, validity, and usefulness because of the narrow range of information involved, and lack of consensus as to their applicability at a given time in social history. Another method for assessing traditional vs. non-traditional sex role orientation has been the use of "trait" measures, such as an androgyny scale (e.g. Bem, 1974). Androgyny is defined (Gilbert, 1981) as the possession of high degrees of "masculine" and "feminine" traits. Some researchers, including the major author of the AWS (Spence, Helmrich, & Stapp, 1973) have argued that androgyny as a psychological attribute, or trait, does not dictate what roles men and women prefer, adopt, or find tolerable. The empirical evidence (see Gilbert, 1981, for summary) seems to support this view. In accordance, the present author adopted the third major strategy, which is to assess role-orientation as a set of prevailing attitudes endorsed by the individual. The Attitudes Toward Women Scale, and the Feminine Interest Questionnaire were the two attitudinal measures chosen, and were described previously.

In the present study, the relationship beween the two was found to be statistically significant and moderate, r (48)= .473, p = <.001) and statistically significant. Interestingly, the mean for the FIQ was considerably lower than the AWS (t (49)= 5.78, p < .001.). The present author speculated on the differences between the two scales which might account for this difference. The AWS is the "classic" research instrument for measuring attitudes toward the female role. It is well-validated, current, and frequently used. Typically, the AWS is referred to as an assessment device for traditional vs. "profeminist", or non-traditional orientation. However, its authors (Spence, Helmrich, & Stapp, 1973) have also been known to discuss the scale's interpretation on a conservative-liberal dimension, terms which are usually applied in the context of abstract, political ideation. Indeed, a perusal of AWS items reveals a number of rather global idealogical statements. In many areas

of psychology, differences between attitudes and behavior have been observed; this notion may have applicability for the gender-role construct as well. That is, women may hold "liberal" (in the sense of broad-based idealogical) attitudes, yet not be necessarily inclined to behave in perfect accordance with them in actual everyday role behaviors, for example in the home environment. The FIQ, as an instrument used in reproductive research, is more heavily weighted in content toward gender-role behaviors within the home and family sphere.

The present sample of women was drawn from a population of predominantly white, Catholic individuals attending a Jesuit university. Although specific data regarding religious preference and race is not available, it may nevertheless be suggested that women raised in Catholic families have, in general, been socialized with more traditional values regarding home and family role behaviors and expectations. This may help to explain the observed relationship between the AWS and FIQ scores, and it raises the issue of whether using both these measures as a "composite" gender-role assessment was appropriate for this sample. Also, if this population on the whole, is more traditional, and there are few extremely non-traditional women in the sample, the two experimental groups in the present study may have been too homogeneous to have reflected "true" differences between them, in the analyses of the major hypotheses.

An alternative interpretation of the relevance of gender role in the present study can be offered. The common report of non-traditional subjects, with respect to their future goals, was the hope of integrating home and family lives with careers. One could argue that aspects of non-traditionality are depressogenic, because this orientation involves endorsing and/or attempting to adopt multiple role behaviors, a task which is not easily accomplished. Perhaps also, it is not role preference which is itself differentially depressogenic, but that women need to feel some sense of congruence between their roles as *envisioned*, and as actually *achieved*. That is, there may be an affective component to the "formula"; if one does not feel effective or fulfilled through the exercise of one's role choice, *then* the role may become a predisposing factor in depression.

Finally, the present design focused on the shortcomings of treating females as a homogeneous population. The question can be raised, why treat males as a homogeneous population? In an era of "progressive" and "gender-neutral" child-rearing philosophies, it seems plausible to argue that there are, and will be, less stereotypically oriented males, especially in succeeding generations.

In summary, the measurement of gender-role orientation was problematic in several respects, and alternative interpretations can account for the lack of significant categorical differences observed in the present study. The issue remains, of how one can best define and measure the construct. Is role-orientation a set of behaviors, traits, or attitudes? It is plausible to argue that it involves aspects of all three, as well as an affective component. If so, a more valid strategy for future research should include a multi-method assessment procedure for gender-role orientation, rather than an arbitrary choice among several partially adequate methods.

Self-efficacy, Depression, and Attributional Style

In examining the relationship between self-efficacy, gender, and gender-role, initial findings revealed no significant differences in self-efficacy between males and females, or between experimental groups. This is particularly interesting because Radloff and Monroe (1978) suggested that the sense of competency and expectancy of effective problem solving, which are core aspects of self-efficacy, are precisely the behaviors discouraged through traditional socialization into the female role. This suggests, as did the prior discussion of the gender-role construct, that the cognitive aspects of different role behaviors are not easily specifiable. Perhaps, for example, non-traditional women tend to experience "breakdowns" in their sense of self-efficacy when the demand of multiple role behaviors are not met with success or a sense of fulfillment.

A partial correlational technique was utilized to investigate the possibility of a "moderating" effect of self-efficacy. In this analysis, only in male subjects were any attributional dimensions significantly altered by controlling for the effects of self-efficacy. Male subjects who scored higher in self-efficacy made less global and stable attributions in the face of negative life events. However, these results were not demonstrated across measures of hypothetical and actual life events. The "stability" finding occurred for the SAS only, and the "globality" finding, as measured by the AQ only. One would also have to wonder why these results occurred only in male subjects, and not across groups. In absolute terms, then, these were very limited findings which did not shed much light on the relationship between attributional style and self-efficacy, in general.

One can argue, however, that there is ample reason to investigate further. First, a significant negative relationship was demonstrated in all three groups, between self-efficacy and depression. Also, recall that the relatively depressed subjects demonstrated more "depressogenic" composite attributional scores, for negative events (as is predicted by the attributional model). In the research literature, attributional style and self-efficacy have thus far been regarded as independent cognitive variables. However, if both are related to depression, in their respective, theoretically expected manner, and partialing out self-efficacy has no significant effect, then one could argue that attributional style and self-efficacy may be tapping a similar construct. These constructs may be confounded; perhaps self-efficacy is somehow "nested" within the broader framework of attributional style. A common-sense analysis of the constructs is persuasive in this regard. For self-efficacy to be a "moderating" variable, and independent, one has to presume a low sense of controllability for the occurrence of a negative event, yet a high sense of controllability for its outcome, or resolution. self-efficacy is a relatively enduring characteristic, what is the probability of these two competing cognitive styles occurring in an individual?

In any case, the methodological limitations of the current study prevent any such meaningful conclusion, based on the available data. The need for a more sophisticated analysis, with a more clearly defined sample, is evident.

Summary

The original purpose of the present study was to elucidate the nature or the relationship between gender and depression, in the context of the attributional model of depression. Little evidence was revealed to support the author's major hypotheses regarding this relationship. Neither the study of hypothetical events nor actual (most distressing and most positive) life events yielded conclusive findings.

The single significant result pertaining to attributional style was in accordance with the general expectations of the attributional model; that more depressed individuals should demonstrate a greater tendency toward internal, stable, and global attributions for negative events. Further analyses, however, were not carried out to determine which specific dimension, or dimensions of the three accounted for the finding.

Another purpose of the present study was to provide a preliminary exploration of the relationship between self-efficacy, attributional style, and depression. Methodological limitations and the weakness of initial correlations between attributions and depression, prevented definitive interpretation of the results. It was suggested, however, that because of the theoretical implications, further study should be made of this issue.

Clearly, the most important "discoveries", from the present study, were not in the domain of statistical significance, but rather in the numerous avenues uncovered for theoretical and methodological refinement in future research. If "traveled", many of these may considerably enrich research in cognitive models of depression, as well as in the psychology of gender differences.

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Self-Efficacy Questionnaire (SES)

Instructions. This questionnaire is a series of statements about your personal attitudes and traits. Each statement represents a commonly held belief. Read each statement and decide to what extent it describes you. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the letter that best describes your attitude or feeling. Please be very truthful and describe yourself as you really are, not as you would like to be.

	Mark:								
1 = 2	B If you DISAGREE MODERATELY with the statement								
3 = 4 = 5 =	D If you AGREE MODERATELY with the statement								
,	If you AGIAL DIRONGET WITH the Sta	. C CIIICII							
1.	I like to grow house plants	1	2	3	4	5			
2.	When I make plans, I am certain that I can make them work.	1	2	3	4	5			
3.	One of my problems is that I cannot get down to work when I should.	1	2	3	4	5			
	Should,	-	_	•	•				
4.	If I can't do a job the first time, I keep trying until I can.	1	2	3	4	5			
5.	Heredity plays the major role in determining one's personality.	1	2	3	4	5			
6.	It is difficult for me to make new friends.	1	2	3	4	5			
7.	When I set important goals for myself, I rarely achieve them.	1	2	3	4	5			
8.	I give up on things before completing them.	1	2	3	4	5			
9.	I like to cook.	1	2	3	4	5			
10.	If I see someone I would like to meet, I go to that person instead of	1	2	3		5			
	waiting for him or her to come to me.	1	4	J	4	J			
11.	I avoid facing difficulties.	1	2	3	4	5			

12.	If something looks too complicated, I will not even bother to try it.	1	2	3	4	51 5
13.	There is some good in everybody.	1	2	3	4	5
14.	If I meet some one interesting who is very hard to make friends with, I'll soon stop trying to make friends with that person.	1	2	3	4	5
15.	When I have something unpleasant to do, I stick to it until I finish it.	1	2	3	4	5
16.	When I decide to do something, I go right to work on it.	1	2	3	4	5
17.	I like science.	1	2	3	4	5
18.	When trying to learn something new, I soon give up if I am not initially successful.	1	2	3	4	5
19.	When I'm trying to become friends with someone who seems uninterested at first, I don't give up very easily.	1	2	3	4	5
20.	When unexpected problems occur, I don't handle them well.	1	2	3	4	5
21.	If I were an artist, I would like to draw children.	1	2	3	4	5
22.	I avoid trying to learn new things when they look too difficult for me.	1	2	3	4	5
23.	Failure just makes me try harder.	1	2	3	4	5
24.	I do not handle myself well in social gatherings.	1	2	3	4	5
25.	I very much like to ride horses.	1	2	3	4	5
26.	I feel insecure about my ability to do things.	1	2	3	4	5
27.	I am a self-reliant person.	1	2	3	4	5
28.	I have acquired my friends through my personal abilities at making friends.	1	2	3	4	5

29.	I give up easily.	1	2	3	4	52 5
30.	I do not seem capable of dealing with most problems that come up in my life.	1	2	3	4	5

APPENDIX B

Feminine Interest Questionnaire (FIQ)

The following items are concerned with your feminine interests. Please read over each one and indicate whether you agree or disagree by circling the answers in the right-hand column. Circle ++ if you Agree Completely, and -- if you Disagree Completely. If you only Agree Somewhat, then circle +; if you only Disagree Somewhat, then circle -. We would like you to answer each item as it relates to you and your feminine interests.

	Cor	Agree mpletely	Agree Somewhat	Disagree Somewhat	Disagree Completely
1.	Having a challenging job or career is as important to me as being a wife and mother.	++	+	· _	
2.	The best thing a woman can do for her husband is to have happy children and keep a good home.	++	+	_	
3.	It can be quite natural for the woman to work and the man to stay home with the children.	++	+	-	
4.	A woman's most important role is in the home.	++	+	-	- -
5.	It is as important for me to work in the community as it is to raise a family.	++	+	<u></u>	
6.	A woman who tends to be nervous should not have more than one or two children.		+	-	
7.	Being a housewife just isn't enough to keep a woman happy.	: ++	+	-	
8.	A woman's greatest natural ability lies in being a mother.	++	+	-	
9.	I believe the husband should do as much work around the house as the wife.	i + ++	+		

	Co	Agree ompletely	Agree Somewhat	Disagree Somewhat	Disagree Completely
10.	A woman who doesn't want a lot of children is probably a little selfish.	++	+	_	
11.	Women should spend less time trying to make com- fortable, happy homes for their husbands.	++	+		
12.	Women who spend a lot of time and energy outside the home are probably not very good mothers.	++	+	- .	
13.	Women can be just as good as men at things like business, logic, and politics.	++	+	-	
14.	A woman should limit the size of her family in order to give more to each child.	++	+	_	
15.	It is difficult for a woman to have a career and still keep up her femininity.	ı ++	+	-	
16.	Raising a family is only a small part of being a woman	· ++	+		
17.	It is important for a woman to limit the number of children she has so that sh can be a better wife.		+	-	
18.	Women should avoid politics and community activities and put more time into doing a better job with their own families.		+		
19.	A husband and wife should spend equal time in raising the children.		+		

		Agree mpletely	Agree Somewhat	Disagree Somewhat	Disagree Completely
20.	I would not respect myself if homemaking was all that I did.	++	+		
21.	There is nothing more fulfilling to a woman than the raising of her children.	++	+	_	
22.	A woman should devote a lot of her time to satis-fying her husband.	++	+	-	
23.	If a woman is going to develop her full potential, she must limit the number of children she has.	++	+	-	
24.	I feel that I can be as creative through artistic expression or through some favorite pastime as I can through raising children.	++	+	_	
25.	I believe that homemaking is more exciting and challeng- ing than most men's jobs.	6 ++	+	_	
26.	A husband has more respect for his wife if she has a career.	++	+	-	
27.	It is perfectly natural for a woman not to want any children.	++	+	_	
28.	I like to compete with men in many of the things that I do.	++	+	_	
29.	A woman shouldn't try to plathe birth of each and every one of her children.	an ++	+	_	

		Agree Completely	_	Disagree Somewhat	Disagree Completely
30.	A woman's grestest creativity lies in being wife and mother.	a ++	+	_	,
31.	A woman must get married to feel completely ful-filled.	++	+	_	:



(FACE SHEET)

College Major:	 Age	
	Sex	

In a few sentences, please indicate what your plans are after leaving Loyola; for example, where you may live, your personal, academic, and/or professional goals, etc.

Of the goals you have mentioned above, which are of the highest priority, i.e., will be more important to accomplish sooner?

APPROVAL SHEET

The thesis submitted by Karen M. Latza has been read and approved by the following committee:

James E. Johnson, Ph.D. Professor of Psychology, Loyola University

Patricia A. Rupert, Ph.D. Director of clinical training, Loyola University

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

4-16-86

Date

Director's Signature