

Gender Differences in Depression: An Examination of Chronic Life
Conditions,
Personal Mastery, and Coping

by

Jaye M. Miles

A thesis
presented to the University of Manitoba
in fulfillment of the
thesis requirement for the degree of
Doctor of Philosophy
in
Psychology

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GENDER DIFFERENCES IN DEPRESSION:
AN EXAMINATION OF CHRONIC LIFE CONDITIONS, PERSONAL MASTERY, AND COPING

BY

JAYE M. MILES

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

DOCTOR OF PHILOSOPHY

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ABSTRACT

This study examined two psychosocial theories explaining the higher rates of depression in women. The social-role theory suggests that the preponderance of depression in women is due to their greater exposure to role-related stressors. Conversely, the sex-role theory suggests that women are more vulnerable than men to the development of depression, because they have been socialized to be more helpless and to use less effective coping behaviors. One-hundred and ninety men and 211 women responded to a mail-survey sent to 800 married residents of Winnipeg, Manitoba. Measures were included to assess the following: (a) chronic life conditions in the areas of marriage, finances, jobs and parenting; (b) methods of coping with problems in these areas; (c) role-related distress; (d) sense of control over environmental forces (personal mastery); (e) health status; and (f) depression. Data were analyzed using hierarchical regression analyses, with variables included according to an assumed causal order. Personal control was, overall, more significant than chronic life conditions in accounting for depression. However, there was no gender difference in personal mastery. While there were no gender differences in the experience of chronic financial or parental conditions, men reported more job-related conditions, and women reported more chronic marital conditions. Chronic marital conditions emerged as having the strongest relationship to depression, compared to other role-related conditions. Results are discussed in terms of the relative merits of the social-role and sex-role hypotheses. Future research directions are suggested.

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INTRODUCTION

There is general agreement that rates of depression are higher in women than in men. Several theories have been posited to account for these gender differences. These have included biological theories and psychosocial theories. Weissman and Klerman (1977, 1985) concluded that although women may be more biologically vulnerable to depression, this difference is not sufficient to account for observed gender differences. Psychosocial theories generally posit two hypotheses, namely differential exposure to stressors (e.g., Aneshensel & Pearlin, 1987) and differential vulnerability. The latter is most strongly articulated by Radloff (1975, 1980) in terms of learned helplessness.

General theories of depression largely focus on the same areas as psychosocial theories of gender differences in depression. There is considerable evidence for the relationship between stress and depression. Although life event stress has been a prime focus of research, there are extensive methodological problems in this area. Further, some evidence suggests that more chronic, persistent life strain may be more strongly related to depression than stressful life events. Regardless of the type of stressor measured, the relationship demonstrated between stress and depression has often been of low magnitude. As a consequence, many researchers have focused their attention on various vulnerability factors that may moderate or mediate the stress-depression relationship. These have included coping resources like generalized control beliefs, as well as coping responses.

The empirical research examining gender differences in life stress and coping has inadequately tested psychosocial theories of gender differences. The research examining life event stress has included few gender comparisons. In addition, the scope of scale items may underrepresent stressors more frequently occurring to women and, therefore, may not reflect actual differences in exposure to stressors. With regard to the stress research in general, examinations of gender differences have generally failed to consider gender differences in the types of stressors experienced while taking into account their overall relationships to depression. In addition, there have been few studies that directly examined the relationship of gender differences in control beliefs and coping responses to gender differences in depression. Further, few studies have examined both the importance of exposure to stressors and vulnerability to stressors in contributing to gender differences in depression.

This study will examine the relationship between gender and depression, with a particular focus on the contributions of gender differences in exposure to chronic life conditions, in control beliefs, and coping strategies. It will attempt to shed further light on the two major psychosocial theories of gender differences in depression, as well as more general theories relating life stress and coping to depression. The following discussion will examine gender differences in depression; the relationships between life stress, coping, and depression; and gender differences in these relationships.

Gender Differences in Depression

Evidence for Gender Differences in Depression

Depression is the most common psychiatric problem in the adult population (Hirschfeld & Cross, 1982; Weissman, Myers, & Harding, 1978). A recent review of the literature reported estimates of 17% to 20% for life-time prevalence, and 5% to 8% for one-year prevalence of depressive disorders (Murrell, Himmelfarb, & Wright, 1983; Radloff, 1977). It is estimated that only 20% to 34% of individuals who suffer from depression receive treatment (Barrett, Hurst, DiScala, & Rose, 1978). In light of its high prevalence relative to other mental health problems and its low treatment rates, depression represents a significant health problem in our society. Further, one of the most consistent findings in the epidemiological literature on mental illness is that females outnumber males by approximately 2:1 in rates of depression. This has been found both in studies examining rates of treatment and diagnosis (Belle & Goldman, 1980; Dohrenwend & Dohrenwend, 1976; Weissman & Klerman, 1985; Weissman & Myers, 1978; Von Zerssen & Weyerer, 1982), as well as in community surveys (Amenson & Lewinsohn, 1981; Aneshensel, Frerichs, & Clark, 1981; Craig & Van Natta, 1979; Eaton & Kessler, 1981; Frerichs, Aneshensel, & Clark, 1981; Radloff & Rae, 1979; Roberts & O'Keefe, 1981; Rosenfield, 1980; Von Zerssen & Weyerer, 1982; Weissman & Klerman, 1977).

Treatment data. In their examination of data regarding admissions, discharge, and diagnosis for various psychiatric facilities, Belle and Goldman (1980) reported fairly consistent gender differences in depression. For

each facility (private mental hospitals, outpatient psychiatric services, state and county mental hospitals, community mental health centers, and general hospitals) the percentage of female patients diagnosed with depressive disorders was higher than the percentage of male patients diagnosed with depressive disorders. The utilization rate was higher for females than males in all age groups, with the exception of 25-34, in which rates for males exceeded those for females at state mental hospitals.

In their review of 34 studies reporting sex ratios for treated depressives between 1936 and 1973, Weissman and Klerman (1977) concluded that a consistent ratio of 2:1 (females to males) exists across studies from the United States and other industrialized countries. This was true in studies of hospitalized cases as well as those of outpatient clinics. Von Zerssen and Weyerer (1982) examined clinical data from outpatients and inpatients seen at the Max Planck Institute between 1969 and 1978. Female rates exceeded male rates in all types of depressive disorders.

There has been continued debate in the literature as to whether gender differences in treatment rates are a result of gender differences in true prevalence or whether they are due to gender differences in help-seeking behavior (Dohrenwend & Dohrenwend, 1977; Gove, 1978; Gove & Swafford, 1981; Kessler, Brown, & Beaman, 1981). Dohrenwend and Dohrenwend (1977) reviewed 12 studies and suggested that extrapsychiatric factors were largely responsible for the higher treatment rates of women. However, Gove and Swafford (1981) examined the same data and concluded that there is no reason to believe assume that psychiatric treatment rates of women were inflated due to their greater propensity to seek help. Gove (1978) found that, when controlling for level of impairment or perceived need, females were no more likely to seek help than men.

Kessler and his colleagues (1981) divided help-seeking behavior into three stages: (1) problem recognition, (2) perception of need, (3) seeking help. They analyzed data from four large-scale surveys and concluded that males and females do not differ in their likelihood of perceiving themselves as needing help or seeking help once a problem is recognized. Women, however, are more likely to translate their distress into problem recognition. Using a mean decomposition analysis, Kessler et al. divided the observed differences in the proportion of men and women who recognized themselves as having personal problems into several components. The first component represented the part of the gender difference due to real differences in self-reported morbidity. The second component represented a gender-related bias, whereby women were more likely to translate feelings of depression into problem perception. From their analysis, Kessler et al. concluded that 10% to 28% of the observed difference in problem recognition was due to bias (i.e., the same feelings are more likely to lead women to perceive themselves as having a personal problem). However, they also found that 46% to 78% of the gender difference in problem recognition was due to the higher levels of true psychological distress in women. Thus, although gender differences in help-seeking may in part result from a gender difference in problem recognition, it is to a greater extent due to gender differences in self-reported symptoms.

In summary, the treatment data indicate that rates of diagnosis and treatment for depression are greater in women than in men. There is some indication that part of this gender difference is the result of differences in help-seeking behavior. However, gender differences in help-seeking behavior are insufficient to account for differences in treatment rates.

Evidence indicates that gender differences in treatment and diagnosis of depression are largely due to real gender differences in rates of depression.

Community surveys: Self-report. In response to criticisms of the potential biases involved in treatment data, results from community surveys have been taken as evidence for the female preponderance in depression. In their review of 14 community surveys, Weissman and Klerman (1977) concluded that, with the exception of bereavement, women predominate in depression in all countries and over all time periods. Sex ratios ranged from 1.6:1 to 3.8:1 (females to males). More recent studies report similar findings. Craig and Van Natta (1976) found that, for a community sample of 1672 individuals, the prevalence of depressive symptoms as measured by the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977) was higher in females than in males. Radloff and Rae (1979), using the same measure, found that depressive symptom scores were higher in females than in males. In a community survey of 1000 individuals, Aneshensel et al. (1981) measured depressive symptoms using the CES-D and found that, overall, women reported significantly more depressive symptoms than did men.

In two large community samples of over 35,000 individuals, using the CES-D, Comstock and Heising (1976) found higher rates of extreme levels of depressive symptoms in white females than in white males. They found no gender differences in blacks. In a national sample of 2867 individuals, Eaton and Kessler (1981) found that rates of extreme depressive symptoms were higher in women than in men. Using the cut-off score of 16 on the CES-D as the criterion for depression (Myers & Weissman, 1980; Weissman & Klerman, 1978; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977),

Eaton and Kessler (1981) found that 20% of the females in their sample and 10% of the males scored above the cut-off. These findings were similar to those of Comstock and Heissing (1976). Frerichs and his colleagues (1981), using the same procedure to identify possible "cases," found that rates of extreme depressive symptoms were higher for females than males (23.5% vs. 12.9%, respectively). In analyzing data from an earlier survey, Kessler (1979) found that females were more distressed (anxious and depressed) than males and were significantly more likely to report symptoms of extreme distress (19.9% vs. 11.6%, respectively).

A few studies, however, do not report overall gender differences in depression. In a community sample of 1026 individuals, Cleary and Mechanic (1983) found significant gender differences in depression as measured by the Psychiatric Epidemiology Research Interview (PERI) (Dohrenwend et al., 1980) only between married men and women. Although women scored higher than men in other marital categories, these differences were not statistically significant. Sample sizes in these other categories, however, were small. Moore and Husaini (1983) found no overall gender differences in their sample of 713 married individuals. Employed women reported significantly more depressive symptoms than did men (as measured by the CES-D). Similarly, in their sample of 965 individuals, Husaini and colleagues (1982) found no gender differences in depression. These two studies differ from the previous studies cited in that both samples consisted of entirely rural populations. Factors related to characteristics of rural populations may have minimized gender differences.

Although results from community surveys generally support the claim that rates of depression are higher among women than men, these studies have

also been criticized on several grounds. It has been argued that women report more symptoms than do men because it is more socially acceptable and sex-role congruent for them to do so (Cooperstock, 1978; Philips & Segal, 1969). Therefore, gender differences may be the result of a reporting bias.

Gove and his colleagues (Clancy & Gove, 1974; Gove & Geerken, 1977; Gove, McCorkel, Fain, & Hughes, 1976) measured three types of response bias. These included perceived desirability or undesirability of psychiatric symptoms, need for approval, and tendency to "yeasay" or "naysay." Gove and his colleagues found that, in all but one case, controlling for response bias had no effect on reports of either men or women. In the one exception, controlling for response bias resulted in an increase in the rates of women. Gove (1980) concluded that "the higher rates of reports of psychiatric symptoms among women are not an artifact of sex differences in response bias" (p. 352). Al-Issa (1982) concluded that studies of gender differences in reporting do not clearly demonstrate that the tendency of women to report symptoms is an artifact of gender role rather than actual experience.

Newmann (1984) suggested that higher rates of depression in women as measured in community surveys result from a measurement artifact. She argued that instruments typically used in community surveys confound mild and transient forms of distress, such as reports of mild dysphoric mood, with symptoms suggestive of clinical depression. Further, since women are more likely to report dysphoric mood such as sadness, their scores on such measures would be inflated. In her factor analysis of the PERI, Newmann found a four-factor model best fit the PERI scores. The PERI measured a

general depressive syndrome. However, it also measured three other factors, including worthlessness, guilt, and sadness. In her analysis of gender differences on the factor scores, Newmann concluded that the high PERI scores of women were largely the result of higher levels of sadness among women than men.

On the other hand, the results of the studies previously cited (Comstock & Heissing, 1976; Eaton & Kessler, 1981; Frerichs et. al., 1981; Kessler, 1979) are not consistent with Newmann's (1984) argument. In order to score above 16 on the CES-D, one must either exhibit many of the symptoms on the scale (not just sad affect) or exhibit a few symptoms for a long duration (not transient). As already indicated, results from these studies indicate higher rates of depression for women.

In conclusion, evidence from community surveys using self-report measures of depression indicates that depressive symptomatology is more prevalent in women than in men. These findings have been attributed, by some, to response bias or measurement artifact. Other evidence is inconsistent with these interpretations and supports the interpretation that gender differences in reported symptoms are the result of gender differences in rates of depression.

Community surveys: Diagnostic interviews. The most definitive response to criticisms of both treatment data and community surveys using self-report measures comes from community surveys using diagnostic criteria in the identification of depression. Weissman and Myers (1978) used the Schedule for Affective Disorders and Schizophrenia (SADS) (Endicott & Spitzer, 1978) and the Research Diagnostic Criteria (RDC) (Spitzer, Endicott, & Robins,

1978) to diagnose depression. The SADS is a semi-structured, standardized interview schedule used to assess the presence of a variety of diagnostic symptoms associated with depression and schizophrenia. The RDC is a system of decision rules for differential diagnosis. The RDC forms the basis for the Diagnostic and Statistical Manual (DSM-III) of the American Psychiatric Association (1980). It, therefore, provides a more stringent assessment of depression than do self-report measures.

Weissman and Myers (1978) found that women had higher rates, both current and lifetime, of major and minor depressive disorders than men. Also using the SADS and RDC, Amenson and Lewinson (1981) found that a significantly higher percentage of women than men met the RDC criteria for a diagnosis of unipolar depression at the initial interview (11.4% vs. 5.1%, respectively) and at follow-up (12.8% vs. 7.1%, respectively). This difference occurred largely because women with a history of depression were more likely than men to develop a new episode of depression. Using the DSM-III, Boyd and Weissman (1981) found that the lifetime risk for depression was higher for women than men (5-26% vs. 2-12%, respectively). Several large studies, collectively called the Epidemiologic Catchment Area Studies, assessed approximately 20,000 community residents across the United States. Using DSM-III criteria, women were two to three times as likely as men to be depressed (cited in Cleary, 1987; Weissman & Klerman, 1985). Findings from these studies could not result either from biases in reporting symptoms or from the failure to measure other than mild transient dysphoric mood. These results are consistent in suggesting a female preponderance in depression.

In summary, results from various types of data including treatment data, data from community surveys using self-report measures, and data from clinical interviews using diagnostic criteria, all report similar findings. Although data from treatment studies and community surveys have each been criticized on different grounds, their findings are generally the same. Further, results from studies using diagnostic criteria and clinical interviews are not subject to the same criticisms. Overall, the high consistency of findings across different methods and different populations provides strong evidence that rates of depression are higher in women than in men.

Explanations for Gender Differences in Depression

Various theories have been suggested to account for gender differences in depression. Biological theories include explanations related to genetic transmission, the menstrual cycle, oral contraceptives, the postpartum period, and menopause. Psychosocial theories include explanations related to stress and sex roles.

Biological theories. Klerman and Weissman (1980) reviewed the evidence pertaining to the hypothesis that women are biologically susceptible to the development of depression. With regard to the genetic transmission of depression, they concluded that "there is insufficient evidence from genetic studies yet to draw conclusions about the mode of transmission or to explain the sex differences in depression" (p. 400). They also reviewed the the endocrinological evidence and concluded:

The pattern of the relationships of endocrine to clinical states is inconsistent. There is good evidence that premenstrual tension and use of oral contraceptives have an effect to increase rates but these effects are probably of small magnitude. There is excellent evidence that the postpartum period does induce an increase in depression. Contrary to widely-held views, there is

good evidence that the menopause has no effect to increase rates of depression. There is little evidence to relate these mood changes and clinical states to altered endocrine balance or specific hormones...While some portion of the sex differences in depression, probably during the child-bearing years, may be explained endocrinologically, this factor is not sufficient to account for the large differences (p.405).

More recently, Weissman and Klerman (1985) noted that "new endocrine data...suggest that female endocrine physiology may be a fruitful area of research" (p.419). In a similar review, Nolen-Hoeksema (1987) concluded that there is no consistent evidence that observed sex differences in depression are due to women's greater genetic predisposition or to hormonal differences. There is substantial research on biological theories of gender differences in depression. However, it will not be further elaborated here, as the present research focuses exclusively on psychosocial theories.

Psychosocial theories. Psychosocial theories account for gender differences in depression by arguing that women's position and roles in society, and the ways they have been socialized, lead them to be at particularly high risk for depression (Carmen, Russo, & Miller, 1981; Gove, 1980; Gove & Tudor, 1973; Klerman & Weissman, 1980; Radloff, 1980; Radloff & Rae, 1981). The two best articulated and most popular theories are what I will call the "social-role hypothesis" and the "sex-role hypothesis."¹

The social-role hypothesis argues that, due to the social roles women occupy in society, particularly in relation to family and work, their lives are more stressful than those of men (Aneshensel & Pearlin, 1987; Gove & Tudor, 1973; Gove, 1980).

¹ Gore and Mangione (1983) also use the terms "social-role" and "sex-role" to explain gender differences in depression. Their meanings are not the same as in the present context. Aneshensel, Frerichs, and Clark (1981) use the term "social-role" in a similar manner as used here.

Gove (1980) argued that married women's lives are more stressful compared to married men because the roles they occupy are less satisfying, less rewarding, and more frustrating than those men occupy. Men have two sources of gratification, their families and their work outside the home. This is less commonly the case for women. Further, even when women work outside the home, they are usually in a less satisfactory position than men in terms of remuneration and responsibility commensurate with their education and skill. Gove also stressed that employed married women are often under greater strain than married men because, in addition to their jobs, they perform the majority of household chores. The explanations offered by Gove focus on "role strain" and "role overload" (Gove, 1972; Gove & Tudor, 1973; Gove & Geerken, 1977). Much of the research in this area, however, has focused on indicators of role status like marital status, employment status, and number of children (Cleary & Mechanic, 1983; Gove & Geerken, 1977).

Aneshensel and Pearlin (1987) argue that role occupancy, as identified by such indicators like marital, employment, or parental status, is important primarily because it determines the ranges of potentially stressful experiences. Role occupancy, in itself, is not critical to the stress process. Rather, it increases the chance of exposure to some stressors and precludes the presence of others. Aneshensel and Pearlin emphasize the different experiences men and women may encounter with similar roles (e.g. as spouses, parents, or workers).

The sex-role hypothesis basically argues that women's socialization into "femininity" makes them particularly vulnerable to depression (Radloff, 1975; Radloff & Monroe, 1978; Radloff & Rae, 1981; Rothblum, 1983). Clini-

cal descriptions of depression include feelings of helplessness, hopelessness, reduced activity, passivity, discouragement, sadness, and retarded ability to learn adaptive responses (Radloff & Monroe, 1979). Rothblum (1983) argued that women are socialized to behave passively and helplessly. Consequently, they develop only a limited repertoire of responses to stress.

Several theories highlight the importance of helplessness, and limited or ineffective coping responses, in the development of depression. These include Beck's (1974) cognitive theory of depression, reinforcement theories of Ferster (1974) and Lewinsohn (1974), McLean's (1976) model of depression, and Seligman's (1974) learned helplessness theory. Beck's cognitive theory focuses on the belief that one has no control over rewards and punishments. Similarly, Seligman focuses on the lack of control over rewards and punishments. Reinforcement theories emphasize the low frequency of reinforcement of active coping in depressed people. McLean's (1976) model suggests that "depression is a consequence of ineffective coping techniques used to remedy situational life problems" (p.69). He further suggests that, over time, repeated goal frustrations (failure in coping) lead to feelings of lack of control, which lead to anticipation of chronic failure, and, finally, to depressive symptomatology. These models highlight the use of ineffective coping and consequent expectations of failure as central to the development of depression.

Radloff (1975, 1980) suggested a mechanism for a learned susceptibility to depression. In her view, the cognitive dimension of depression, which includes beliefs of having no control over reinforcers (Beck, 1974; Seligman, 1974), is seen as a learned susceptibility factor which makes women

particularly vulnerable to the development of depression. These beliefs could be learned by experience in uncontrollable situations (Seligman, 1974) or more indirectly by a past history of low rates of reinforcement (Ferster, 1974). This would lead to an impoverished response repertoire so that problem-solving skills would not be available. Such reduction in successful problem-solving would lead to generalized expectations of failure. Radloff suggested that this susceptibility factor remains dormant until activated by a precipitating factor. At this point the cognition would lead to the expectation of failure of problem-solving attempts, which would in turn reduce the probability of adequate problem-solving behavior and, ultimately, to depression. Radloff (1980; Radloff & Monroe, 1978) argues that there are gender differences in this learned susceptibility, as men are given more contingent reinforcement (Maccoby & Jacklin, 1974) and are reinforced more for achievement and competence (Radloff & Monroe, 1978). In short, women are given more "training in helplessness" (Radloff, 1980).

In summary, these psychosocial theories argue that (a) women's lives are more stressful than are men's lives and/or that (b) women are more susceptible to depression because they either perceive themselves to have, or do have, less control over their environments than do men (i.e., are more helpless). Further, because of their learned or real helplessness they use less active, instrumental coping behaviors when under stress. Implicit in these theories is that life stress, helplessness, and coping behaviors are related to depression. The remainder of this discussion will focus on the relationship of life stress, expectations of control (or helplessness), and coping behaviors to depression, followed by evidence for gender differences in these relationships.

Stress

Although the concept of stress has been the focus of science and medicine for centuries (Selye, 1982), there is generally little agreement as to the definition of the term (Paterson & Neufeld, 1987). Selye (1982) defined stress as the "nonspecific response of the body to any demand" (p. 472). Spielberger (1976) suggested that the term stress indicates the objective stimulus properties of a situation. Lazarus and his colleagues (Folkman, 1984; Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984) view stress as a relationship between the person and the environment in which the demands of the environment tax or exceed the resources of the person. Endler and Edwards (1982) concluded that stress has been defined as a stimulus, a response, and an intervening state of the individual. Given the diversity of definitions of the term "stress," it is important to explicate the model of stress upon which the present research is based.

The conceptualization of stress used here is based on that of Cox (1980), and that of Lazarus and his colleagues. Within these models, stress is defined neither as a stimulus nor as a response. Rather, it is defined in terms of the relationship between individuals and their environment. Stress is viewed in terms of the disparity between individuals' perceptions of environmental demands and their perceptions of their resources to handle such demands. These perceptions are determined by a variety of factors including appraisal processes, actual demands, actual resources, past history, and personality traits. Once a situation of stress exists, a short term stress response may result (e.g., feelings of distress like worry, fear, concern, tension, physiological arousal). Continuation of stress

responses may lead to more long term negative health conditions such as depression or physical illness (Coyne & Lazarus, 1980). These aspects of the model will be further developed as the relevant research is reviewed in the following discussion.

Stressful Life Events and Depression

The bulk of the research examining the relationship between stress and depression focuses on stressful life events. With the development of the Social Readjustment Rating Scale (SRRS) (Holmes & Rahe, 1967), a method to quantify stressful life events, there has been a proliferation of research in this area. Based on the average rating of a large group of subjects, each life event item in the scale is assigned a life change unit score representing the average amount of social readjustment required by the event. A total life stress score is computed by summing the life change units for all events (Holmes & Rahe, 1967). The rationale behind this methodology is that the higher the life stress score, the higher the likelihood of developing some physical or psychological problem (Rahe, 1974). Implicit in this scale is that events are stressful because they lead to change. Change is seen as fundamentally intolerable to the organism (Cannon, 1935; Selye, 1956).

Substantial research demonstrates a positive relationship between the occurrence of stressful life events and depression (e.g., Billings, Cronkite, & Moos, 1983; Brown & Harris, 1978; Lloyd, 1980; Nezu, 1986; Sandler & Lakey, 1982; Tennant, Bebbington, & Hurry, 1981). In comparing depressed patients and a community control group, Billings et al. (1983) found that depressed patients had experienced significantly more negative life events

in the past year than nondepressed controls. In his review of the research relating life events to the onset of depression, Lloyd (1980) concluded that depressed patients experience more stressful events in the months that precede onset of depression than do nondepressed or schizophrenic people. Tennant et al. (1981) reported similar results. Negative life events in the areas of health, finances, and interpersonal relationships have been found to be 3 to 6 times more common among depressed persons than in controls from the general population (Brown & Harris, 1978). Amenson and Lewinsohn (1981) found stressful life events were significantly related both to the diagnosis of depression and to scores on the CES-D. Phifer and Murrel (1986) found loss events and health problem events in the past six months discriminated between depressed and nondepressed older adults. The depressed group experienced significantly more loss events and health problem events than did the nondepressed group. Other studies have found significant correlations between stressful events (usually within the past six months or one year) and the report of depressive symptoms (Billings & Moos, 1982; Husaini & Neff, 1981; Kaplan, Robbins & Martin, 1983; Lefcourt, Miller, Ware & Sherk, 1981; Lin & Dean, 1984; Sandler & Lakey, 1982; Warheit, 1979; Wheaton, 1983). Many authors agree that there is sufficient evidence to conclude that there is a positive relationship between stressful life events and clinical depression (e.g., Dean & Lin, 1977; Dohrenwend & Dohrenwend, 1978; Rabkin, 1983). Rabkin (1983) concluded "it has been demonstrated sufficiently often that some relationship exists between life events and depressive disorder" (p. 581).

The aforementioned studies can be criticized, however, on their use of retrospective or cross-sectional designs, which make the etiological sig-

nificance of stressful life events questionable (Dohrenwend & Dohrenwend, 1978; Monroe, 1982; Rabkin, 1982). On the other hand, several longitudinal studies have also found positive relationships between stressful life events and depressive symptoms (Billings & Moos, 1982; Cohen, McGowan, Fooskas, & Rose, 1984; Dean & Ensel, 1982; Lin & Ensel, 1984; Nelson & Cohen, 1983). Holahan and Moos (1981) found a significant correlation between negative life events and depressive symptoms after controlling for initial symptom levels. Cohen et al., (1984), as well as Billings and Moos (1982), found similar results after controlling for initial symptoms. Nezu (1986) found that negative life events were significantly related to later depressive symptoms after controlling for initial levels of depression. Using a prospective design, Monroe and his colleagues (Monroe, Bromet, Connel & Steiner, 1986) found that, for a sample of married women who were relatively asymptomatic (from depression), life events were significant predictors of depressive symptoms assessed one year later. Similarly, Holahan and Moos (1987) found negative life events to significantly predict subsequent depressive symptoms after controlling for initial levels of depression.

Although evidence from both cross-sectional and longitudinal data are consistent in finding a significant relationship between life events and depression, there are numerous criticisms of this research area. There are numerous conceptual and methodological problems with life event measures. Researchers disagree on the salient characteristics of life events and the appropriate scoring procedures. Whereas Holmes and his colleagues (Holmes & Masuada, 1974; Holmes & Rahe, 1967; Rahe, 1974) argue that change per se is the important element in stressful life events, others argue that it is

the undesirability of the event that is important (Brown, 1974; Kale & Stenmark, 1983; Mueller, Edwards, & Yarvis, 1977; Paykel, 1974; Ross & Mirowsky, 1979; Vinokur & Selzer, 1975). Still others have focused on the controllability of events (Husaini & Neff, 1981; McFarlane, Norman, Streiner, Roy, & Scott, 1980; Perris, 1984; Sandler & Lakey, 1982). Along another dimension, some researchers advocate the use of weighted scoring procedures, either standardized normative weights (e.g., Dohrenwend, Krasnoff, Askenasy, & Dohrenwend 1978; Holmes & Rahe, 1967; Horowitz, Shaefer, Hiroto, Wilner, & Levin, 1977; Myer et al., 1972), or subjective individualized weights (e.g., Hinkle, 1974; Sandler & Lakey, 1982; Sarason, Johnson, & Siegel, 1978; Vinokur & Selzer, 1975). Others seriously question the need to weight life events and advocate a simple count of experienced life events (e.g., Grant, Sweetwood, Gerst, & Yager, 1978; Kale & Stenmark, 1983; Lei & Skinner, 1980; McFarlane et al., 1980).

Other criticisms focus on the relationship between life events and outcome measures, like depression. These have included the confounding of items on the scale with the dependent measure, resulting in items either being themselves manifestations of disorder or consequences of the disorder (Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984; Perkins, 1983; Tausig, 1982; Thoits, 1982). They also include issues of construct (Perkins, 1983) and content (Perkins, 1983; Rabkin, 1983) validity.

Another major criticism of this research area relates to the utility of stressful life events in predicting disorder. Although significant relationships are consistently found between stressful life events and depression, the correlations are typically small (e.g., 0.30 or less), accounting for less than 10% of the variance) (Dohrenwend & Dohrenwend, 1981; Grant,

Patterson, Olshen & Yager, 1987; Rabkin & Streuning, 1976; Sarason, de Monchaux, & Hunt, 1975; Tausig, 1982).

In an attempt to address a number of the methodological concerns raised regarding life event measures (including scope of item content, multidimensional structure, confoundedness with dependent variables, objective-subjective scoring, and desirability), Tausig (1982) systematically tested the effect of varying the evaluation of life events on these dimensions. He found that even when different ways of evaluating life events were considered, the relatively small relationship to depressive symptoms (as measured by the CES-D) did not improve substantially. Tausig (1982) reported a correlation of about 0.21 between life events and depression (accounting for 4.4% of the variance in depression scores. He concluded:

the life event concept as measured with the Holmes and Rahe instrument (even when methodological issues are considered) does not appear to be a very powerful predictor of depressive symptoms. From this, one may conclude either that the life event measures are tapping inadequately a useful concept or that the concept is measured effectively but has little direct effect on depression score outcomes (p. 63).

In an attempt to address this issue, many researchers have begun to refocus their efforts. Some have started to conceptualize and measure life stress in a different manner (e.g., Ilfeld, 1976a; Kanner, Coyne, Schaefer & Lazarus, 1981; Pearlin & Schooler, 1978), while others have focused on examining factors that may moderate or mediate the stress-disorder relationship (Andrews, Tennant, Hewson, & Vaillant, 1978; Coyne, Aldwin & Lazarus, 1981; Dean & Lin, 1977; Johnson & Sarason, 1978). These new approaches are examined below.

Chronic Life Conditions and Depression

While studies using life event scales focus only on major discrete events, the occurrence of which may be stressful, other studies focus on stressful occurrences or conditions which are an ongoing aspect of everyday life. Some researchers examine "daily hassles," defined as ongoing minor events and everyday occurrences which may be stressful (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner et al., 1981; Lazarus, 1980). In contrast, others examine persistent strain or conditions associated with people's social environments and social roles (Ilfeld, 1976a; Moos, 1984; Pearlin & Schooler, 1978). Ilfeld (1976a) calls these "current social stressors" and defines them as those circumstances of daily life considered to be problematic or undesirable. Pearlin's "chronic life strain" is similarly defined (Pearlin & Schooler, 1978).

Moos and his colleagues (e.g., Billings, Cronkite, & Moos, 1983; Billings & Moos, 1984; Moos, 1984) focus on stressful aspects of people's social environment, such as strain associated with work, family, home environment, and health. Pearlin and his colleagues (Ilfeld, 1976a, 1976b, 1977; Pearlin, 1982; Pearlin, Lieberman, Menaghan, & Mullan, 1981; Pearlin & Schooler, 1978; Ilfeld, 1976a, 1976b, 1977) largely focus on strains associated with work, parenting, marriage, and finances. It should be noted that these researchers do not deny the importance of major life events as stressors. They have, however, broadened the conceptualization and measurement of stressors. For purposes of this research, stressors which include more chronic and persistent strains associated with people's social environments and social roles will be called "chronic life conditions."

There is some indication that chronic life conditions may be more powerful predictors of disorder than are life events. Kanner et al. (1981) found that daily hassles were better predictors of psychological symptoms than were major life events. Using the same scale, Flannery (1986) found that daily hassles were more strongly correlated with depression than were life events. Dohrenwend et al. (1984), however, argued that the "hassles" scale (Kanner et al., 1981) is severely confounded with measures of psychological symptoms. Monroe (1983), addressing some of these issues, controlled for initial symptom levels and still found that hassles were better predictors of psychological symptoms than were major life events. Lazarus (1984) noted, however, that the problem of confounding was not entirely eliminated in Monroe's (1983) design.

In their examination of adults with unipolar depression, Billings and his colleagues (Billings et al., 1983; Billings & Moos, 1984) found that chronic strains involving work, personal health, home environment, and family were somewhat more strongly related to depression severity than were negative life events. Wheaton (1983) measured both acute stressors (negative life events) and chronic stressors and found that the latter were better predictors of depression than the former. Makosky (1982) measured stressful life conditions in several areas including education, employment, living environment, law, parenting, friends, family, intimate relations, health, and money. In addition, stressful life events were measured. Stressful life conditions were more strongly related to depression, as well as to other measures of psychological well-being, than were life events. Makosky also noted that the event-distress correlation was of the same magnitude as those typically published in other studies ($r=0.25$). Strain in

the areas of finance, intimate relations, health, family, and friends had the highest correlations with depression. Multiple regression analysis revealed that life events added nothing to the predictability of depression that could not be subsumed under life conditions. The above studies suggest that the assessment of chronic life conditions associated with people's social environments and roles may be more fruitful than the assessment of stressful life events in the examination of the relationship between stress and depression.

Using six of the nine scales developed by Pearlin and his colleagues (Illfeld, 1977; Pearlin & Schooler, 1978), Illfeld (1977) examined the relationship between depression and chronic conditions in the area of homemaking, neighborhood, job, finances, parenthood, and marriage. Overall, chronic conditions were significantly correlated with depression in both men and women. However, correlations of each condition with depression differed depending upon employment or marital status category. For example, marital conditions were significantly more strongly correlated with depression in employed married men than were parental or job conditions. Employed married women, however, were equally affected by parental and marital conditions. Together, stressors in the areas of marriage, finances, parenthood, and neighborhood explained approximately 25% of the variance in depression. Current marital conditions had the highest correlations with depression. Parenting, job, and finances had moderate correlations.

In a longitudinal study examining financial conditions, coping resources, and depression, Pearlin et al. (1981) found that changes in economic conditions were significantly correlated with changes in depression. They

also examined the impact of negative life events involving job disruption (being fired, laid off, downgraded, or having to leave work because of illness) on depression. While they found these events to be significantly related to depression, further analysis revealed that much of the impact of life events on depression was largely the result of their negative impact on economic conditions. Further, the direct impact on depression was greater for changes in economic conditions than for job disruption events.

In summary, there has been relatively less focus on chronic life conditions compared to life events in the examination of life stress and depression. However, there is some indication that chronic life conditions may bear a stronger relationship to depression than do life events. Further, some chronic life conditions seem to have a stronger relationship to depression than do others. Some researchers (e.g., Pearlin 1983; Pearlin et al., 1981) even suggest that the impact of life events on depression is largely due to the impact these events have on more enduring life conditions.

Coping

One of the clearest conclusions in the literature examining the relationship between stressful life experiences and disorder is that not all experiences are equally stressful to all people and not all people will manifest disorder in response to stressful experiences (Billings & Moos, 1984; McFarlane et al., 1983; Wheaton, 1983). As a consequence, the last decade has seen an increasing interest in explanations involving the joint effects of stressful life experience and coping (Caplan, 1981; Coyne, Aldwin, & Lazarus, 1981; Folkman & Lazarus, 1986; Johnson & Sarason, 1978;

Kessler & Essex, 1982; Kobasa, Maddi, & Courington, 1981; Lazarus & Launer, 1978; Lefcourt, Miller, Ware, & Sherk, 1981; Moos & Billings, 1982; Pearlin & Schooler, 1978; Wheaton, 1983).

Models of Coping

Throughout its history, coping has been conceptualized in various ways. From a psychodynamic perspective, coping has been viewed in terms of defensive or ego processes (Haan, 1977; Vaillant, 1977). These conceptualizations define coping on an evaluative basis with regard to whether or not responses are successful, mature, or pathological. For example, Vaillant (1977) ordered defense processes from primitive to mature according to their "relative theoretical maturity and pathological import" (p. 80). Haan (1977) ranked ego processes as indicating ego failure, defense, or coping according to their adherence to an objective reality. These conceptualizations are not without problems, however. The definition of ego processes as coping is dependent upon the outcome and, therefore, precludes an examination of its relation to adaptational outcome. Further, such conceptualizations define coping in terms of tension reduction and the maintenance of emotional equilibrium (Cohen & Lazarus, 1979) while ignoring other important aspects of coping, such as problem-solving (Janis & Mann, 1977).

Personality researchers have sought to measure those aspects of the self-concept that provide intrapersonal resources in handling adverse environmental events (Wylie 1979). The most common of these trait measures are self-efficacy (Bandura, 1977), sense of mastery (Pearlin & Schooler, 1978), and locus of control (Rotter, 1966). These trait concepts have been criticized for their assumption of cross-situational consistency (Bowers, 1973;

Magnusson & Endler, 1977) and their assumption that coping is a unidimensional construct (Folkman & Lazarus, 1980; Lazarus, 1981). However, it is also acknowledged that person factors such as efficacy, locus of control, and sense of mastery may serve as a perceptual lens or set and, therefore, influence coping (Folkman, 1984; Moos, 1984). These concepts will be discussed below.

Coping responses. Several authors have conceptualized coping in a different fashion (Billings & Moos, 1984; Coyne & Lazarus, 1980; Folkman & Lazarus, 1980; Lazarus & Launier, 1978; Pearlin & Schooler, 1978). They define coping as the cognitive and behavioral efforts made to master, tolerate, or reduce environmental and internal demands, and conflicts among them (Billings & Moos, 1984; Kessler, Price & Wortman, 1985; Lazarus & Folkman, 1984; Lazarus & Launier, 1978; Pearlin & Schooler, 1978). Thus coping is not defined by the success or outcome of the strategy but by the intent of the responses used, and by whether the responses are cognitive or behavioral.

Within this conceptualization, coping has been classified in several ways. Moos and his associates (e.g., Billings & Moos, 1982, 1984) have classified coping into three general domains according to their functions. Appraisal-focused coping represents cognitive attempts to define the meaning of the situation and, thereby, prevent stress. Problem-focused coping consists of active behavior that seeks to modify or eliminate the source of stress, to deal with the tangible consequences of a problem, or to actively change the self and develop a more satisfying situation. Emotion-focused coping includes cognitive and behavioral responses whose primary function is to manage the emotions aroused by stressors and, thereby, maintain

affective equilibrium. Within each of these domains, types of strategies are further categorized to include a total of nine types of coping responses. As noted by Billings & Moos (1984), these categories are not necessarily mutually exclusive.

Lazarus and his colleagues (e.g., Coyne & Lazarus, 1980; Lazarus & Launier, 1978) divide coping into two main categories. Instrumental or problem-focused coping includes efforts to deal with the source of stress, whether by changing one's problem-maintaining behavior or by changing environmental conditions. Emotion-focused coping refers to efforts aimed at reducing emotional distress. Lazarus and his colleagues do not include a separate appraisal-focused coping category. In their conceptualization, the significance or meaning of an event or situation is determined by cognitive appraisal processes. As such, cognitive appraisal is not seen as a coping process per se. Primary appraisal refers to the cognitive process of evaluating the significance of an encounter in terms of harm, loss, threat, or challenge (Coyne & Lazarus, 1980; Folkman, 1984; Folkman & Lazarus, 1986). Secondary appraisal involves the evaluation of coping resources, options, and constraints. Appraisal processes influence the types of coping responses initiated and the energy expended in coping (Folkman, 1984). For example, whether a person appraises a situation as a threat or challenge would influence the types of coping responses initiated. There is some overlap between Lazarus's appraisal processes and Moos' appraisal-focused coping.

Pearlin and his associates (e.g., Pearlin & Schooler, 1978; Pearlin et al., 1981) divide coping responses into three separate categories. These include: (a) responses that change the situation out of which stressful

experience arises, (b) responses that control the meaning of the stressful experience after it occurs but before the emergence of stress, and (c) responses that function more for the control of stress itself after it has emerged. The first category most closely resembles Moos' problem-focused coping. The second is similar to Moos' appraisal-focused coping. The last is most similar to Moos' emotion-focused coping.

In summary, various researchers conceptualize coping in a similar manner. An integration of these models offers a comprehensive description of the function of various coping responses, and provides an elaboration of the stress model articulated to this point. Primary and secondary appraisal serve to determine individuals' perceptions of environmental demands and resources to handle these demands. Further, when perceived demands outweigh perceived resources, a situation of stress results. Given a situation of stress, coping responses are initiated. Which coping responses are used is determined, to a certain extent, by appraisal processes. Coping responses are of three different types. Problem-focused coping are behavioral strategies which serve to alter the actual environmental demands. Appraisal-focused coping responses serve to alter the perception of demands, and are cognitive problem-focused strategies. Emotion-focused coping responses manage the stress response once it has already occurred. These may be either cognitive or behavioral in nature. Whereas the former two types of coping serve to reduce imbalance between perceived resources and demands, the latter serves to manage distress arising from this imbalance.

Coping resources. Several authors have distinguished between coping resources and coping responses (Billings & Moos, 1984; Kohn, 1972; Moos,

1984; Pearlin & Schooler, 1978). Resources refer not to what people do, but, instead, to what is available to them in developing their coping repertoire (Pearlin & Schooler, 1978). Coping resources have been conceptualized in terms of environmental (or social) and personal (or psychological) resources (Antonovsky, 1979; Billings & Moos, 1982; Folkman, Schaefer & Lazarus, 1979; Wheaton, 1983). Environmental resources are represented by social networks, including family, friends, coworkers, neighbors, and voluntary organizations. These networks can provide information, tangible assistance, and emotional support (Belle, 1987; Liem & Liem, 1978; Schaefer, Coyne & Lazarus, 1982; Thoits, 1986).

Personal coping resources refer to a complex set of personality, attitudinal, and cognitive factors that provide the psychological context for coping (Folkman, 1984; Moos, 1984; Wheaton, 1983). These include generalized beliefs that can be drawn upon to sustain hope, skills for problem-solving, self-esteem, and morale (Folkman, 1984). These are analagous to what was earlier described as trait measures of coping. Such psychological resources are seen as affecting the appraisal processes (Cohen & Lazarus, 1983; Folkman, 1984; Moos, 1984) and the choice of coping responses and the effort expended in coping (Billings & Moos, 1982; Lazarus & Folkman, 1984; Folkman, 1984; Pearlin & Schooler, 1978).

Different researchers focus on different personal coping resources. For example, Wheaton (1980, 1983) focuses on "fatalism" (as measured by a subset of Rotter's [1966] I-E scale) and "flexibility." Kobasa (Kobasa, 1979; Kobasa et al., 1981) focuses on "hardiness" (locus of control and a sense of power). Pearlin (Pearlin & Schooler, 1978; Pearlin et al., 1981) focuses on "mastery," "self-esteem," and "self-denigration." All these

researchers have in common a focus on some generalized belief about control. As noted by Folkman (1984), generalized beliefs about control are among the most important psychological resources that influence both primary and secondary appraisal, as well as the differential utilization of coping responses.

Coping and Adaptational Outcome

Coping responses and coping resources are hypothesized to reduce stress and the consequent distress (short-term stress response). Ultimately, they are believed to impact upon long-term health. The following discussion will review the evidence for the effectiveness of coping responses, and generalized control beliefs (one specific personal coping resource), in reducing distress in general and depression in particular.

Coping Responses and Distress. Some evidence suggests that certain coping responses are more effective than others in dealing with stress. Elman & Gilbert (1984) reported that higher effectiveness, in dealing with role conflicts between professional and parental roles, was related to increased role behavior, including active strategies like working more efficiently and planning time more carefully. Gilbert and Holahan (1982) found that highly effective copers (self-rated) used different coping strategies than ineffective copers. Highly effective copers used perspective-taking (similar to Pearlin & Schooler's [1978] positive comparison) to a greater extent and situational withdrawal to a lesser extent than did ineffective copers. In contrast to Elman & Gilbert (1984), they found no differences in problem-solving.

In an examination of coping with childbirth, Westbrook (1979) found that working class women were less likely to use strategies of confrontation and instrumental coping, and more likely to use fatalistic mechanisms, than were middle and upper class women. These differences were associated with significantly higher levels of distress (fear, anxiety, and depression) in working class women. These findings are consistent with the interpretation that instrumental coping behaviors lead to a minimization of distress while fatalistic mechanisms maintain distress or perhaps even exacerbate it.

Pearlin and Schooler (1978) found that different coping strategies were associated with low levels of distress in different areas of strain. In coping with marital strain, self-reliance (vs. advice-seeking), controlled reflectiveness (vs. emotional discharge), self-assertion (vs. passive forbearance), making positive comparisons, negotiation, and low selective ignoring were associated with low levels of distress. In coping with parental strain, positive comparison, self-reliance (vs. advice seeking) low levels of selective ignoring, and nonpunitiveness were associated with low distress. In coping with financial strain, devaluation of money, high levels of selective ignoring, positive comparisons, and optimistic faith were associated with low distress. In coping with occupational strain, substitution of rewards and positive comparisons were associated with low distress.

These results suggest that different types of coping are effective for dealing with different types of strain. In the area of parenting and marriage, coping behaviors aimed at confronting problems both behaviorally and cognitively in a self-assertive and calm (vs. aggressive and explosive) manner was associated with less distress. Advice seeking, which may be

considered a problem-focused strategy (Moos, 1984), was not associated with less distress. It may be that people only seek advice as a last resort, when problems are completely out of hand and distress is at its peak. The pattern was different for financial and occupational strain. With regard to financial strain, cognitive strategies aimed at changing the meaning of the situation and cognitive avoidance were associated with lower distress. With regard to occupational strain, cognitive strategies aimed at changing the meaning of the situation were most effective. It may be that in situations in which people have little control (or feel they have little control), like finances or jobs, cognitive strategies aimed at avoidance or changing the meaning of the situation are more effective than attempts at active problem-solving.

These results are consistent with Parkes' (1984) findings that individuals endorsing an internal locus of control increased use of suppression and decreased use of direct coping in situations that they perceive as out of their control. Similarly, Folkman and Lazarus (1980) noted that individuals are more likely to employ defensive or emotion-focused coping in response to stressors they appraise as having little potential for amelioration.

Using longitudinal data on chronic marital conditions and coping strategies, Menaghan (1982) found that negotiation and optimistic comparisons reduced marital distress, whereas selective ignoring and resignation exacerbated distress. Negotiation was not directly related to distress, but was related only through the effects of initial marital conditions. The other coping behaviors had direct effects on distress. With regard to the relationship of coping to later problems, Menaghan found that, with dis-

tress held constant, both negotiation and optimistic comparison significantly reduced later marital conditions. In contrast, neither selective ignoring nor resignation directly influenced the level of later problems. They did affect later problems, indirectly, through exacerbating distress. Only optimistic comparisons significantly reduces both felt distress and later problems. Menaghan's findings highlight an important issue. Conclusions about effectiveness of coping may depend on how and when effectiveness is measured. Different coping strategies may be differentially effective depending upon whether one is measuring level of distress, level of problems, satisfaction, psychological symptoms, or physical symptoms (Cohen & Lazarus, 1983; Billings & Moos, 1982). They may also be differentially effective depending upon whether one is measuring short-term or long-term outcomes (Cohen & Lazarus, 1983; Moos & Billings, 1982).

Several conclusions are warranted from studies examining the relationship between coping responses and distress. Coping responses differ in their effectiveness in reducing distress. Further, which coping responses are most effective in reducing distress is dependent upon the type of situation. Active problem-focused coping responses seem to be most effective for marital and parental distress, whereas appraisal-focused strategies seemed more effective for financial and occupational distress. These differences appear related to the controllability or perceived controllability of the strain. Finally, although certain coping responses may be effective in reducing distress, they may not be effective with regard to other outcome measures. The following discussion will, therefore, examine the relationship between various coping responses and symptoms of depression.

Coping responses and depression. Several studies have identified depressed and nondepressed individuals and compared them in their use of different coping responses. Coyne, Aldwin, & Lazarus (1981) found that depressed and nondepressed individuals differed in their use of coping strategies in dealing with stressful episodes. Depressed people used more wishful thinking, seeking of emotional support, and help-seeking/avoidance. Depressed and nondepressed individuals did not differ in terms of problem-focused coping, self-blame, or minimization of threat. This latter finding is inconsistent with a view of depression as involving passivity and self-blaming. Folkman and Lazarus (1986) found that individuals with high levels of depressive symptoms use more confrontation, self-control, and avoidance. They also accepted more responsibility and sought more social support than individuals with low levels of depressive symptoms. Folkman and Lazarus found no differences between the groups in their use of problem-solving strategies. Billings, Cronkite, and Moos (1983) found that depressed and nondepressed individuals differed in their use of problem-focused and emotion-focused coping. Depressed individuals used significantly more information-seeking and emotional discharge, and less problem-solving, than nondepressed individuals. Billings and Moos (1984) found that problem-solving and affective regulation were associated with less severe depression, while emotional discharge and cognitive avoidance were linked to more severe depression.

The aforementioned studies suggest that depressed and nondepressed individuals differ in their use of coping responses. However, due to the cross-sectional nature of the data, the direction of causality is unclear. Depression may lead to the use of different coping responses, or alterna-

tively, use of different, less effective, coping responses may lead to depression.

Several longitudinal studies have also examined the relationship between depression and coping responses. Moos (1984), reporting results from earlier studies, found that the use of avoidance (a combination of appraisal-focused and emotion-focused) coping was linked to subsequent depression, after controlling for initial levels of depression. Holahan and Moos (1987) found the use of avoidance coping significantly predicted subsequent levels of depression (one year later), but only when initial levels of depression were not taken into consideration. This suggests that although prior use of avoidance (combination of appraisal-focused and emotion-focused) coping may lead to later depression, its effects may be redundant when initial levels of depression are taken into consideration. Parker, Brown, and Blignault (1986) found that greater initial use of self-consolation and distraction were related to less improvement in depressive symptoms, while greater use of affect reduction was related to greater subsequent improvement in symptoms.

In summary, the most consistent finding regarding the relationship between coping responses and depression is that use of avoidance coping is positively related to depression. Depressed persons are also more likely to turn to others to meet their needs than are nondepressed persons. There do not seem to be consistent differences between depressed and nondepressed persons in their use of problem-focused coping. Although the causal relationships are unclear, there is some evidence to suggest that appraisal-focused and emotion-focused coping responses, aimed at avoidance, may lead to subsequent higher levels of depression.

Generalized Control Beliefs

The concept of "beliefs about control" is central to current cognitive theories of depression (Abramson, Seligman, & Teasdale, 1978; Beck, 1974; Beck, Rush, Shaw, & Emery, 1979; Garber, Miller, & Seaman, 1979; Miller & Norman, 1979; Seligman, 1975). Central to Seligman's (1975) learned helplessness model of depression is that learning that outcomes are not contingent upon one's behavior leads to the expectation of an inability to control future outcomes (learned helplessness) and, ultimately, to symptoms of depression. The centrality of "helplessness" in the etiology of depression is also evident in many noncognitive theories of depression (Becker, 1977).

Since his original explication of the learned helplessness model, Seligman (Abramson, Seligman, & Teasdale, 1978) has presented a revised model incorporating elements of attribution theory (Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971). A similar model was proposed by Miller and Norman (1979) independent of Seligman's work. Attribution theory postulates that an individual's causal attributions influence his or her expectations for probable outcomes of future performance. The revised model suggests that depressive-prone people tend to attribute negative outcomes in their lives to internal, stable, and global factors (e.g., ability), whereas nondepressed people tend to attribute negative outcomes to more external, unstable, and specific factors. Internal, global, and stable attributions lead to negative expectancies to control future outcomes. Consistent with this model, Beck (1974) asserted that depressed people believe they are deficient, inadequate, or unworthy. Moreover, they tend to attribute their negative experiences to physical, mental, or moral defects (i.e., internal, stable, and global causal factors).

The learned helplessness model emphasizes two types of control beliefs. The first, external attribution of control, refers to the expectancy that future outcomes are outside one's control. The second, internal attribution of blame, refers to the causal attributions made regarding failure experiences (e.g., internal, stable, and global factors). Miller and Norman (1979) make a similar distinction when they define their conception of locus of control, in contrast to Seligman's (1975) concept of response-outcome independence. They state "in a typical learned helplessness study subjects may perceive that their responses do not influence outcomes (external locus of control) but may assign causality for this to an internal source" (internal locus of blame) (p. 110). Thus, individuals may simultaneously believe that they are responsible for failure and, because this failure is due to unchangeable internal attributes, that they cannot control future outcomes.

Whereas the attribution of internal blame and noncontingent outcomes is one possible cause of an expectancy for lack of control, it is not the only one. Some have argued that external blame can also result in a sense of helplessness (Radloff & Monroe, 1978). Bandura (1977) argued that people develop efficacy expectations on the basis of information from several sources, including experience, instructions, and observation. Therefore, beliefs in external control may have a variety of causes. The learned helplessness model is just one explanation for development of these beliefs and, ultimately, to development of depression.

Control beliefs and depression. The above discussion has suggested that beliefs about control are causally related to depression. In particular, people who do not feel they control stressors in their lives (external

locus of control) will be more vulnerable to becoming depressed. As will be illustrated, there is some empirical evidence to support this view. Different researchers have measured and labelled this concept in different ways. Some have labelled it external locus of control (Rotter, 1966), some a low sense of mastery (Pearlin & Schooler, 1978), some fatalism (Wheaton, 1980), some a low sense of personal competence (Dean & Ensel, 1982), and some helplessness (Moore & Husaini, 1983). All of these measures, however, purport to assess a similar construct, that is, individuals' perceptions of their ability to control the outcomes of environmental forces that impinge upon them. The following discussion will review the empirical literature examining the relationship between control beliefs and depression.

Kilmann and his colleagues (Kilmann, Laval, & Wanlass, 1978) found that, although externals and internals (Rotter, 1966) did not differ in the number of life events experienced over a two-year period, externals reported greater difficulty in psychological adjustment to these events than did internals. Johnson and Sarason (1978) predicted that the frequently documented relationship between life stress and depression would only be found for individuals endorsing an external locus of control. Consistent with their predictions, a significant positive correlation was found between negative life events and depression for externals but not for internals. Similarly, Husaini and Neff (1981) found that higher life event scores and external locus of control were related to greater symptoms of depression. They also found that locus of control decreased the event-depression relationship. Their results support the hypothesis that locus of control moderates the relationship between negative life events and depression.

Sandler and Lakey (1982) found that the correlation between negative life events and depression was higher for externals than internals, although for both groups the relationship was significant. Turner and Noh (1988) found that locus of control was significantly related to psychological distress, including depression. They further found that there was a significant effect for locus of control at all stress levels, but only for middle class women. They concluded that the relationship between personal control and distress is complex.

Kessler and Essex (1982) found mastery to be significantly related to depression, with high mastery associated with low levels of depression. They also found that mastery decreased the relationship between stress and depression. This was true for economic strain, homemaking strain, and parental strain. Dean and Ensel (1982) found that competence was significantly related to depression and the negative relationship between competence and depression varied with regard to the number of life events experienced (life event by competence interaction). However, these findings were not consistent across age groups or sex. Nelson and Cohen (1983) found that locus of control was significantly related to psychological distress, including depression, with external locus of control associated with higher measures of distress. No stressor by control interaction was found.

In a series of experiments, Lefcourt et al. (1981) found that both life events and locus of control were significantly related to depression. In each study they found significant interactions between life events and locus of control in predicting depression. The exact nature of these interactions differed depending on the type of stressor. When negative events were more temporally distant, the nature of the interaction was sim-

ilar to those previously reported. However, this was not the case when the stressful life events were more recent. Under high stress conditions externals and internals did not differ in their reports of depression. Under low stress conditions, externals reported significantly more symptoms than did internals.

Warren & McEachren (1983) found that, for a sample of adult women, perceived life control was significantly correlated with depression. In comparison to other variables (accomplishments, derived identity, and social support), perceived life control was the most strongly related to depression. Wheaton (1983) found that, in the face of many stressors, a reduction in fatalism reduces reports of depressive symptoms. Although this was true for both chronic and acute stressors, the effect was stronger for acute stressors. Pearlin and Schooler (1978) found that a sense of mastery significantly reduced the relationship between life strain and feelings of distress in the areas of marital strain, parental strain, financial strain, and job strain.

More recently, Elliot, Trief and Stein (1986) found that their "high mastery group" reported significantly less depressive symptoms than their "moderate" or "low" mastery groups. Similarly, Folkman, Lazarus, Grun, and Delongis (1986) found low mastery to be significantly related to higher symptoms of depression. Turner and Wood (1985) found mastery to be the most powerful predictor of depression as compared to chronic strain, life events, social support, and coping strategies. Higher levels of mastery were significantly related to lower reported levels of depression.

As is evident from the empirical findings, the nature of the relationship between stressors, general beliefs about control, and depression are complex. Most studies report a direct relationship between external locus of control or lower mastery and greater depression. Most stressor by control belief interactions support a stress-moderating effect of control beliefs. Further, some have found that these relationships are dependent upon the age or gender of subjects, or the type of stressor.

Control beliefs and coping responses. Interest in control beliefs and depression (as well as other disorders) is largely based on the premise that these beliefs influence the types of coping behaviors used, which in turn, directly and indirectly, determine adaptational outcome (Fleishman, 1984). The following discussion will review the evidence relating control beliefs to the use of different coping responses.

It has been suggested that individuals endorsing high beliefs of control and those endorsing low beliefs of control differ in their use of problem-focused versus emotion-focused coping behaviors. Phares, Ritchie, & Davis (1968) found that internals were more willing to take action to deal with problems than were externals. Anderson (1977) found that, in comparison with externals, internals were likely to employ more task-centered and fewer emotion-centered coping behaviors. Strickland (1978) cited studies noting that people with an internal locus of control are more likely than people with an external locus of control to engage in an information search about disease and health maintenance when it is relevant to their well-being. They are also more likely to perform preventive behaviors like wearing seat belts and going to the dentist for checkups.

Parkes (1984) also found that direct coping (problem-focused) was significantly related to locus of control, with internal locus of control associated with greater use of direct coping. There was no relationship between locus of control and suppression. Suppression identified a tendency to suppress thoughts about a problematic situation, or to inhibit action. In addition, Parkes found that appraisal of the situation mediated the relationship between locus of control and coping behaviors. For internals, both problem-focused coping and suppression were related to appraisal whereas, for externals, this was not the case. The more a situation was perceived as outside their control, internals tended to decrease amounts of direct coping and increase amounts of suppression. This was not the case for externals. Further, in response to situations appraised as amenable to change, internals reported high levels of direct coping and low levels of suppression, whereas externals reported high levels of suppression and low levels of direct coping. Parkes' results suggest that internals may be more flexible in their use of coping behaviors than externals and that their coping behavior may be more effective, because their coping responses match their appraisal of the situation.

Fleishman (1984) found mastery was related to use of different coping responses. High levels of mastery were associated with the use of positive comparison and direct action in occupational coping, and positive comparison in parental coping. Low levels of mastery were associated with (a) passive acceptance and selective ignoring in marital coping, (b) resignation, selective ignoring, and self-reassurance in parental coping, (c) optimistic faith in financial coping, and (d) reward substitution and selective ignoring in occupation coping. Fleishman's findings illustrate

the different coping behaviors used by those with a high and low sense of mastery. In all areas, low levels of mastery were associated with using appraisal-focused and emotion-focused coping. High mastery, however, was not always associated with active problem-focused coping. Although direct action, in occupation, was related to high mastery, other problem-focused behaviors like negotiation in marriage, and budgeting were not associated with high levels of mastery. There was some relationship between high mastery and the use of problem-focused coping. High mastery people tended to use predominately problem-focused coping relative to other types of coping. Elliot, Trief, and Stein (1986) found similar results. Their high mastery group reported less use of some appraisal-focused and emotiona-focused coping strategies than their moderate or low mastery groups. However, they found no differences in use of problem-focused coping.

In summary, these studies suggest that individuals with low control beliefs tend to use more appraisal-focused and emotion-focused coping than individuals with high control beliefs. Individuals with high control beliefs use some problem-focused coping responses to a greater extent than do individuals with low levels of control beliefs. Some problem-focused coping responses were not used to a greater extent by individuals with high control beliefs, as compared to those with low control beliefs. High mastery individuals seemed to be characterized by their predominate use of active problem-focused coping relative to appraisal-focused and emotion-focused coping. Results further indicate that individuals with high control beliefs may be more flexible than those with low control beliefs in their use of the various coping responses. The former, in contrast to the latter, may tend to vary their coping according to the perceived controllability of the situation.

Control beliefs, coping responses, and adaptational outcome. To this point, I have reviewed the evidence relating coping responses to control beliefs, to distress, and to depression. I have also reviewed studies relating control beliefs to distress and to depression. Only two studies (Pearlin et al., 1981; Ilfeld, 1980) have examined the relationship between control beliefs, coping responses, and either distress or depression.

Ilfeld (1980b) examined mastery, psychological symptoms including depression, distress, and coping responses in the areas of parenting, marriage, finances, and jobs. He found that, except regarding finances, rationalization was simultaneously related to low mastery, high symptom levels, and high feelings of distress. Acceptance of parental and financial strain was simultaneously related to low mastery, high symptom levels, and high levels of distress. Findings regarding the use of active problem-focused coping were inconsistent. In marriage, action was related to high mastery, low symptom levels, and low levels of distress. In finances, the opposite was true. Action was related to low mastery and high distress. In the job arena, action was related to high mastery but was also related to high distress and high symptom levels.

Using longitudinal data, Pearlin et al. (1981) examined the relationship between depression, changes in economic strain, mastery, and two appraisal-focused coping responses. These were devaluation of money and positive comparison. Appraisal-focused coping was related to low levels of depression. They found the use of these coping responses was indirectly related to decreases in depression levels. The use of these strategies was associated with decreases in economic strain and increases in mastery, which in turn impacted on levels of depression. The authors concluded that coping

responses impacted on depression by decreasing economic strain and bolstering one's sense of mastery. Unfortunately, their analyses did not assess whether initial levels of mastery influenced the types of coping responses subsequently used.

These findings suggest that mastery and psychological symptoms are linked by the use of certain coping responses. In parenting, marriage, and finances, low mastery and high symptom levels were related to using some emotion-focused and appraisal-focused coping responses. In contrast, when coping with financial conditions, using appraisal-focused coping was related to high mastery and low symptoms. Data from Pearlin et al. (1981) suggests that coping may function in two manners, namely by influencing the level of strain and by influencing subsequent levels of mastery. These would, in turn, impact on distress and symptom levels. Their data, however, did not provide information regarding the impact of initial levels of mastery on the use of different coping responses.

Coping: Summary

There are several conclusions warranted from the literature examining the relationship between control beliefs, coping, and adaptational outcomes. First, evidence indicates that various coping strategies may not be equally effective in different role areas. These differences may be related to the actual or perceived controllability of the stressors (Folkman, 1984). Importantly, the results indicate that, for situations that are controllable or perceived as controllable, active problem-focused coping responses are associated with positive outcomes, whereas appraisal-focused and emotion-focused strategies were associated with negative outcomes.

Second, the strategies associated with positive outcomes were associated with a high sense of control, whereas those associated with more negative outcomes were related to a sense of lack of control. Even in those role areas where the most effective strategies was either emotion-focused or appraisal-focused (i.e., occupational strain, financial strain), these strategies were associated with a high sense of control.

A note of caution is in order at this point. Except for two studies (Menaghan, 1982; Pearlin et al., 1981), this research is cross-sectional in nature, thus precluding causal inferences. All of these studies, however, are based upon some causal model and assumptions regarding the direction of causality. For example, in studies examining the relationship between stressful life events, locus of control, and depression, it is assumed that a sense of personal control reduces the effect of stress because it predisposes the individual to use certain coping strategies that are more effective in reducing the impact of stressors. Although some support has been provided for this model, other models are possible.

Conceptual Model

Figure 1 outlines the conceptual model of stress and coping developed throughout the previous discussion. The figure presents the major relationships among factors affecting depression. As is illustrated in Figure 1, environmental demands (chronic conditions) and personal resources (generalized control beliefs) may lead to a situation of stress, which in turn may result in adaptational problems (depression). Whether or not environmental demands and personal resources lead to a situation of stress is determined by the level of the demands and personal resources, as well as a

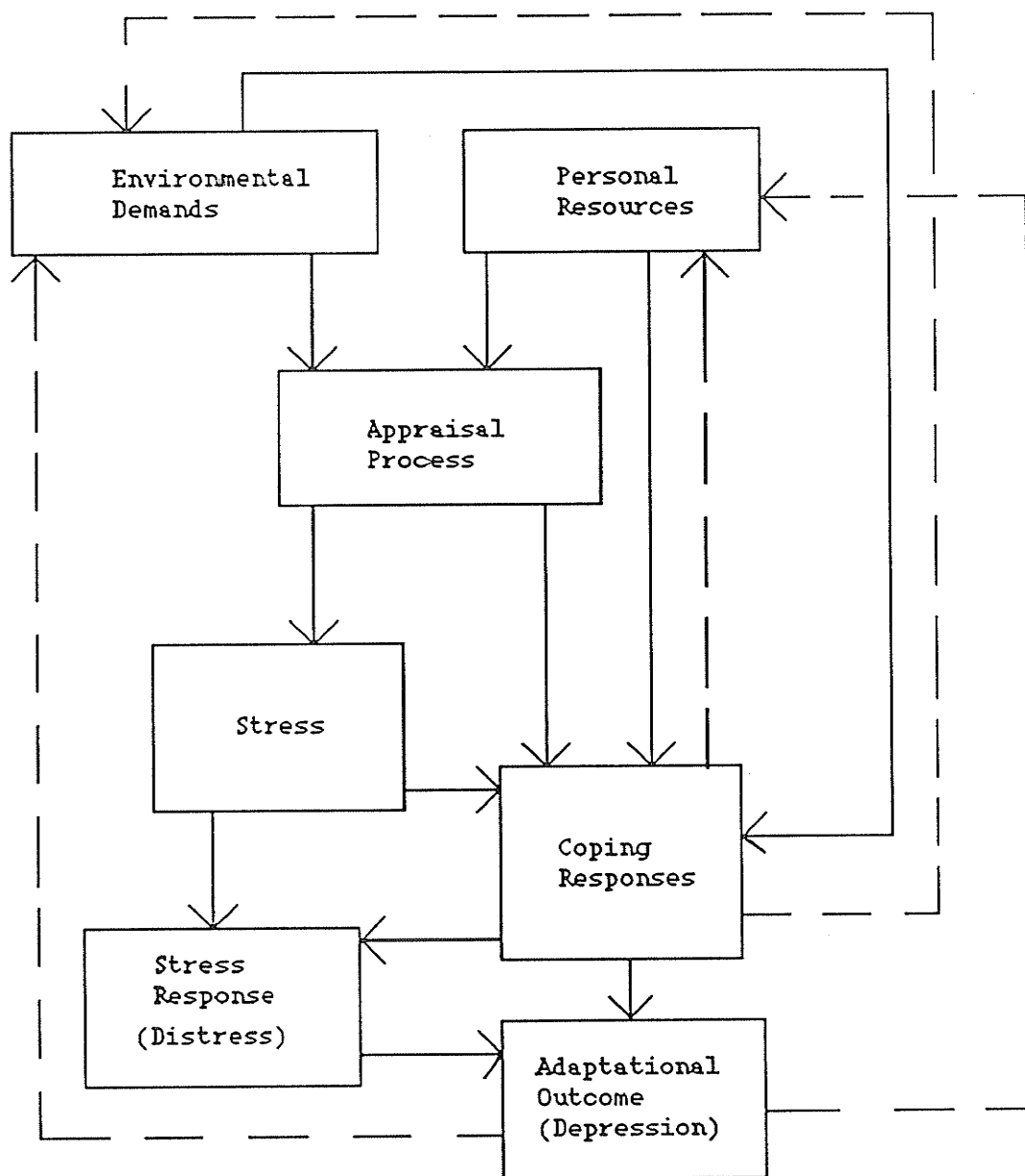


Figure 1. Stress and coping model illustrating causal order of factors relating to depression.

variety of appraisal processes. The occurrence of stress initiates coping responses and, along with control beliefs, environmental demands, and appraisal processes, determines what coping responses are initiated. In turn, coping affects the severity of the stress response and adaptational outcomes.

The feedback loops in Figure 1 illustrate the model from a longitudinal perspective. Feedback loops from coping illustrate how prior coping may affect current levels of environmental demands (chronic conditions) and personal resources (control beliefs). For example, an initial use of ineffective problem-focused coping may cause high levels of environmental demands (chronic conditions) and low personal resources (control beliefs). Therefore, environmental demands and personal resources at any one time would, in part, result from the outcome of past problem-focused coping efforts. Minor conditions at an earlier time could become more chronic conditions as a result of ineffective coping.

The interrelationships shown in Figure 1 present the major expected relationships based on the theoretical model and relevant research. While Figure 1 presents the assumed causal sequence of variables, the diagram does not reflect all possible relationships among variables. For example, personal resources will always causally precede coping responses, stress response and depression. However, a direct relationship may be found between personal resources and coping responses, as well as between personal resources and depression. While the former is presented in the figure, the latter is not. Since the purpose of the diagram is to highlight the major relationships expected among variables and their causal ordering, other possible pathways were omitted to simplify the presentation. This

method of simplification was also used for later figures (Figure 2 and Figure 3).

Psychosocial Explanations for Gender Differences in Depression

Two general areas of research have been reviewed to this point. The first area documents gender differences in depression, with women exhibiting higher rates than men. The second area documents the relationship between stressful life experiences, control beliefs, coping, and depression. If stress, mastery, and coping are etiologically important in the manifestation of depression, and if women predominate in depressive symptoms, then a logical hypothesis is that women and men may differ in these respects.

As previously discussed, the two best articulated theories are of gender differences in depression are termed differential stress and differential vulnerability. The former encompasses a "social role" explanation in which higher rates of depression are seen as resulting from the greater stress associated with women's social roles. The latter encompasses a "sex-role" explanation in which women's greater vulnerability is seen as both the result of their "helplessness training" and their greater exposure to situations of helplessness, both of which lead to low generalized control beliefs. Thus, gender differences in depression result from different learning histories between males and females. These, in turn, may result in different ways of coping with stress, with women using less effective strategies (Hishfeld, Kleiman, Clayton, Kelly, & Andeasen, 1988; Radloff 1980). Although perhaps not identical, the concepts of beliefs in lack of control, external locus of control, low sense of mastery, and helplessness,

are conceptually analagous to the concept of "powerlessness" which has been central to feminist analysis of depression in women (Bernard, 1973; Chesler, 1972; Lips, 1981; Miller, 1979).

The following discussion will review the evidence for gender differences in exposure to stressful life experiences, followed by a discussion of evidence pertaining to gender differences in vulnerability to stressful life experiences.

Gender Differences In Exposure to Life Stress

Stressful life events. Although the bulk of the literature examining the relationship between life stress and depression has focused on stressful life events, gender comparisons in the study of life event stressors are few (Levenson, Hirschfeld, Hirschfeld, & Dzubsay, 1983; Makosky, 1980). Further, the results of these few studies are inconsistent at best. For example, Uhlenhuth, Lipman, Balter, and Stern (1974), in a series of studies, did not find that women reported more stressful life events than men. Similarly, Markush and Favero (1974) found that women and men did not have significantly different life-change unit scores. Dohrenwend (1973), on the other hand, reported that women had significantly higher life-change scores than did men. Turner and Wood (1985) also found that women reported more stressful life events than did men. Perris (1984) found that, overall, depressed female and male patients did not differ in the mean number of total life events in the 12-month period prior to depression onset. However, women reported a significantly higher mean number of events, independent of depression. Independent events were those determined by the author as unlikely to be caused or distorted by depression. This list included 32

of the 56 events in the scale. In response to the dearth of empirical literature in the area, and the few but inconsistent findings, Makosky (1980) concluded that, at present, "what we do not know is whether there is a consistent relationship between sex and life event stress" (p. 116).

There are several criticisms of the research examining gender differences in life event stress. Makosky (1980) argued that women may, in fact, experience more stressors than men but this may not be reflected in the items of life event scales. She suggested that the scales may reflect a bias, as they include items more likely to occur in men's lives (e.g., work related events). Further, a number of stressors more likely for women are typically not included (e.g., rape, abortion, physical assault, changes in child-care arrangements, sexual harassment, discrimination, problems of significant others). Some research suggests that men and women do differ in the types of life event stressors they experience. Webb (1978) found that men reported more events related to involvement with the law and more vocationally related events, whereas women reported more personal-family events. Folkman & Lazarus (1980) found that women reported more stressful episodes having to do with health and family, whereas men reported more work related episodes.

A second criticism relates to the method of scoring life event measures. Several authors (e.g., Reese & Smyer, 1983; Skinner & Lei, 1980; Tausig, 1982) have argued that the simple summation of items on life event scales into single score may obscure meaningful relationships between specific categories of events, specific subject groups, and adaptational outcome. They advocate categorizing events into content areas. If specific categories of life events are more highly related to depression, and if these

categories of events more commonly occur to women, then this could partially account for gender differences in depression. For example, Brown and Gary (1987) found no overall gender differences in the experience of stressful life events. However, when specific content categories were examined separately, they found that black males had significantly more events in relation to arrests while black females had significantly more events related to finances. Unfortunately, Brown and Gary did not examine the differential relationships of different categories of events to adaptational outcome. In general, life event research has not focused on different categories of stressful events (in terms of content area) or on the importance of different life event categories in the development of symptoms.

In summary, the stressful life event research provides little consistent evidence regarding gender differences in the experience of stressful life events. It has been argued that the failure to find gender differences in the experience of stressful life events may, in part, be the result of methodological shortcomings. This includes gender-bias in the content of life event scales. Further, the failure to examine specific categories of life events may obscure gender differences within specific content areas.

Chronic life conditions. There is some indication that men and women may experience different types of chronic life conditions (i.e., life strain) and that different types of chronic conditions may be differentially predictive of depression. Billings and Moos (1984) found that depressed men report more personal illness than did depressed women. Ilfeld (1976b, 1977) reported that men experience more job conditions whereas women experience more financial, parental, and marital conditions. He further

noted that chronic marital conditions have the highest correlations with depression, with parenting, job, and financial stressors intermediate in association. Parental and financial conditions were more strongly related to depression in women than in men, whereas job conditions were more strongly related to depression in men than in women.

Vanfossen (1981) factor analyzed Pearlin and Schooler's (1978) chronic marital condition scale and identified three factors. These were affirmation, intimacy, and equity. Vanfossen found that more husbands than wives feel affirmed by their spouses and marriages, more husbands than wives report that their spouses reciprocate equally in their marital relationship, and more husbands than employed wives indicate that they share intimacy with their spouse. Overall, low affirmation was more strongly related to depression than low intimacy or low equity. In addition, the strength of the relationship between the three conditions and depression varied according to gender and women's employment status. These results suggest that women may experience some conditions (in this case, lack of affirmation) which are positively related to depression, to a greater extent than do men.

Newmann (1986) reported that women experience more chronic conditions associated with the absence of a spouse, the absence of a living companion, lower income, and chronic health problems than do men. She also reported that, for women, living alone and chronic health problems were related to depression, while for men, being single, divorced, or separated, low income, and health problems were related to depression. Health problems had the strongest relationship to depression for both men and women. One drawback of this study was the manner in which chronic strain was measured.

Except for the health variable, all variables were proxy measures, with chronic strain assumed to be associated with the condition.

The aforementioned studies suggest that men and women may differ in the types of chronic conditions they experience. Further, women, more than men, may experience those chronic conditions most strongly related to depression. Results also suggest that men and women may be affected differently by specific types of chronic conditions. The above findings suggest that, while gender differences in exposure to chronic life conditions may be important in explaining different rates of depression, gender differences in the impact of these conditions may also be important. The following discussion will review the evidence pertaining to these suggestions.

Gender Differences in Vulnerability

Gender differences in exposure to stressors may not be sufficient to account for gender differences in depression. Several studies (e.g., Moore & Husaini, 1983; Radloff, 1975; Radloff & Rae, 1981) have found that controlling for differential stress did not significantly reduce gender differences in depression. Differences in stressors, therefore, could not account for gender differences in depression. Pearlin (1975) also concluded that gender differences in depression can only be partially explained by the strain impinging upon women from their family and employment roles.

If differential stress is insufficient to account for gender differences in depression, what does account for this difference? Several authors (e.g., Belle, 1987; Kessler & Mcleod, 1984; Radloff, 1975; Radloff & Rae, 1981) have suggested that women may be more vulnerable than men to the

development of depression. This hypothesis has also been offered to account for the higher rates of depression in other disadvantaged groups, particularly the poor (Husaini & Neff, 1981; Wheaton, 1983). Kessler (1979) defined vulnerability as "the force with which a stress impacts on the distress of an individual" (p. 101). He acknowledges that there are a variety of determinants of vulnerability. These include both constitutional and environmental factors.

Methodologically, vulnerability can be estimated as the regression coefficient associated with a quantifiable stressor in a regression equation predicting distress (in this case, depression). A number of studies have used this methodology. Husaini et al. (1982) found that, in 6 of 8 regression equations using life events to predict depression, life events had greater impact on women's depression scores than on men's depression scores. The other two life events had about equal impact. Similarly, Dean and Ensel (1982) found that life events had greater impact on depression in women over age 25 than on men over that age. For the age group under 25, life events had greater impact on men's depression. Moos (1984) also reported that life events had greater impact on women's depression scores compared with men. Cleary and Mechanic (1983) found that marital satisfaction had greater impact on homemaker's depression scores compared to employed married men. However, marital satisfaction had greater impact on depression scores of employed married men than on employed married women. Parental satisfaction and having children at home had greater impact on women than on men. Only job satisfaction had greater impact on men's depression scores than on women's depression scores. Similarly, Vanfossen (1981) found that lack of affirmation and inequity had greater impact on

depression in women than in men. Intimacy, however, had greater impact on depression in men than women.

Newmann (1986) examined both gender differences in exposure to chronic life strain, and gender differences in the impact of chronic life strain, on depression. She concluded that, although women were exposed to greater life strain than men, they were not more vulnerable to its effects. Kessler and Mcleod (1984) examined data from five large epidemiologic surveys which included measures of life events and psychological distress. They divided life events into six categories of events including income loss, separation and divorce, other love loss, ill health, death of a loved one, and other network events. They found that ill health, death of a loved one, and network events had significantly greater impact on women than on men. Only income loss had greater impact on men than women, and this was only true when compared to homemakers. Kessler and Mcleod used a decomposition analysis to identify the independent effects of exposure to stressors and the impact of stressors (i.e., vulnerability) on gender differences in psychological symptoms. Based upon this analysis, they concluded that gender differences in impact of stressful life events entirely accounted for greater distress in women. They further concluded that the differential impact of network events was of particular importance in accounting for gender differences in distress.

Overall, these results suggest that, when gender differences in vulnerability are found, women are more vulnerable than men to more classes of stressors. Two notable exceptions are occupation-related stressors and marital intimacy. It should be noted that this general finding says nothing about actual levels of stressors to which women and men are exposed.

For example, although Vanfossen (1981) found that men are more vulnerable to lack of intimacy than women, men also reported greater intimacy than did women. Thus, greater experience of intimacy may offset greater vulnerability to its absence. This analyses, however, did not assess the relative importance of the two in determining levels of depression. The studies by Newmann (1986) and Kessler and McLeod (1984) are particularly significant, as they directly examined differential exposure and differential vulnerability in accounting for gender differences in psychological distress. It should be noted, however, that neither directly examined the importance of more chronic life conditions or specific vulnerability factors.

Gender differences in control beliefs. If women are more vulnerable than men to the development of depressive symptoms, what may account for this differential vulnerability? As has already been suggested, a sense of powerlessness and infrequent active problem-solving (Radloff, 1975, 1980) have been implicated in this differential vulnerability. Wheaton (1980) proposed a model to account for the higher levels of psychiatric impairment typically found in lower socioeconomic classes which emphasizes greater vulnerability to impairment. He argued that conditions of lower-class life tend to produce a state of fatalism which, in turn, leads to decreased problem-solving efforts. Wheaton further argued that his model is equally applicable to gender differences in impairment. Liem and Liem (1978) suggested a slightly different version, implicating a decrement in coping ability, as opposed to coping effort. Both of these formulations are consistent with aspects of Radloff's (Radloff & Rae, 1981) model. The former is consistent with Radloff's suggestion that women experience more situations in which they are helpless. The latter is consistent with the sug-

gestion that women are socialized to feel more helpless than men and, consequently, are not encouraged to develop active problem-solving behaviors.

Research from several areas provides evidence for women's greater helplessness. As has been suggested, a sense of lack of control or mastery (helplessness) may result from internal, global, stable attributions of failure. There is some evidence suggesting that, compared to men, failure experiences in women are attributed more to internal, global, and stable causes, both by others and by women themselves (Deaux & Emswiller, 1974; Deaux & Farris, 1977; Dweck & Goetz, 1978; Ickes & Laden, 1978; Nicholls, 1975)

Deaux and Emswiller (1974) found that both males and females rated male actors as having more ability than female actors who performed the task equally well. Feather and Simon (1975) found that subjects attributed a male character's success more often to ability than they did a female character's success. Conversely, a female character's failures were more often attributed to lack of ability than a male character's failure. Deaux and Farris (1977) found that men were more likely than women to attribute their success to their own ability. Women were more likely than men to attribute their success to luck. Women attributed their failure to lack of ability whereas men attributed their failure to task difficulty. Ickes and Laden (1978) reported that, for positive outcomes, male college students rated internal causes as more probable than did females. For negative outcomes, males rated internal causes as less probable than did females.

Nichols (1975) found that fourth grade girls attributed their failure to poor ability, whereas boys tended to attribute their failure to bad luck.

Dweck and Bush (1976) noted that, in situations with adult evaluators (teachers), girls are more likely than boys not only to attribute their failures to internal, enduring qualities but also to show behavioral debilitation when confronted with failure on a task. This debilitation included decreased persistence, statements of negative affect, and failure to solve problems that were easily solved earlier. The opposite was true, however, when the evaluators were peers. Under these circumstances, boys were more likely than girls to attribute their failure to lack of ability. The authors note that the types of failure attributions made by boys and girls may be dependent on the evaluator. They also note, however, that the effect of teacher evaluation in the classroom has important implications for gender differences in learned helplessness. Results of other studies with children suggest that girls' expectations of future performance are affected more by past or present failures than by past or present successes. On the other hand, boys' expectations of future performance do not seem to be negatively affected by present or past failure (Dweck, Goetz, & Straus 1980).

Frieze (1975; cited in Radloff & Monroe, 1978) concluded that success of females is likely to be attributed to luck or effort, and failure to lack of ability. More than success, failure for females is more likely to be seen as personal, global, and stable, and likely to be repeated. On the other hand, success for men is more often attributed to ability and failure to bad luck or lack of effort. If men fail, they expect to do better in the future and, therefore, they keep trying. This is not the case for women (Radloff & Monroe, 1978).

Other evidence suggests that women may get more early training in helplessness than men by receiving less reinforcement for instrumental actions (Maccoby & Jacklin, 1974), by being perceived as more in need of help and protection than men (Radloff & Monroe, 1978), and by receiving more help (Unger, 1975). Further, women's greater expectations of lack of control may result not only from helplessness training, but also through the relative powerlessness they experience in their everyday lives (Lips, 1981; Polk, 1974; Radloff & Monroe, 1978; Sturdivant, 1983).

Other evidence suggests that women may have a greater sense of helplessness than men. Overall, women are more external in locus of control than are men (Doherty & Balwin, 1985; Pidano & Tennen, 1985; Radloff, 1980; Radloff & Rae, 1981). Women also have a lower sense of mastery than men (Fleishman, 1984; Pearlin & Schooler, 1978). As previously discussed, external locus of control and low sense of mastery are associated with higher depressive symptoms. Husaini and Moore (1983) found that gender differences in depression disappeared when gender differences in helplessness were controlled. They concluded that helplessness (lack of mastery) may be important in understanding gender differences in depression.

Gender differences in coping responses. A few studies suggest that men and women may use different coping responses which may differentially relate to depression. The coping strategies that women use are those associated with low levels of mastery, whereas those that men use are associated with high levels of mastery. Pearlin and Schooler (1978) found that eight coping behaviors were more commonly used by men, while three coping behaviors were more commonly used by women. Women more commonly used selective ignoring in parenting and marriage. This coping response was

associated with higher levels of depression and low levels of mastery. On the other hand, men more often used coping behaviors such as self reliance, self assertion, controlled reflectiveness, and nonpunitiveness. These were associated with low levels of depression and high levels of mastery. Using the same data base, Fleishman (1984) and Ilfeld (1980) reported similar results. Women used coping behaviors that either exacerbated distress or were ineffective in reducing distress, to a greater extent than did men. Billings and Moos (1984) found that, compared with depressed men, depressed women made more frequent use of emotional-discharge coping. This coping response was associated with more severe impairment.

Folkman and Lazarus (1980) found that men use more problem-focused coping than women, but only at work. They attributed this to gender differences in jobs rather than a general disposition on the part of males to use more problem-focused coping. Stone and Neale (1984) found that men more often than women reported using "direct action" while women reported greater use of "catharsis." These studies, however, did not examine the relationship between coping and adaptational outcome. Therefore, nothing is known about the relative effectiveness of different coping strategies, or whether there were gender differences in symptoms.

In summary, a few studies suggest that women may have a lower sense of mastery than men. Other studies suggest that women use less effective coping behaviors than do men. Consequently, this leads to higher rates of depression in women. This suggestion is consistent with Radloff's (1980) learned helplessness model, which argues that women's lower sense of mastery may lead them to use less problem-solving and, generally, less effective coping behaviors than men. None of these studies, however, have

directly assessed the importance of gender differences in mastery or coping behaviors in accounting for gender differences in depression. Such relationships have been inferred primarily from correlations between variables.

Rationale For The Present Study

This study is based on the conceptual model developed from the theoretical issues and empirical evidence previously discussed. Figure 2 represents an integration and summary of the major relationships one would expect in this model. As is illustrated, environmental demands (i.e., exposure to potential stressors) may lead to a situation of stress and a stress response. Whether or not the exposure to potential stressors leads to a situation of stress is determined by the individual's perceptions of the demands, and perceptions of his or her capacity to deal with them (appraisal). These perceptions are, in part, determined by the person's beliefs about her or his ability to control environmental influences (mastery), as well as various aspects of the stressor situation. When a situation of stress arises, coping responses are initiated. Whether or not coping responses are initiated, and the types of coping responses used, are partially a function of appraisal.

The occurrence of a stress response is determined partly by the existence of stress and partly by the coping responses initiated. If coping responses that change the meaning of the situation are initiated, then a stress response will not result or will be reduced. Similarly, adaptation-al outcome is influenced by the coping responses initiated. How one copes with stress will influence whether or not symptoms (both distress and depression) will occur and their severity. These coping responses are

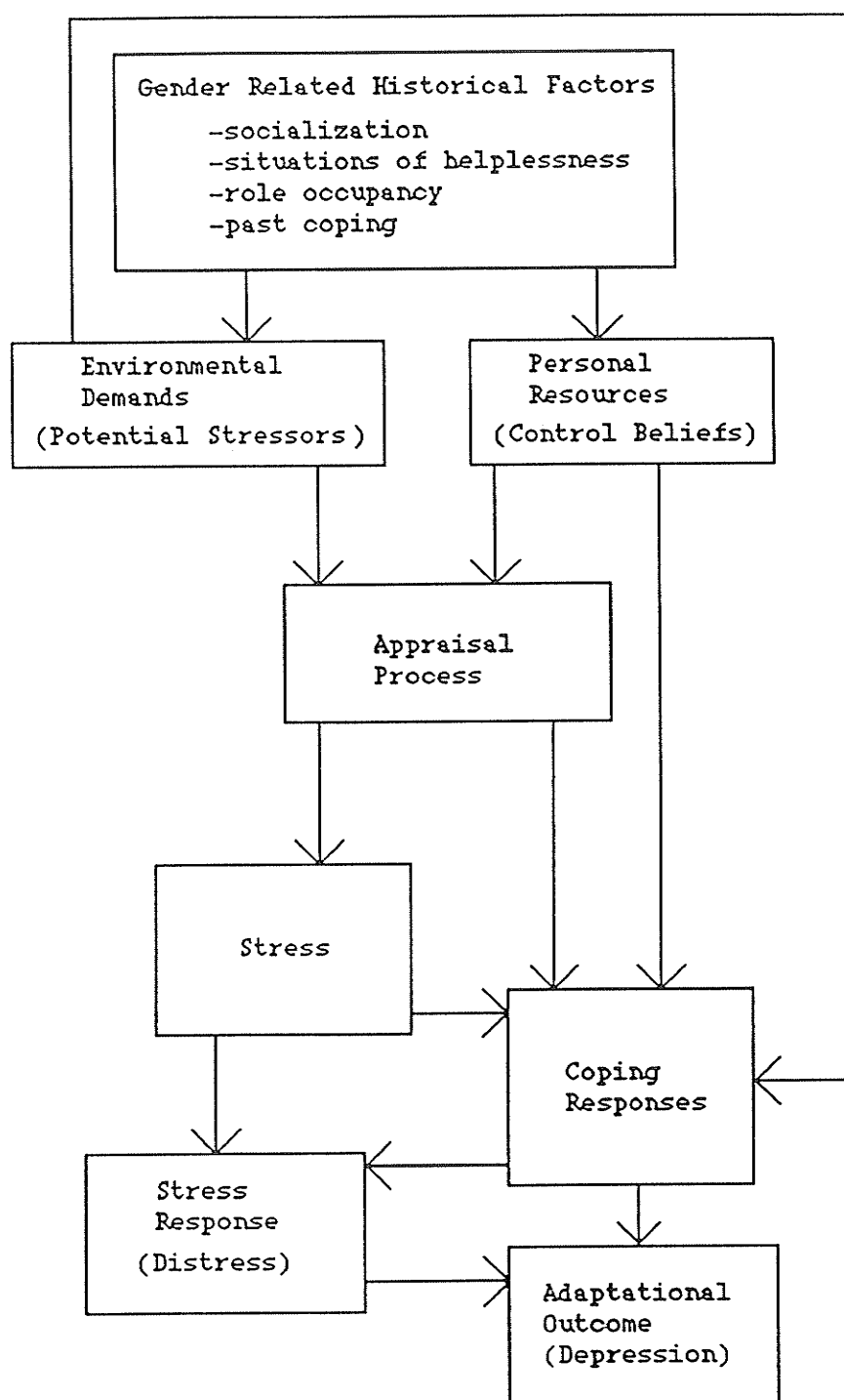


Figure 2. Stress and coping model of depression illustrating the role of gender-related historical factors.

directly and indirectly (through appraisal) determined, in part, by control beliefs and potential stressors. As is indicated in the model, control beliefs and potential stressors are determined by several "historical" factors including, socialization, prior experience in situations of helplessness, and the success of past coping responses. As is illustrated, past coping responses influence current life conditions, as well as control beliefs.

Gender differences related to depression may occur at several places in this model. Based upon the sex-role hypothesis, men and women may differ in their level of control beliefs. In turn, such gender differences could lead to gender differences in the use of different coping responses and/or in their effectiveness in dealing with stress, which could, ultimately lead to gender differences in depression. Alternatively, extending from the social-role hypothesis, gender differences may occur in terms of the level or type of environmental demand (potential stressor). Following the model, this too could ultimately lead to gender differences in depression.

The purpose of the present study is to examine the relative validity of the "social-role" and "sex-role" hypotheses, respectively. In order to assess these two hypotheses, approximately equal numbers of male and female respondents will answer questions regarding their experience of potentially stressful life conditions, the ways they cope with these conditions, their sense of control over environmental forces, their experience of distress, and their experience of depressive symptoms.

As has been previously argued, acute life event stressors may not be the most useful conceptualization or measure of life stressors. This is due to

both their relatively low explanatory power and potential gender biases in event scales. As a consequence, the present study will measure more chronic conditions associated with people's social roles. These will include chronic conditions associated with marital relationships, jobs, parenting, and finances. These four content areas were chosen for several reasons. First, they have a stronger relationship with depression than other content areas (Ilfeld, 1977; Makosky, 1980a, 1982). Second, measures to assess coping responses in each of these areas are available. Finally, inclusion of several different content areas will allow for the assessment of gender differences in particular content areas and their relationships to depression.

Generalized beliefs about control will be assessed using a "mastery" scale developed by Pearlin and his associates (Pearlin & Schooler, 1978). In order to assess coping responses, a series of questions will be asked regarding how respondents cope with difficulties in each of the four role areas (Pearlin & Schooler, 1978). Distress, a short term stress response, will also be measured using a "distress" scale developed by Pearlin & Schooler (1978). Current levels of depressive symptoms will be measured using the CES-D (Radloff, 1977).

As can be seen from the conceptual model, there is a potential problem in interpreting any observed gender differences in chronic life conditions. Greater experience of chronic conditions by women may be the result of greater exposure to such conditions, but also may be due to previous unsuccessful attempts at actively alleviating these conditions. Thus, these gender differences may be due to gender differences in prior use of problem-solving strategies. In order to assess prior success of active prob-

lem-focused coping, respondents will be asked several questions regarding their prior use of problem-solving in alleviating problematic situations, and their perceived success in accomplishing this.

Several factors, including socio-economic status (Comstock & Helsing, 1976; Craig & Van Natta, 1976, 1979; Radloff & Rae, 1979), age (Comstock & Helsing, 1976; Craig & Van Natta, 1976; Weissman & Myers, 1978), and physical health status (Aneshensel, Frerichs, & Huba, 1984; Craig & Van Natta, 1983; Makosky, 1982; Murrel, Himmelfarb, & Wright, 1983), have been related to depression. Therefore, these background factors will be assessed and any gender differences on these factors in the obtained sample will be controlled for in the analysis. Figure 3 illustrates the aspects of the previously articulated model which will be measured in this study.

As previously explained for Figure 1, a fully recursive model (i.e., direct pathways extend from all causally prior variables to all causally later variables) will be examined in this study. As in Figures 1 and 2, for simplicity, only the major expected pathways have been diagrammed in Figure 3.

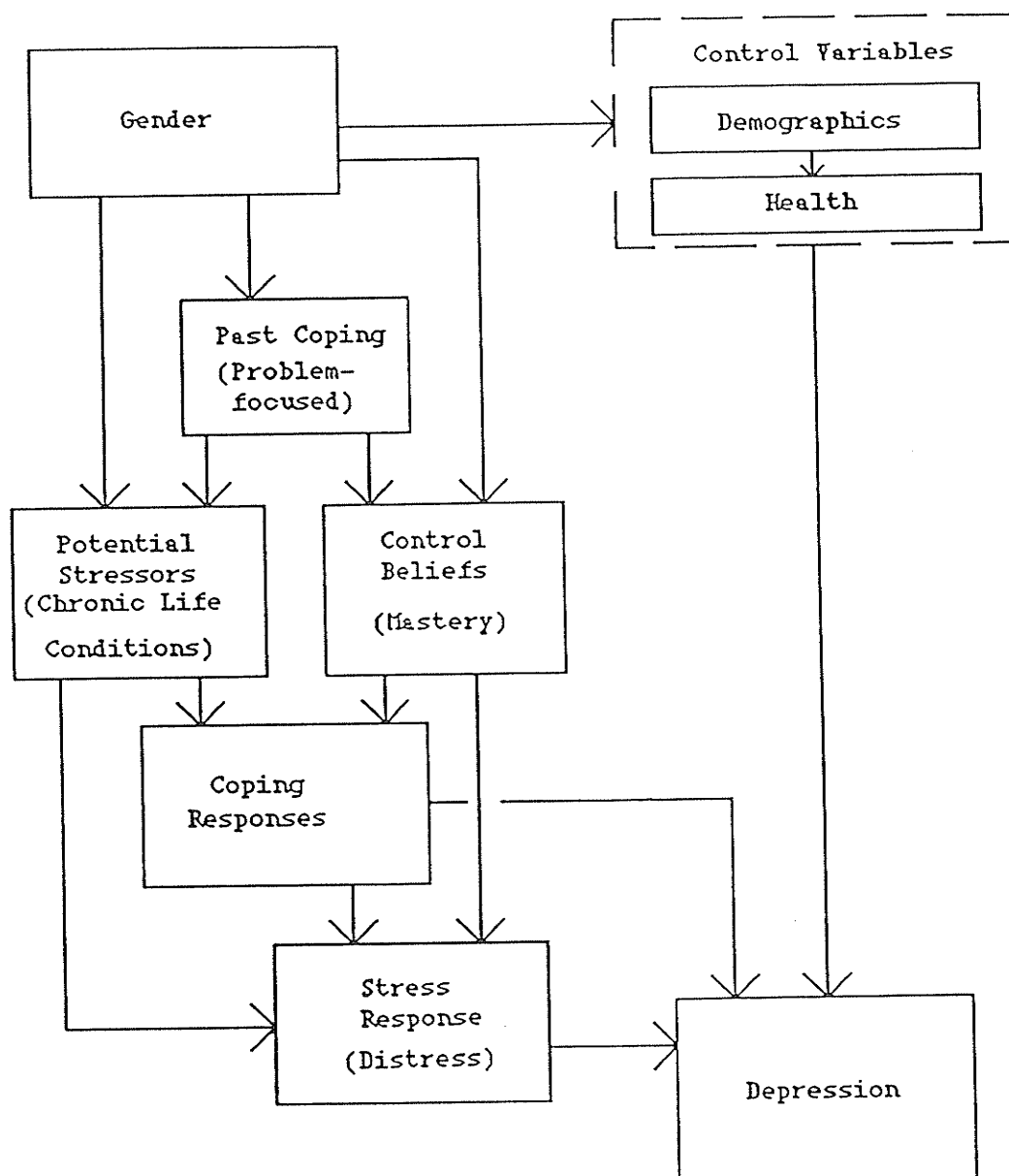


Figure 3. Major interrelationships and causal ordering of variables examined in this study.

Hypotheses

1. Women will be significantly more depressed than men.
2. There will be a significant negative relationship between levels of personal mastery and depression.
3. There will be a significant positive relationship between levels of chronic conditions in the parental, marital, financial, and job areas, and depression.
4. Women will use emotion-focused coping and appraisal-focused coping to a greater degree than men.

On the basis of the sex-role theory, it is predicted that:

5. Women will have significantly lower personal mastery than men.
6. Gender will be related to depression, indirectly, through its association with mastery.

On the basis of the social-role theory, it is predicted that:

7. Women will experience more chronic life conditions than men, particularly those most strongly related to depression.
8. Gender will be related to depression, indirectly, through its association with chronic life conditions.

METHOD

Respondents

Eight-hundred married adults (400 men and 400 women) living in Winnipeg, Manitoba were selected on the basis of a systematic sample of the Street Guide section of the Winnipeg City Directory (Henderson, 1986). The restriction of the sample to married adults was based on two factors. First, gender differences in depression have often been found to be largest among married individuals in comparison with other marital status categories (Gove, 1972; Hirschfeld & Cross, 1982; Radloff & Rae, 1979). Second, a sample including single individuals would result in an absence of subsections of data on a large proportion of the sample (e.g., the absence of conditions associated with intimate relations or parenting). This would reduce the sample size and power for certain analyses. Therefore, to maximize the amount of data on each respondent, the sample was restricted to married individuals.

Systematic sampling (Kish, 1965; Sudman, 1976) involves the choice of every n -th address, where n is the sampling interval. The sampling interval is determined on the basis of the estimated number of entries, divided by the required sample size. In practise, the number of inches to skip rather than the number of addresses to skip is used as an estimate of the sampling interval (Kish, 1965).

City directories are based upon thorough block enumeration and Kish (1965) estimates that they are about 95% complete. Kish (1965) and Sudman (1976) argue that systematic sampling from directories is approximately equivalent to random sampling and, for relatively small samples, they are good enough for use without supplements. Sudman (1976) suggests that when census tract, block information, and city directory lists are available, sampling from the directory should be used. Directory sampling should identify a general cross-section of the city population, although people residing in hospitals, institutions, motels, hotels, military establishments, or similar settings are excluded.

In order to determine the exact sampling interval, the following procedures were followed (Kish, 1965). The list of addresses in the directory was regarded as the population of households (N) of which there exists a subpopulation of households of proportion (p) which contain married individuals. The sampling interval was determined by estimating the number of the subpopulation entries (M , where $M=Np$) and dividing this by the required number of respondents (800). The proportion of entries that contained married individuals was estimated on the basis of information pertaining to household composition from the 1981 census (Statistics Canada, 1984). This method has been recommended when a subclass of the population is of interest, when information on this variable is available, and it is too time-consuming to isolate the subgroup prior to sampling (Kish, 1965; Sudman, 1976).

Sampling began at a random spot in the directory and continued until 800 addresses were chosen. When the end of the directory was reached prior to the end of sampling, the sampling procedure continued at the beginning of

the directory, treating the listings as though they were continuous. Addresses selected that did not contain married individuals were treated as blanks and sampling continued until 800 households were chosen. Blanks, nonresidential addresses, and vacant addresses were not sampled. Only one individual from each household was chosen. The gender of the individual chosen was randomly predetermined such that equal numbers of women and men were included. This sampling procedure only identified those individuals legally married. Therefore, individuals "living as married" were excluded.

Based on other mail surveys conducted in the city of Winnipeg, it was estimated that there would be a small percentage of undeliverable questionnaires, due to individuals having moved (D. Ricketts, personal communication, January 2, 1987). As a consequence, individuals having moved were replaced by a new sample chosen using the procedures previously outlined. In this sample, the number of men and women selected was equal to the number of men and women for which questionnaires were undeliverable.

Survey Procedures

The present study involved a mail-survey of the population of Winnipeg, Manitoba. Although in-person interviews have been the most common survey procedures used in this type of research, the choice of a mail-survey was based on several factors. Mail-surveys are less costly and less time consuming than interviews (Dillman, 1978; Siemiatycki, 1979), yet obtain comparably high response rates (Dillman, 1978; ISER, 1983; Siemiatycki, 1979). Response rates ranging from 75% to 90% are common in mail-surveys using extensive follow-up procedures. In addition, the accuracy of response and willingness to respond to sensitive questions are somewhat higher for mail

surveys than personal interviews (Dillman, 1978; Siemiatycki, Wiseman, 1972).

Eight-hundred married individuals each received a questionnaire. This questionnaire included a cover letter (Appendix A) explaining the nature and purpose of the study, why individuals were selected for the study, the importance of their responses, and confidentiality of responses. Respondents were also informed of the availability of a summary of the results on request. The covering letter and envelope were personally addressed. Also included was a stamped, self-addressed return envelope. Questionnaires were stamped with an identification number to aid in follow-up. The purpose of the identification number was explained in the covering letter. One week following the initial mailing, a reminder letter (Appendix A) was sent to all respondents. The letter briefly explained the nature of the research, the importance of their response, and thanked those already having completed the questionnaire. Three weeks after the reminder letter, a second questionnaire along with a second cover letter and stamped, self-addressed return envelope was sent to respondents who had not yet returned the completed questionnaire.

Following the three mailings, two additional follow-up procedures were instituted. Given the length of the questionnaire and the necessity for some individuals to skip sections, some respondents omitted relevant sections. As a consequence, telephone follow-up procedures were used to collect this missing data.

After all questionnaire data was collected, nonresponders were contacted by telephone. Social-demographic and background information were collected

in order to compare responders and nonresponders on these characteristics. Telephone contact with nonresponders was attempted a maximum of three times. If after three attempts the individual could not be reached, no further attempts were made.

Questionnaire Design

The organization and content of the questionnaire was determined by several factors. These included (a) recommendations made by Dillman (1979), (b) previous research, and (c) pretesting conducted by the present author.

The questionnaire was printed in booklet format with a cover page and a back cover allowing respondent comments (Dillman, 1979). Ordering of items was determined by several considerations. Items within existing scales were ordered according to the original scale. Ordering of scales and addition of other items followed recommendations of Dillman's Total Design Method. Dillman identifies several ordering principles in mail-survey development: (a) Questionnaires should begin with relatively easy and non-threatening questions. They should, however, be relevant to the research topic; (b) Questions should be ordered along a descending gradient of importance; (c) Questions similar in content should be grouped together; (d) Questions should be ordered so that a "cognitive flow" exists from one question to another, with later questions building on earlier ones; (e) Demographic information should be requested at the end of the questionnaire. Within this framework, attempts were made to maintain some consistency of scale order with the structured interview format developed by Pearlin and his associates (Pearlin & Schooler, 1978).

Pretesting of the questionnaire was conducted to identify questionnaire construction defects including unclear wording, confusing instructions and layout, and item interpretation problems. Additional goals of pretesting included determining the average completion time, determining an ideal print size, and general impressions and suggestions for improvement. Pretesting consisted of two phases. In the first phase, ten mental health professionals were asked to complete the questionnaire, paying attention to the aforementioned issues. Individuals were solicited who were familiar with the area of research or who were familiar with mail-survey designs. They were asked for written feedback based on a series of questions. In the second phase, thirty-four married individuals (17 men and 17 women) ranging between the ages of 25 and 70 completed the survey and gave written feedback based on a series of questions. Each individual was personally interviewed by the author. The interview focused on their written comments and ways in which completion of the questionnaire could have been made easier. In addition, particular attention was paid to the clarity and interpretation of items developed by the author. On the basis of pretesting, the instructions, item wordings, and questionnaire layout were modified (see Appendix B for a copy of the final questionnaire).

The final questionnaire was composed of a series of questions designed to assess each of seven dimensions. These included (1) social-demographic and household information, (2) physical health status, (3) control beliefs, (4) chronic life conditions, (5) coping responses, (6) role related distress, and, (7) current depressive symptoms.

Social demographic and household information. Respondents were asked to indicate their gender, duration of marriage, employment status, occupation,

education level, age, income, number and age of children. Respondents were also asked several questions regarding their spouse including age, employment status, occupation, and educational level.

Physical health status. The measure of physical health developed by Murrell, Himmelfarb, & Wright (1983) was used in the present study. This measure is a revised version of an earlier scale developed by Belloc, Breslow, & Hockstein (1971). The scale consists of 20 items concerning the respondent's symptoms, limitations of activities, and overall health. Scores on the scale range from 20 to 49, with a higher score indicating poorer health. Internal consistency reliability of 0.89 has been reported (Murrell et al., 1983). Test-retest reliability has not been reported. Using this index of health, poor health is significantly related to age. Older people report poorer physical health than do younger people (Himmelfarb, 1984). This is consistent with the common belief that older people have more physical health problems than younger people. Further, poorer health is positively correlated with the presence of psychological symptoms of anxiety and depression (Himmelfarb, 1984; Himmelfarb & Murrell, 1984). These findings are consistent with results using different measures of physical health (Billings et al., 1983; Dohrenwend & Dohrenwend, 1979). Two scale items ask about health conditions which "limits the kind or amount of work you can do at a job" and "prevents you from working at a job." The wording of these two items was changed from "at a job" to "at a job outside the home." Two additional items were added by the author to reflect health problems that limit the kind or amount of work done within the home or prevent work being done within the home.

Control beliefs. In order to assess respondents' beliefs about control, this study used the Mastery Scale developed by Pearlin and associates (Pearlin & Schooler, 1978). The Mastery Scale is designed to assess the extent to which people see themselves as being in control of the forces that importantly affect their lives. The scale consists of seven items for which respondents are asked to indicate their extent of disagreement or agreement. Possible scores on each item range from 1 (strongly agree) to 4 (strongly disagree). Responses on 5 items are coded such that high scores indicate high mastery, while two items are coded in reverse. Scores on the items are summed (after recoding scores of the two reverse items) such that a high score indicates a high sense of mastery. The scale has been subjected to confirmatory factor analysis and item loadings are generally high (Pearlin et al., 1981). Pearlin et al. reported that the scale is generally reliable, although reliability figures were not given. Groups such as women and the poor, who are commonly believed to experience less control over their lives, score significantly lower in mastery than men and the general population (Makosky, 1982; Pearlin & Schooler, 1978).

Chronic life conditions. Measures of chronic life conditions used in this study were primarily those developed by Pearlin and associates (Ilfeld, 1976a; Pearlin & Schooler, 1978). These were chronic conditions associated with parenting, marriage, finances, and jobs. These items represent potentially stressful conditions that are ongoing aspects of everyday life, as opposed to potentially stressful, discrete life events.

The items used in this study were those reported in Ilfeld (1976a), with several additions and modifications. They were developed through initial exploratory interviews with approximately 175 subjects. Standardized ques-

tions were gradually developed and tested from the themes that surfaced during these interviews. Although these items do not represent a complete range of potentially stressful life conditions, they do stem from the experiences and perceptions of a socially diverse group of respondents (Ilfeld, 1976a). Attending to specific methodological issues regarding these scales, Ilfeld (1976b) noted that the correlations between each of these stressor areas are generally small and vary in magnitude, thus lending support to the validity of their use as independent scales, as opposed to a general tendency to complain about stressful life conditions. Similarly, he noted that the variation in correlations between these scales and psychiatric symptoms suggests their relative independence. With regard to the problem of the direction of effect in cross-sectional data, Ilfeld (1976b) noted that the duration of social stressors was significantly longer than the duration of psychiatric symptomatology, suggesting that stressors causally precede symptoms, as opposed to the reverse.

Ilfeld (1976a) reported internal consistency reliabilities of 0.87 (marriage), 0.87 (finances), 0.69 (jobs), 0.69 (homemaking). Internal consistency reliabilities for conditions associated with parenting children over 6 and over 16 were 0.76 and 0.79, respectively. No test-retest reliabilities were reported.

The experience of chronic life conditions in the areas of marriage, parenting, finances, and occupation is positively correlated with role specific distress (Pearlin & Schooler, 1978). In addition, low income is positively correlated with high levels of chronic conditions associated with finances (Ilfeld, 1976a). Chronic marital conditions are positively correlated with other indices which may represent marital strain. These

include frequency of marital arguments, choosing a person other than spouse to discuss personal problems, and low frequency of going out with spouse (Ilfeld, 1980). Taken together, these findings lend validity to the use of these scales as measures of life conditions that are potentially stressful to an individual.

The job-related conditions developed by Pearlin and his associates (e.g., Pearlin & Schooler, 1978) are directed at people working outside the home. A separate set of conditions associated with the homemaking role are directed specifically at women. Since the perspective taken here is one that considers working within the home to be a job like other jobs, all respondents were required to answer the same questions regarding conditions associated with their job. Therefore, the items from the occupation and homemaking scales were integrated into one scale. The wording of several items was modified to make them more applicable to all respondents.

With regard to financial conditions, four of the eight original items were separated into two items each, to distinguish between the respondent's needs and the needs of other family members. Since women are considered to be more other-directed than men (Gillian, 1983; Makosky, 1980), they may put their own needs second to those of other family members. As a consequence, questions that ask about "you and your family" may obscure important gender differences in experiences.

Since the parenting items reported by Ilfeld (1976a) did not include conditions associated with having children under age 5, several questions adapted from Makosky (1980) were used to assess chronic conditions associated with having young children. In addition, several questions taken from

the Modified Hobbs Difficulty Checklist (Saulnier, 1985) were adapted for use in the present study. The above checklist was designed to assess stresses associated with parenting.

With regard to marital conditions, Makosky (1980a, 1982) adapted the scale developed by Pearlin and associates for use in a study examining stress in low-income women. Makosky separated several items that lumped homemaking and wage earning into one item. These modified items were used in the present study. Several items were added to this revised scale. A few items taken from Makosky, which tap problems an individual's partner may have, were included. Further, two items tapping potential violence in the home were added.

In general, respondents were required to indicate, on a four point scale (from 1 to 4), the degree to which certain conditions exist in each of the role areas. A few items required a yes (scored 1) or no (scored 4) response. An individual's life conditions score was the sum of all the items for each role area. A high score indicated a high level of potentially stressful chronic conditions.

Coping responses. The items measuring coping responses were those developed by Pearlin and his associates (Ileld, 1980a, 1980b; Pearlin & Schooler, 1978). Questions concerning coping were developed, along with life condition items, in open-ended exploratory interviews in which respondents were asked both to identify the problems that they were facing and also to describe how they were dealing with these problems. Thematic examination of these interview materials suggested a number of coping patterns. Questions tapping these patterns, within each role area, were gradually

developed, tested, and standardized. Each role area was factor analyzed separately, yielding 17 types of coping responses (Pearlin & Schooler, 1978). The authors noted that these 17 types of coping constitute but a portion of the full range of responses people undoubtedly call upon in dealing with life stressors.

Although these coping responses are by no means exhaustive, they can be viewed as a sampling of the three major types of coping that are often distinguished from one another (Folkman & Lazarus, 1980; Moos & Billings, 1982; Pearlin, 1982). These include responses that change the stressful situation (problem-focused), responses that control the meaning of the situation after it occurs (appraisal-focused), and responses that control distress after it has emerged (emotion-focused). Within each of the role areas, responses reflecting each of these functions are represented (Fleishman, 1984; Pearlin & Schooler, 1978).

With regard to the reliability of these coping measures, the authors have not reported any reliability figures. The empirical development of these coping items, and the derivation of coping responses through factor analytic methods, have identified coping responses which are congruent with various theoretical formulations of coping (e.g., Moos, 1985). This convergence lends support to the validity of these coping measures. Fleishman (1984) found that coping responses aimed at ignoring the problem or changing the meaning of the situation were positively correlated with the tendency to avoid thinking about negative aspects of one's life. Similarly, he found that coping responses that involve interacting with others (e.g., advice seeking) were negatively correlated with the tendency to avoid revealing one's problems to others. These findings further support the validity of the scales in measuring what they intended to measure.

The format of the coping items are of three different types. The majority of items ask about the frequency with which individuals engage in certain behaviors to deal with problems in each of the four role areas. Responses on these items range from 1 (never) to 4 (very often). Other items ask about the degree to which the individual has certain thoughts or engages in certain behaviors. Item responses range from 1 (strongly disagree) to 4 (strongly agree). A few questions simply require yes (scored 1) or no (scored 4) responses. Items are scored such that a high score indicates having that thought or a high frequency of engaging in the specific behavior.

Based on recommendations made by Fleishman (1984), several modifications were made to coping items. Fleishman argued that the items making up the "positive comparison" responses were qualitatively different from other coping items. While other items ask for the frequency of behavior or degree of belief, these items ask for an evaluation of one's present circumstances, not the frequency of making such comparisons. As a consequence, these 16 items were modified so as to assess frequency of comparisons. For example, the item "How would you compare your marriage to that of most other people like yourself: better, the same, less good" was changed to "How frequently do you remind yourself of how much better your marriage is than that of most other people like yourself."

This study did not use the coping responses identified by previous factor analyses (Pearlin & Schooler, 1978; Fleishman, 1984) for two reasons. First, numerous items were modified, which might lead to different responses. This, in turn, might result in different factors. The second reason relates to differences in the samples responding to job-related coping

items. In the original sample, these items were directed to only individuals employed outside the home. In the present sample, homemakers also responded to these questions. Due to these modifications, it seemed inappropriate to rely on the factors identified in previous research. Therefore, as recommended by Fleishman, coping responses within each role area were identified using Principal Factor Analysis with an oblique rotation.

Past coping. Past coping was assessed by a four-item scale constructed by the author. Each item asked respondents to indicate, on a scale from 1 (very effective) to 4 (not at all effective), how effective, in the past, was taking specific actions to solve problem situations in each area studied. Respondents were also asked to indicate if they had never taken any specific action, in the past, to solve problems. The past coping measure was included to disentangle potential gender differences in chronic conditions in terms of differential exposure vs. differential success in past use of active coping responses. Therefore, responses indicating "never taken specific action" were scored identically to "not at all effective," reflecting the absence of impact of past active coping measures on current chronic conditions. Individuals' scores on the past coping measure was the sum of their scores on each of the items.

Distress. Unpleasant feelings of distress were measured using four separate scales developed by Pearlin & Schooler (1978). Unpleasant feelings of distress are viewed as one of a variety of indicators of stress. Respondents were asked to indicate, from 1 (very) to 4 (not at all), how "bothered," "worried," "tense," etc. they feel when they think about their _____ (marital, financial, job, parental) situation. An individual's distress score was the sum of all their item responses on that measure.

Each person, therefore, had four distress scores, each specific to one role area. Menaghan (1984) indicated that these measures had adequate reliability, although she did not report figures. No other reliability data has been reported. Pearlin & Schooler (1978) found that individuals reporting a high level of potentially stressful life conditions score significantly higher on the distress measures than individuals reporting low levels of potentially stressful life conditions. Coping responses associated with low levels of psychiatric symptoms are associated with low levels of distress (Ilfeld, 1980). Such findings support the use of these measures as indicators of stress.

Depression. Current depressive symptoms were measured using the CES-D scale (Radloff, 1977). The CES-D scale is a self-report measure designed to assess symptoms of clinical depression experienced over the past week. The instrument has 20 items which ask for the frequency with which a given symptom was experienced during the previous week. Possible scores on each item range from 0 (rarely or none of the time) to 3 (most or all of the time). For all except four items (for which scoring is reversed), a higher score indicates a higher symptom level. The total score is made by summing the scores for each item. The total score has a possible range from 0 to 60. This single score is used as an estimate of the degree of depressive symptomatology.

The CES-D correlates significantly with clinical ratings of depression, using the Hamilton Rating scale and the Raskin Depression scale, for a variety of clinical populations (Weissman, Sholomskas, Pottenger et al., 1977). The CES-D scale discriminates between depressed patient populations and other psychiatric patient groups, as well as between depressed patients

and the general population (Radloff, 1977; Weissman et al., 1977). It also discriminates between those that report needing help and those that do not, and is sensitive to improvement after treatment (Radloff, 1977; Weissman et al., 1977). Satisfactory reliability coefficients have been reported for general populations (approximately 0.85, 0.77, 0.87 for alpha, split-half, and Spearman-Brown, respectively) (Radloff, 1977).

Factor analytic studies of the CES-D have produced four major factors. These include depressed affect, lack of positive affect, somatic and retarded activity (ennervation), and interpersonal problems (Clark, Aneshensel, Frerichs, & Morgan, 1981; Ross & Mirowsky, 1984; Radloff, 1977). In general, the factor structure is similar for men and women (Clark et al., 1981; Ross & Mirowsky, 1984). These authors note that this is an important property when using a scale for comparison between subgroups. Similar internal consistency (alpha) measures of reliability have been reported for women and men (0.85 and 0.83, respectively).

Although the CES-D scale is not recommended as a clinical diagnostic tool, it is considered to be a useful screening tool for research purposes (Myers & Weissman, 1980; Radloff, 1977). Radloff (1977) notes that it should be interpreted as the level of symptoms which accompany depression.

Additional information. Although not the focus of the present study, several questions on controllability were included. It has been suggested that perceived controllability may influence the types of coping responses a person uses. Therefore, respondents were asked, "In general, when you think of any problems you have _____ (in your marriage, regarding finances, in your job, as a parent), do you feel that they are things that

can be changed, or do you feel they are things that must be accepted or adjusted to?"

It has also been suggested that alcohol abuse in men and depression in women represent different, yet sex-role congruent, manifestations of similar levels and types of distress (Weissman & Klerman, 1979). Therefore, several questions regarding alcohol use and motivation for drinking were included in the questionnaire. This included two items tapping the frequency of drinking and the average amount of alcohol consumed in one sitting (Celentano & McQueen, 1978a, 1978b), a question assessing the quantity of alcohol consumed in the past seven days (Canada Health Survey, 1981), and the Reason For Drinking Scale (Cahalan et al., 1969) assessing motivation for drinking.

RESULTS

Description of Sample

Sample Return Rate

Of the 800 questionnaires mailed, 436 completed questionnaires were returned. Six of the 60 replacement questionnaires were returned undeliverable. This represents a 55% return rate. Similar return rates have been found for mail surveys of the Winnipeg population for less lengthy questionnaires (Ricketts, 1987). Two-hundred and thirty-one of the 396 questionnaires delivered to women were returned and 205 of the 398 questionnaires delivered to men were returned. This represents return rates of 58.3% and 51.5% for women and men, respectively. An additional 44 questionnaires (5.5%) were returned by respondents uncompleted with explanations why. These explanations included age, ill health, and language problems. Nine questionnaires from women and 2 from men were excluded from the sample because they were "not currently married" (i.e., separated, widowed, or divorced).

Comparison of Sample and Census on Demographics

Table 1 compares the demographic breakdown of the present sample with the demographic breakdown of the Winnipeg 1981 census (Statistics Canada, 1984). All census information, except "highest level of education attained," is for married people only. The latter information is not

available for married people. Where census data is available for men and women separately, statistics were reported.

Examination of Table 1 indicates that, as compared to the 1981 census, men in this sample were less likely to be under the age of 35 and more likely to be over 55, $\chi^2(2, N = 190) = 7.98, p < .025$. On the other hand, women in the sample were more likely to be between the ages of 35 and 54, and less likely to be under 35 compared to the census population, $\chi^2(2, N = 211) = 7.23, p < .05$. The present sample of married individuals was better educated than the general population of Winnipeg, with a greater likelihood of having some post-secondary (vocational and university) education, $\chi^2(1, N = 401) = 9.67, p < .005$. Married men in this sample were more likely to be unemployed outside the home, $\chi^2(1, N = 190) = 5.17, p < .05$. This may be related to the higher proportion of older men likely to be out of the workforce, in comparison to the census population.

The average family income for the present sample and the 1981 census population was \$34,965 and \$25,332 respectively. On the basis of the estimated 29% increase in family income between 1981 and 1986 (Statistics Canada, personal communication, February 4, 1988), the adjusted average 1981 income in 1986 dollars is \$32,678. Using this as a comparison, there is no difference in average family income between the present sample and the 1981 census population. Personal income of married men did not significantly differ from that of the 1981 census population when adjusted for the increase in average income (\$26,208 vs. \$23,593). Personal income of married women was significantly higher than the same group in the 1981 census (\$13,640 vs. \$9,516), $z = 3.6, p < .001$.

Table 1

Demographic Comparisons of Sample with 1981 Census

Variable	Sample (%) (N = 401)	1981 Census (%) (N = 285,495)	X ²
Age (male)			7.98*
Less than 35	21.6	31.2	
35 - 54	35.7	38.1	
Over 54	42.7	30.5	
Age (female)			7.23*
Less than 35	27.5	37.6	
35 - 54	49.3	36.7	
Over 54	23.3	25.5	
Education (highest level)			9.67**
Less Than High School	6.2	16.1	
Some High School	16.2	32.2	
Completed High School	20.4	9.9	
Some Vocational/Trade	9.0	6.1	
Completed Vocat./Trade	14.2	15.8	
Some University	13.5	10.3	
Completed Univ. Degree	20.4	9.6	
Employment (male)			5.17*
Employed Outside Home	75.3	83.7	
Unemployed Outside Home	24.7	16.3	
Employment (female)			
Employed Outside Home	55.3	55.5	
Unemployed Outside Home	44.7	44.5	
Parental Status			0.08
Parents	83.2	82.2	
Not Parents	16.7	17.8	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

In summary, the present sample tended to be better educated than the general population in 1981. Men tended to be overrepresented in the over-54 age range and underrepresented in the under-35 age range, while women were underrepresented in the under-34 age range and overrepresented in the 34-54 age range. Family income in this sample was comparable to the 1981 census, although women made more money compared to women in 1981.

Comparisons of Males and Females on Demographics

Men and women in the present sample were compared on several demographic variables including age, education, family and personal income, and parental status. Examination of Table 2 indicates that women in this sample tended to be younger than men, and more likely than men to be either under age 35 or between 35 and 54, while men were more likely to be over 54, $X^2(2, N = 401) = 17.27, p < .001$. There were no differences between men and women in terms of educational attainment or family income. With regard to personal income, women in this sample were more likely to have incomes under \$20,000 as compared to men, while men were much more likely to have incomes either between \$20,000 and \$39,999 or over \$40,000, $X^2(3, N = 401) = 142.3, p < .001$. This difference is at least in part related to women in this sample more likely being employed part-time or being outside the paid workforce than men, $X^2(2, N = 401) = 49.7, p < .001$. Men and women were equally likely to have children. In summary, men and women in this sample tended to differ in age, with women being younger than men. They also differed in terms of personal income, with women earning less money than men.

Table 2

Comparisons Between Males and Females on Demographics

Variable	Males (%) (N = 190)	Females (%) (N = 211)	X ²
Age			17.27 ***
Less Than 35	21.6	27.5	
35 - 54	35.8	49.3	
Over 54	42.6	23.2	
Education			11.62
Less Than High School	8.9	3.8	
Some High School	13.7	18.5	
Completed High School	17.9	22.7	
Some Vocational/Trade	6.3	11.3	
Completed Vocational/Trade	15.8	12.8	
Some University	13.7	13.3	
Completed University Degree	23.7	17.5	
Family Income			0.92
Less Than \$20,000	10.6	11.8	
\$20,000 - \$39,999	49.2	44.5	
\$40,000 - \$69,999	32.3	35.5	
Over \$70,000	7.9	8.1	
Personal Income			142.30 ***
Less Than \$20,000	16.3	74.9	
\$20,000 - 39,999	60.0	22.3	
Over \$40,000	23.7	2.8	
Employment Status			49.70 ***
Full-time Paid	72.1	38.6	
Part-time Paid	3.2	16.7	
Not Paid	24.7	44.8	
Parental Status			1.25
Parent	81.1	85.2	
Not Parent	18.9	14.8	

Note. *** $p < .001$.

Comparison Between Responders and Sample of Nonresponders

One-hundred and seventeen nonresponders were contacted by telephone. Table 3 compares the characteristics of the present sample with the sample of 117 nonresponders. It should be noted that one person did not give his or her age, three did not give their level of education, 35 individuals would not give their personal income, and 37 individuals would not give their family income. All percentages are based only on individuals who responded to questions. There were no significant differences between responders and nonresponders on age, level of education, employment status, or parental status. Nonresponders were more likely than responders to have family incomes under \$20,000, and less likely to have family incomes between \$20,000 and \$39,999, $\chi^2(3, N = 480) = 12.96, p < .05$. Nonresponders were also more likely than responders to have personal incomes below \$20,000 and less likely to have personal incomes between \$20,000 and \$39,999, $\chi^2(2, N = 483) = 6.40, p < .05$.

Table 3

Comparison of Responders With A Sample of Nonresponders

Variable	Responders (%) (N = 401)	Nonresponders (%) (N = 117)	χ^2
Age			2.47
Less Than 35	24.7	19.8	
35 to 54	42.8	50.8	
Over 54	32.4	29.3	
Education			7.52
Less Than High School	6.2	10.5	
Some High School	16.2	15.8	
Completed High School	20.4	14.0	
Some Vocational/Trade	9.0	8.8	
Completed Vocational/Trade	14.2	21.1	
Some University	13.5	10.5	
Completed University Degree	20.4	19.3	
Family Income			12.96 *
Less Than \$20,000	11.2	26.2	
\$20,000 - \$39,999	46.8	36.3	
\$40,000 - \$69,999	34.0	31.2	
\$70,000 And Over	8.0	6.3	
Personal Income			6.40 *
Less Than \$20,000	46.8	59.7	
\$20,000 - \$39,999	40.4	25.6	
\$40,000 And Over	12.7	14.6	
Employment Status			0.08
Full-time Paid	54.5	54.7	
Part-time Paid	10.3	9.4	
Not Paid	35.2	35.9	
Parental Status			2.97
With Children	83.2	89.7	
Without Children	16.8	10.3	

Note. * $p < .05$.

Factor Analysis of Coping Items

In order to identify coping factors within each role area, factor analyses were computed for coping items separately for each role area (marriage, finances, work, and parenting). Analyses were based upon data from all individuals answering questions in each area. Decisions regarding the number of factors to extract were based on several considerations. These included (a) the Kaiser-Guttman Rule (factors with Eigenvalues > 1), (b) Cattell's (1978) scree test, (c) interpretability of factors, and (d) consistency with prior factor analytic studies using these coping items. Principal components analysis (PCA) was used initially in order to determine an approximate number of factors to extract, using the Kaiser-Guttman rule and scree test. Once an approximate number of factors was determined, Principal factor analyses (PFA) with oblique rotations were performed, retaining both an underestimated and overestimated number of factors, based upon the above criteria. These were then examined as to their interpretability and consistency with prior research.

Identification of the variables composing a factor was determined in the following manner. For each variable, all of its salient loadings on all factors were examined to find that factor with which the variable has the strongest relationship. A salient loading was considered to be any factor loading $> .30$. The variable was then used to measure only that factor. A variable with two or more almost equally high loadings was not used to measure any factor (Gorsuch, 1983) and excluded from the analysis. Two such variables were identified (with factor loadings within 0.05) and were not used to measure any factor.

Principal factor analysis was used to extract only variance that each observed variable shared with other observed variables (common variance), excluding unique and error variance. Squared multiple correlations of each variable with all other variables were used as initial communality estimates. Since coping factors are not viewed as independent (i.e., orthogonal), factors were rotated obliquely to obtain a final solution.

Prior to factor analyzing coping variables in each area, the correlation matrices of coping variables were tested for significance using Bartlett's (1950) χ^2 test of significance. Gorsuch (1983) recommends this procedure to determine a correlation matrix's factorability. All correlation matrices were highly significant (p 's < .001), indicating that factor analysis of the correlation matrices was appropriate. Results of these factor analyses are reported below.

Marital Coping

Principal components analysis of the marital coping items identified six factors with eigenvalues greater than one. Examination of Cattell's scree test suggested retaining the first four or five factors. In order to determine the number of factors to retain, PFA with an oblique rotation for factor solutions retaining four through seven factors were examined. The extraction of six factors resulted in stable and interpretable factors. Table 4 identifies the six-factor solution extracted by PFA with an oblique rotation, the items in each factor, their loadings, and the percentage of variance accounted for by each factor. The six factors accounted for a total of 90% of the common variance.

Table 4

Items and Factor Loadings for Six Marital Coping Factors (N = 401)

Factor 1: Positive Comparison (36.7%)

Item	Factor Loading
Remind self that relationship better than most other people like yourself	.825
Appreciate own marriage after seeing what others are like	.694
Tell self how much better it gets with time	.539

Factor 2: Passive Acceptance (25.5%)

Item	Factor Loading
Give in more than half way	.615
Keep out of spouse's way for awhile	.551
Keep hurt feelings to self	.514
Wait for time to remedy difficulties	.383

Factor 3: Negotiation (12.1%)

Item	Factor Loading
Sit down and talk things out	.765
Try to find a fair compromise	.514

Factor 4: Advice Seeking (6.9%)

Item	Factor Loading
Asked for advice from friend or neighbor about getting along in marriage	.773
Asked for advice from a relative	.429
Read books or magazines about getting along in marriage	.427
Gone to doctor counsellor or other professional for marriage advice	.327

Factor 5: Rumination (5.1%)

Item	Factor Loading
Keep so busy you don't have time to think	.733
Get completely discouraged about changing things	.556
Often thinking about marriage problems during a week	.485

Factor 6: Selective Ignoring (4.4%)

Item	Factor Loading
Overlook spouse's faults and pay attention only to good points	.686
Ignore difficulties by looking only at good	.413
Tell self the difficulties are not important	.368

As indicated by Table 4, Factor 1 loads on items tapping the tendency to compare one's own marriage with those of others or with one's own in the past. This factor represents a type of cognitive coping response. Factor 2 reflects acceptance that problems won't change and ways of coping with this. Factor 3 identifies a tendency to actively work out problems with a spouse. Factor 4 identifies a tendency to seek advice from others. Factor 5 reflects trying to actively avoid thinking about problems seen as unchangeable, although perhaps unsuccessfully. Factor 6 identifies a tendency to use cognitive techniques to think about positive qualities and minimize the importance of the negative qualities.

Factors 1 through 4 are identical to factors found in previous research (Fleishman, 1984; Pearlin & Schooler, 1978). Factor 6 was virtually the same as found by Fleishman (1984) and Pearlin and Schooler (1978), except their factor had one additional item. Factor 5 was the only factor not similarly identified by other studies. The decision to retain this factor was made because it accounted for a similar proportion of variance as other already well established factors and was, therefore, worth examining.

Financial Coping

Principal components analysis of financial coping items identified five factors with eigenvalues greater than one, while examining Cattell's (1950) scree test suggested retaining six or seven factors. Principal factor analyses with an oblique rotation were performed retaining four through seven factors. A five-factor solution, accounting for 92% of the common variance, was most easily interpreted and was consistent with past research. Table 5 identifies the five-factor solution, items in each factor,

Table 5

Items and Factor Loadings for Five Financial Coping Factors (N = 401)

Factor 1: Positive Comparison (36.6%)

Item	Factor Loading
Tell self that income is higher than most of your friends	.840
Remind self that income is higher than most of your relatives	.764
Tell self that income is higher than most of your neighbours	.673
Tell self that income is higher than most people with same education	.545

Factor 2: Devaluation (19.8%)

Item	Factor Loading
Our money seems to be enough for our wants	.646
Never have money problems on your mind	.643
Borrowing money	-.510
Tell self that money situation will get better	-.458

Factor 3: Budgeting (18.1%)

Item	Factor Loading
We are very careful how we spend money	.742
We limit what we buy so we can be secure	.663
We live on a strict budget	.657

Factor 4: Selective Ignoring (11.8%)

Item	Factor Loading
Tell self money isn't worth getting upset about	.703
Concentrate on more important things in life	.683
Remind self that standard of living is better than it was	.625
Notice people who are worse off	.432

Factor 5: Acceptance (6.2%)

Item	Factor Loading
Sit back and wait for things to work out	.661
Accept the money pinch because there is little you can do about it	.531

their factor loadings, and the percentage of variance accounted for by each factor.

As indicated by Table 5, Factor 1 identifies a cognitive coping strategy tapping a tendency for people to compare their situation with that of other people. Factor 2 identifies a strategy of minimizing the importance of money. Factor 3 identifies active strategies of limiting spending. Factor 4, another cognitive strategy, includes trying to ignore money problems and noticing others in worse positions. Factor 5 identifies a strategy of passive acceptance of money problems.

Factors 1, 3, and 5 are identical to those reported by Fleishman (1984) and Pearlin and Schooler (1978). identified by the aforementioned authors. Factor 2 is a combination of two factors identified by Fleishman (1984). Fleishman (1984) retained a six-factor solution as compared to the present five-factor solution. Three of the four items loading on this factor were the same as identified by Pearlin and Schooler (1978). In summary, the five-factor solution retained in this analysis was the most interpretable and was highly similar to those obtained by previous research.

Job Coping

Principal components analysis of job coping items identified five factors with eigenvalues greater than one. Examining Cattell's (1950) scree test suggested retaining a four-factor solution. As a result, PFA with an oblique rotation was performed retaining four through six factor solutions. Each of these factor solutions identified a one-item factor ("just wait for a difficulty to work itself out"). Given the questionable validity and

interpretation problems of one-item factors, PFA with an oblique rotation extracting four through six factors was again performed, eliminating this item from the analysis. Examination of each of these factor solutions indicated that the four-factor solution (accounting for 89.5% of the common variance) was the most interpretable.

Table 6 outlines the four factor solution, factor items and their loadings, and the percentage of variance accounted for by each factor. Factor 1 identifies cognitive strategies aimed at making comparison with either one's own situation or that of others to feel more positive about current situation. Factor 2 identifies passive attitudes or beliefs aimed at resigning oneself to the situation and focusing on positive rewards that result. Factor 3 identifies specific strategies aimed at taking action to solve problems. Factor 4 involves trying to ignore difficulties by minimizing their importance or by trying to avoid thinking about them.

When comparing this four-factor solution with comparable factor solutions from previous research (Fleishman, 1984; Pearlin & Schooler, 1978), only two of the four factors are identical to those previously found. Factor 1 (positive comparison) and Factor 4 (selective ignoring) contained slightly different items than in previous research. The "selective ignoring" factor found previously included the items on the present factor, the item deleted from the present analysis ("just wait for a difficulty to work itself out"), and one item loading on the present positive comparison factor ("remind self that for everything bad about work situation there is also something good"). The positive comparison factor included two items not loading on this factor in previous research and excluded one item which did load on this factor in previous research. Two items were identical.

Table 6

Items and Factor Loadings for Four Job Coping Factors (N = 332)

Factor 1: Positive Comparison (37.2%)

Item	Factor Loading
Remind self that for everything bad about your work situation there is also something good	.731
Tell self that your job is as good as or better than most other people you know	.550
Notice people who have more difficulties in their job than you have	.512
Remind yourself that your work life now is better than it was	.444

Factor 2: Reward Substitution (29.4%)

Item	Factor Loading
The most important thing about my job is that it provides me the things I need in life	.672
I can put up a lot on my job as long as pay is good	.498
I have to accept my job as it is because there is nothing I can do to change it	.447
Time solves most problems on my job	.358
As soon as I leave work, I put it out of my mind	.306

Factor 3: Action (13.7%)

Item	Factor Loading
Take some action to get rid of the difficulties in your work situation	.835
Talk to others to find a solution to difficulties in work situation	.391

Factor 4: Selective Ignoring (9.7%)

Item	Factor Loading
Tell self that difficulties in you work are not important	.722
Try to pay attention only to your duties in order to overlook difficulies in work situation	.388

One difference between the present research and prior research using these items was the respondents. In previous research, only individuals who "work outside the home" completed these questions, whereas in the present research both individuals who "work outside the home" and individuals who are homemakers completed these questions. To assess whether the inclusion of homemakers affected the factor solutions, all factor analyses were repeated omitting homemakers from the sample ($N = 72$). Examination of factor solutions revealed no major differences, although some item loadings differed. This suggests that the discrepancy between the current factor solution and those obtained by prior research was not due to the inclusion of homemakers.

Inspection of the items loading on different factors in the present analysis revealed that these differences occurred for items that were modified, as recommended by Fleishman (1984). Although modification of other items in other role areas did not seem to change their meaning (as evident by the constancy of factor composition), it seems that for the work coping items such a modification resulted in a change in meaning and, therefore, different factor loadings. As a consequence, the present four-factor solution was retained for later analyses to reflect the modification of items.

Parental Coping

Results of initial PCA identified six factors with eigenvalues greater than one. Cattell's scree test suggested a factor solution retaining six or seven factors. As a consequence, PFA with an oblique rotation was computed for factor solutions retaining five through seven factors. The most interpretable solution was a six-factor solution which accounted for 92% of the common variance and was most consistent with previous research.

Table 7 outlines the six factor solution, factor items and their loadings, and the percentage of variance accounted for by each factor. Factor 1 identifies active, punishment oriented strategies aimed at controlling difficult behavior in children. Factor 2 reflects strategies aimed at seeking advice from others regarding difficulties in children's behavior. Factor 3 identifies ways of thinking (attitudes or beliefs) that serve to minimize a parent's feeling of responsibility for controlling their children's behavior. Factor 4 reflects a strategy aimed at reassuring oneself that things could be worse or that they will get better in the future. Factor 5 reflects a strategy aimed at ignoring the problems by focusing on positive things, minimizing the importance of problems, or deciding you can't change things. Factor 6 identifies a cognitive strategy seeing things as easier than in past or that they will become easier.

This factor solution was identical to that obtained by Fleishman (1984), adding support to the decision to retain a six-factor solution. Pearlin and Schooler (1978), retaining a five-factor solution, obtained similar factors as those reported here. The only difference was the combination of the present Factor 4 and Factor 5 into one factor.

The decision to retain a six-factor solution as opposed to a five-factor solution was based on several considerations. These included the indications from PCA and the scree test to retain more than five factors, Fleishman's (1984) results, and the fact that Factor 4 and Factor 5 each accounted for a sufficient amount of common variance (10.7% and 7.7%, respectively) to warrant treating them as separate factors.

Table 7

Items and Factor Loadings for Six Parental Coping Factors (N = 325)

Factor 1: Action (32.7%)

Item	Factor Loading
Scold you children	.819
Threaten some kind of punishment	.785
Take away a privilege	.740

Factor 2: Advice Seeking (25.3%)

Item	Factor Loading
Asked advice of friends or neighbors in dealing with difficulties in children's behavior	.714
Asked advice of relative	.669
Gone to a doctor, teacher or other professional for advice about children's behavior	.548
Read any books or magazines about raising children	.374

Factor 3: Rationalization (11.3%)

Item	Factor Loading
The way my children are turning out depends on their inner nature and there is little I can do	.869
There is only so much I can do as a parent and after that I just accept my children as they are	.511

Factor 4: Reassurance (10.7%)

Item	Factor Loading
Look around at other parents to see how much better off you are than they	.754
Remind yourself that things could be worse	.557
Think that it's behavior your children will outgrow	.428

Factor 5: Selective Ignoring (7.7%)

Item	Factor Loading
Just try to ignore what's going on	.538
Try to notice only the good things	.532
Decide there is nothing you can do to change things	.531
Tell yourself it is not really important	.357

Factor 6: Positive Comparison (5.1%)

Item	Factor Loading
Remind self how much easier it is now being a parent than it used to be	.703
Tell self parenting will become easier in future	.502

Derivation of Factor Scores

Factor scores in the four role areas were computed by the unit weighting method, such that each person's score on a factor was the sum of his or her scores on each variable making up that factor. Although there are numerous methods of determining factor scores, research suggests that differential weighting methods add little information and are seldom worthwhile (Gorsuch, 1983). These factor scores were used in the main analyses.

Reliability of Measures

Internal consistency reliabilities (Cronbach's alpha) were computed for all measures used in the present study. Table 8 presents Cronbach's alpha for all measures included in the main analyses. Internal consistency reliability coefficients range from .45 to .91. Overall, reliabilities are adequate, with coping responses having the lowest and most variable alpha coefficients.

Table 8

Internal Consistency Reliability (Cronbach's Alpha) For All Variables

Variable	Alpha Coefficient
Depression	.87
Health	.80
Past Active Coping	.72
Mastery	.75
Chronic Marital Conditions	.89
Marital Distress	.91
Marital Coping Responses	
Advice Seeking	.57
Positive Comparison	.72
Negotiation	.59
Selective Ignoring	.55
Passive Acceptance	.61
Rumination	.65
Chronic Financial Conditions	.89
Financial Distress	.90
Financial Coping Responses	
Devaluation	.64
Selective Ignoring	.71
Positive Comparison	.79
Acceptance	.55
Budgeting	.70
Chronic Job Conditions	.78
Job Distress	.88
Job-Related Coping Responses	
Reward Substitution	.56
Positive Comparison	.65
Selective Ignoring	.45
Action	.52
Chronic Parental Conditions	.83
Parental Distress	.86
Parental Coping Responses	
Selective Ignoring	.55
Punitive Action	.83
Advice Seeking	.64
Reassurance	.60
Positive Comparison	.51
Rationalization	.62

Main Analyses

Analytic Method

Prior to data analysis, all variables were examined for violations of distributional assumptions. Upon examining variable distributions, many variables were significantly positively skewed. Therefore, these variables were transformed using a logarithmic transformation (log10 transformation) (Tabachnick & Fidell, 1983). After transformations were performed, variable distributions were reexamined and did not deviate significantly from normality. Therefore, these transformed variables were retained for all later analyses. Transformations were performed on all variables except for the following: Mastery, Financial Devaluation, Financial Budgeting, Financial Selective Ignoring, Financial Acceptance, Marital Positive Comparison, Marital Negotiation, Job Reward Substitution, Job-related Positive Comparison, Action, and Parental Rationalization.

The main analyses of the present data were based on the conceptual model previously articulated in Figure 3. This model identifies the salient variables and their causal priority within the model. Data analysis proceeded with a series of ordinary least-squares multiple regression analyses, with each endogenous variable in the model serving as a dependent variable regressed on all other variables preceding it in the model. For each dependent variable, variables preceding it were entered into the regression equation, hierarchically, according to their causal priority. This method is described by Cohen and Cohen (1983) as a method of partitioning effects into total, direct and indirect effects. The direct effect of a variable on a dependent measure is estimated by its partial regression coefficient, when all other variables are in the equation. The total

effect of a variable on a dependent measure is estimated by its partial regression coefficient, when it is first entered into the equation. The indirect effect of a variable is the total effect minus its direct effect. Demographic variables, coping factors, and chronic conditions and mastery, were entered as three sets of variables, since no causal assumptions were made regarding the relationship of the variables within these sets (Cohen and Cohen, 1983).

Since many variables were examined for statistical significance, Fisher's Protected *t* Test, adapted for multiple regression analysis (Cohen and Cohen, 1983), was used to protect against large experiment-wise Type I error. Individual variables were examined for statistical significance only if the overall *F* test, for the set, was significant at the .05 significance level. An alpha level of .05 was chosen as the criterion of testing individual regression coefficients. Cohen and Cohen (1983) note that there is a choice between two error terms in significance testing, "Model I" and "Model II" error terms. Model I error term is the residual variance when only the variable subset of interest is included in the regression equation. Model II error term is the residual variance found when all variables in the model have been included in the regression equation. Model I error term was used for all significance tests, since it represented the most conservative test.

The following presentation of the main findings will procede in two stages. Since the hypotheses were based on a conceptual model, presentation of the results will begin with a discussion of the significant effects in the model. Only the most relevant findings will be presented. Each of the four role areas (finances, marriage, parenting and work) were examined

separately. Due to the complexity of the results, detailed findings will be presented initially, followed by an integration and summary, both within the text and diagrammatically. Although demographic variables were included in all analyses, their effects will not be highlighted in the text, as they are not of central importance. All relationships between demographics and other variables, however, are contained in the tables. After highlighting the significant relationships within the model, each hypothesis will be examined separately.

Marital Role: Examination of Model

Tables 9 through 13 summarize the results of the series of hierarchical multiple regression analyses performed using all variables identified by the conceptual model, within the marital area. These tables highlight the total effects of each variable, the direct effects, and the squared semi-partial correlation (sr^2). For the total effect, the squared semi-partial correlation is the amount of change in the squared multiple correlation coefficient (R^2) when that variable is added to the equation, or the percentage of variance accounted for by that variable when added to the equation. For the direct effect, the squared semi-partial correlation represents the percentage of variance accounted for by that variable, net of all other variables, as if it were added to the equation last. Variables are listed in their order of entry into the regression equation, and each dependent variable is regressed on all variables assumed to be causally prior to it. For variables entered last into the equation, the total effect is equal to the direct effect. Therefore, the latter is omitted from the table.

Table 9

Total And Direct Effects of Gender, Demographics, and Health On Health and Past
Active Coping: Hierarchical Regression Analysis (N = 400)

	Health							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.178	.032	13.00 ***	.025	.205	.023	9.50 ***
Demographics								
Family Income	-.003	-.112	.009	3.80				
Education	-.001	-.033	.001	0.39				
Age	.001	.025	.001	0.23				
Personal Income	.001	.034	.001	0.23				
<hr/>								
	Past Active Coping							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.004	-.011	.000	0.05	-.008	-.026	.000	0.14
Demographics								
Family Income	-.007	-.095	.007	2.69	-.006	-.081	.005	1.95
Educations	-.005	-.081	.006	2.27	-.005	-.077	.005	2.07
Age	-.007	-.126	.014	5.75	-.007	-.129	.015	6.02 *
Personal Income	.003	.054	.001	.56	.004	.049	.001	0.48
Health	.316	.125	.015	6.05 *				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 10

Total and Direct Effects of Gender, Demographics, Health and Past Active Coping on
Mastery and Chronic Marital Conditions: Hierarchical Regression Analysis (N = 400)

Mastery								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.234	-.029	.001	0.33	.026	.003	.000	0.00
Demographics								
Family Income	.426	.218	.035	15.00 **	.307	.157	.018	9.58 **
Education	.256	.146	.018	7.81 **	.198	.114	.011	5.84 *
Age	.027	.018	.000	0.13	-.013	-.008	.000	0.03
Personal Income	-.093	-.058	.002	0.68	-.052	-.032	.001	0.27
Health	-23.25	-.349	.116	56.45 ***	-20.967	-.315	.093	49.56 ***
Past Active Coping	-7.214	-.275	.073	38.60 ***				
Chronic Marital Conditions								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.013	.060	.004	1.43	.018	.084	.004	1.82
Demographics								
Family Income	-.005	-.101	.007	3.07	-.002	-.046	.002	0.73
Education	-.006	-.126	.014	5.55 *	-.004	-.095	.008	3.77
Age	-.005	-.125	.014	5.73 *	-.004	-.099	.009	4.20 *
Personal Income	.007	.170	.014	5.74 *	.006	.147	.010	5.07 *
Health	.542	.306	.089	40.28 ***	.485	.273	.070	34.18 ***
Past Active Coping	.182	.260	.065	31.57 ***				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Effects on health, past coping, mastery, and marital conditions. As is indicated in Table 9, gender was related to health, with both a significant total effect ($p < .001$) and a significant direct effect ($p < .001$). The positive weights indicate that women reported more health problems than did men. Health was significantly related to the effectiveness of past active coping, with healthier ($p < .05$) people reporting greater effectiveness than less healthy people. There was no significant gender difference in effectiveness of past active coping.

As is indicated by Table 10, health and effectiveness of past active coping behavior were significantly related to mastery (p 's $< .001$), with lower health problems and greater effectiveness of past coping related to greater mastery. In comparing the total and direct effects of health on mastery (11.6% vs. 9.3%), it should be noted that most of its effect on mastery was direct, with only a small indirect effect through past coping. No gender differences in mastery were found ($p > .05$). Similarly, both health and effectiveness of past active coping were significantly related to chronic marital conditions (p 's $< .001$). Higher health problems and lower effectiveness of past active coping were related to higher chronic marital conditions (p 's $< .001$). Both accounted for a significant percentage of variance in mastery, with the total and direct effects of health accounting for 8.9% and 7.0%, respectively and past coping accounting for 6.5% of the variance. Health affected chronic marital conditions, primarily directly, with only a small proportion of its effect being indirect through past active coping.

Effects on marital coping responses. Table 11 summarizes the results of multiple regression analyses, with marital coping responses regressed on

all variables preceding them in the model. Gender was significantly related to Advice Seeking, with both a significant total effect ($p < .001$) and a significant direct effect ($p < .05$). This indicates that women reported more frequent marital Advice Seeking than did men. Greater chronic marital conditions were related to greater use of Advice Seeking in marriage ($p < .001$).

Gender was significantly related to Positive Comparison ($p < .05$ and $p < .01$ for total and direct effects, respectively), indicating that women reported more frequent use of Positive Comparison in marriage than did men. Although health problems do not have a significant total effect on frequency of using Positive Comparison ($p > .05$), they had a significant direct effect ($p < .01$), indicating that greater health problems were related to greater use of Positive Comparison in marriage. Effectiveness of past active coping had a total effect on Positive Comparison ($p < .05$), with less effectiveness associated with higher frequency of using Positive Comparison. Chronic marital conditions were significantly related to Positive Comparison in marriage ($p < .001$), with more chronic conditions associated with less frequent use of Positive Comparison. It may be that when chronic marital conditions are high, it is not as easy to positively compare one's marriage, in relation to others. Examination of the semi-partial correlations of each of the variables indicates that chronic conditions, by far, accounted for the greatest percentage of variance in Positive Comparison (13% vs less than 4% for other variables). This is an indication that chronic marital conditions was the most important variable in accounting for the frequency of using Positive Comparison in marriage.

Table 11

Total and Direct Effects Of Gender, Demographics, Health, Past Coping, Mastery, and Chronic Marital Conditions On Marital Coping Responses: Hierarchical Regression Analysis (N=400)

Marital Advice Seeking								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.031	.273	.074	31.93 ***	.014	.125	.008	4.00 *
Demographics								
Family Income	.002	.055	.002	1.00	.002	.076	.004	1.97
Education	.002	.087	.006	2.87	.003	.115	.011	5.33 *
Age	-.003	-.159	.023	10.18 **	-.003	-.132	.015	7.26 **
Personal Income	-.003	-.133	.009	3.84	-.004	-.178	.015	7.27 **
Health	.090	.096	.009	3.98 *	.023	.025	.000	0.24
Past Active Coping	.005	.015	.000	0.09	-.019	-.052	.002	1.10
Marital Conditions	.150	.284	.058	28.08 ***				
Mastery	.000	.026	.000	0.21				
Marital Positive Comparison								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.499	.108	.012	4.67 *	.844	.182	.018	8.75 **
Demographics								
Family Income	-.006	-.006	.000	0.01	-.047	-.042	.001	0.63
Education	.016	.016	.000	0.09	-.038	-.038	.001	0.61
Age	.174	.204	.037	15.46 ***	.125	.147	.019	9.40 **
Personal Income	.003	.003	.000	0.00	.068	.074	.003	1.30
Health	-.956	-.025	.001	0.25	4.399	.116	.011	5.42 **
Past Active Coping	-1.774	-.119	.014	5.66 *	.012	.001	.000	0.00
Marital Conditions	-9.178	-.429	.133	66.53 ***				
Mastery	.016	.029	.001	0.27				

Table continued....

Table 11 (continued)

Marital Negotiation								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.162	.054	.003	1.15	.290	.096	.005	2.63
Demographics								
Family Income	.022	.031	.001	0.28	-.030	-.042	.002	0.66
Education	.079	.122	.013	5.15 *	.029	.044	.002	0.87
Age	.007	.012	.000	0.05	-.030	-.054	.003	1.34
Personal Income	-.017	-.028	.000	0.15	.032	.054	.001	0.74
Health	-2.621	-.106	.011	4.37 *	2.093	.085	.006	3.11
Past Active Coping	-2.100	-.216	.045	19.03 ***	-.619	-.064	.003	1.83
Marital Conditions	-5.902	-.425	.131	69.73 ***				
Mastery	.057	.153	.016	8.30 **				
Marital Selective Ignoring								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.018	.084	.007	2.80	.028	.128	.009	3.71
Demographics								
Family Income	.003	.052	.002	0.83	.003	.058	.002	1.03
Education	-.002	-.051	.002	0.95	-.002	-.042	.002	0.63
Age	.009	.225	.046	19.14 ***	.010	.240	.050	21.48 ***
Personal Income	.004	.078	.003	1.24	.002	.054	.001	0.59
Health	.181	.102	.010	4.21 *	.149	.084	.006	2.43
Past Active Coping	.003	.005	.000	0.01	-.010	-.014	.000	0.07
Marital Conditions	.158	.158	.019	7.76 **				
Mastery	.002	.081	.004	1.86				

Table continued....

Table 11 (continued)

Marital Passive Acceptance								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.003	.015	.000	0.10	.001	.003	.000	0.00
Demographics								
Family Income	-.002	-.045	.001	0.60	.001	.028	.001	0.30
Education	-.004	-.095	.008	3.06	-.001	-.020	.000	0.19
Age	-.001	-.019	.000	0.13	.001	.040	.001	0.76
Personal Income	.005	.121	.007	2.82	.001	.035	.001	0.31
Health	.351	.218	.045	18.95 ***	.067	.042	.001	0.76
Past Active Coping	.098	.154	.023	9.69 **	.004	.007	.000	0.02
Marital Conditions	.419	.462	.154	83.93 ***				
Mastery	-.002	-.038	.006	3.48				
Rumination								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.035	.159	.026	10.36 **	.026	.117	.007	5.12 *
Demographics								
Family Income	-.004	-.070	.004	1.49	.001	.016	.000	0.13
Education	-.007	-.151	.020	8.16 **	-.003	-.063	.003	2.33
Age	-.003	-.068	.004	1.71	-.000	-.004	.000	0.01
Personal Income	.005	.115	.006	2.67	.001	.013	.000	0.05
Health	.438	.245	.057	25.25 ***	.050	.028	.001	0.43
Past Active Coping	.078	.111	.012	5.29 *	-.055	-.078	.005	3.65
Marital Conditions	.576	.571	.236	165.18 ***				
Mastery	-.004	-.150	.015	10.43 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Examination of the total and direct effects on marital Negotiation shows that both health and effectiveness of past active coping had significant total effects on marital Negotiation ($p < .05$ and $p < .001$, respectively). This indicates that higher health problems and lower effectiveness of past active coping are related to greater use of Negotiation in marriage. Chronic marital conditions and mastery were both significantly related to marital Negotiation ($p < .001$ and $p < .01$, respectively). Greater chronic marital conditions were related to less use of Negotiation in marriage, whereas greater mastery was related to more frequent use of Negotiation. Both chronic marital conditions and mastery were significantly related to using Negotiation. Examination of their squared semi-partial correlations reveals that chronic marital conditions accounted for 13% of the variance in Negotiation, while mastery only accounted for 1.6% of the variance. There was no significant gender difference in using Negotiation ($p > .05$). Greater chronic marital conditions was also related to greater use of Selective Ignoring as a coping response ($p < .01$).

Health and effectiveness of past active coping had significant total effects on Passive Acceptance ($p < .001$ and $p < .01$, respectively), indicating that greater health problems and less effective past active coping were related to greater use of Passive Acceptance. Chronic marital conditions, again accounting for a substantial amount of variance (15.4%), was significantly related to Passive Acceptance, with greater chronic conditions associated with greater use of Passive Acceptance ($p < .001$). No other variables significantly affected Passive Acceptance in marriage.

There was a significant gender effect on Rumination in marriage, with women using Rumination more frequently than men ($p < .01$ and $p < .05$ for

total and direct effects, respectively). Health and past active coping exhibited significant total effects ($p < .001$ and $p < .05$, respectively). Greater health problems and less effective active coping were related, indirectly, to greater use of Rumination ($p < .001$ and $p < .05$, respectively). None of their direct effects were significant. Chronic marital conditions and mastery both significantly related to Rumination ($p < .001$ and $p < .01$, respectively), with greater chronic marital conditions and lower mastery associated with greater use of Rumination. Again, chronic marital conditions, as compared to mastery and other variables, accounted for substantially more variance in Rumination (23.6% vs. less than 6%).

In summary, examination of the effects on marital coping responses indicates that women use Advice Seeking (problem-focused coping), Positive Comparison (appraisal-focused coping), and Rumination (emotion-focused coping) more frequently than do men. Greater health problems were associated with more frequent Advice seeking, less frequent use of Negotiation, more frequent selective ignoring, more frequent passive acceptance, and more frequent Rumination. These effects, however, were largely due to the indirect effect of health, through other variables. Health was directly related only to Positive Comparison, with greater health problems related to more frequent use of Positive Comparison. Overall, greater health problems were related to greater use of emotion-focused and appraisal-focused coping responses. Greater effectiveness of past active coping was related to greater use of Positive Comparison (appraisal-focused), greater use of Negotiation (problem-focused), and less use of Passive Acceptance and Rumination (emotion-focused). Again, as with health, these effects were largely due to the indirect effect of past coping, through other variables.

Mastery was related to only two coping responses. Higher mastery was associated with more frequent use of Negotiation (problem-focused) and less frequent Rumination (emotion-focused). By far the most important variable affecting coping responses in marriage was chronic marital conditions. For all coping responses except Advice Seeking and Selective Ignoring, chronic conditions accounted for a substantial amount of variance, far more than any other variable. Greater chronic marital conditions was associated with more frequent Advice Seeking and less frequent Negotiation (problem-focused responses), more frequent Selective Ignoring and less frequent Positive Comparison (appraisal-focused responses), and more frequent Passive Acceptance (emotion-focused response).

Effects on marital distress and depression. Table 12 summarizes the total and direct effects of all variables on marital distress. As indicated by Table 12, many variables exhibited significant total effects on marital distress, but not direct effects. Gender was significantly related to marital distress ($p < .01$), with women reporting greater marital distress than men. Health and effectiveness of past active coping significantly affected marital distress ($p's < .001$), with greater health problems and less effective past active coping related to higher marital distress. The aforementioned variables exhibited only significant total effects. Chronic marital conditions and mastery had significant total effects as well as significant direct effects (all $p's < .001$). Greater chronic marital conditions and lower mastery were related to greater marital distress. Again, it should be noted that marital conditions accounted for a substantial amount of variance in marital distress (24%). As is indicated by the

Table 12

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping,
 Mastery, Chronic Marital Conditions and Marital Coping Responses On Marital
 Distress: Hierarchical Regression Analysis (N = 400)

	Marital Distress							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.038	.141	.020	8.11 **	.017	.062	.002	2.05
Demographics								
Family Income	-.005	-.073	.004	1.64	.001	.015	.000	0.16
Education	-.007	-.121	.013	5.23 *	-.000	-.003	.000	0.01
Age	-.007	-.134	.016	6.64 *	-.002	-.040	.001	1.34
Personal Income	.007	.139	.009	3.86 *	.003	.050	.001	1.26
Health	.657	.298	.085	38.64 ***	.109	.050	.002	2.07
Past Active Coping	.199	.229	.051	24.38 ***	.043	.050	.002	2.19
Marital Conditions	.716	.576	.240	205.04 ***	.325	.261	.025	26.51 ***
Mastery	-.007	-.205	.028	23.62 ***	-.004	-.135	.011	11.98 ***
Coping Responses								
Advice Seeking	.266	.113	.010	10.62 **				
Positive Comparison	-.003	-.058	.002	2.37				
Negotiation	-.010	-.108	.008	8.46 **				
Selective Ignoring	.010	.008	.000	0.05				
Passive Acceptance	.037	.027	.000	0.44				
Rumination	.427	.347	.060	63.87 ***				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

change in the regression weight and the squared semi-partial correlation, most of marital conditions' effect on marital distress was indirect, through its relationship with coping responses. Three of the six coping responses were significantly related to marital distress. These were Advice Seeking ($p < .01$), Negotiation ($p < .01$), and Rumination ($p < .001$), indicating that greater Advice Seeking, less Negotiation, and greater Rumination were related to greater marital distress.

Table 13 summarizes the effects of all variables on self-reported symptoms of depression. Gender was significantly related to depression ($p < .05$), with women reporting more depressive symptoms than men. Effectiveness of past active coping and chronic marital conditions had significant total effects on depression ($p < .001$ $p < .001$, respectively), indicating that less effectiveness of past active coping and greater chronic marital conditions were related to greater symptoms of depression. Only one coping response, Rumination, was significantly related to depression ($p < .001$ for total effect), indicating that higher Rumination was related to higher symptoms of depression. Marital distress significantly related to depression ($p < .001$), with higher marital distress related to higher symptoms of depression. Only two variables exhibited both significant total and direct effects on depression. Higher health problems and lower mastery were related to higher symptoms of depression (all p 's $< .001$).

Summary

Figure 4, 5, and 6 summarize the important relationships between the variables in the model. For the purposes of simplifying the diagrammatic representation of each variable's effect on later variables, only signifi-

Table 13

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping, Mastery, Chronic Marital Conditions, Marital Coping Responses and Marital Distress On Self-Reported Depression: Hierarchical Regression Analysis (N = 400)

	Depression							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.103	.011	4.24 *	.000	.002	.000	0.00
Demographics								
Family Income	-.008	-.165	.020	8.32 **	-.002	-.048	.002	1.18
Education	-.004	-.090	.007	2.84	.001	.015	.000	0.14
Age	-.002	-.054	.001	1.28	-.000	-.012	.000	0.09
Personal Income	-.002	-.054	.001	0.59	-.001	-.024	.000	0.19
Health	.726	.422	.170	84.84 ***	.352	.205	.033	24.30 ***
Past Active Coping	.123	.181	.031	16.36 ***	.010	.014	.000	0.13
Marital Conditions	.257	.265	.051	35.64 ***	.053	.055	.001	0.75
Mastery	-.009	-.361	.086	60.62 ***	-.008	-.299	.054	39.58 ***
Coping Responses								
Advice Seeking	.041	.022	.000	0.27	.002	.001	.000	0.00
Positive Comparison	-.002	-.037	.001	0.66	-.001	-.026	.000	0.33
Negotiation	-.004	-.053	.002	1.41	-.002	-.033	.001	0.55
Selective Ignoring	.015	.015	.000	0.11	.013	.013	.000	0.09
Passive Acceptance	.047	.044	.001	0.79	.042	.039	.001	0.63
Rumination	.158	.164	.013	9.71 ***	.096	.100	.004	3.13
Marital Distress	.145	.186	.013	9.23 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

cant effects, and only those variables important in understanding the relationship between gender and depression, are included. Since there were no gender differences in effectiveness of past active coping, it was not included in the path diagrams. As demographic variables were included primarily as control variables, their effects are less salient than those of other variables in elucidating the relationship between gender and depression. Therefore, they were also omitted from the path diagrams. Although health was included as a control variable, analyses revealed that, in fact, it was of great relevance to understanding the gender-depression relationship. Therefore, its relationship with other variables is illustrated.

Figure 4 illustrates the impact of gender on depression, indirectly, through its effects on other variables. As is illustrated by the path diagram, women report having greater health problems than do men. Higher health problems, in turn, lead to a lower sense of mastery and greater chronic marital conditions. It should be noted that the significant pathways between health and mastery and health and conditions, as illustrated in this path diagram, are the total effects of health on each of these variables. That is, both the indirect effects through past coping and the direct effects are subsumed in these pathways. Greater chronic marital conditions and lower mastery, in turn, lead to greater marital distress, which finally leads to greater depression. Greater health problems also directly lead to greater depression, as does low mastery. In short, the significant pathways diagrammed in Figure 4 illustrate how, based on this model, being female leads to greater symptoms of depression. It should be noted that the observed gender difference in depression is accounted for by its direct and indirect relationship with other variables in the model.

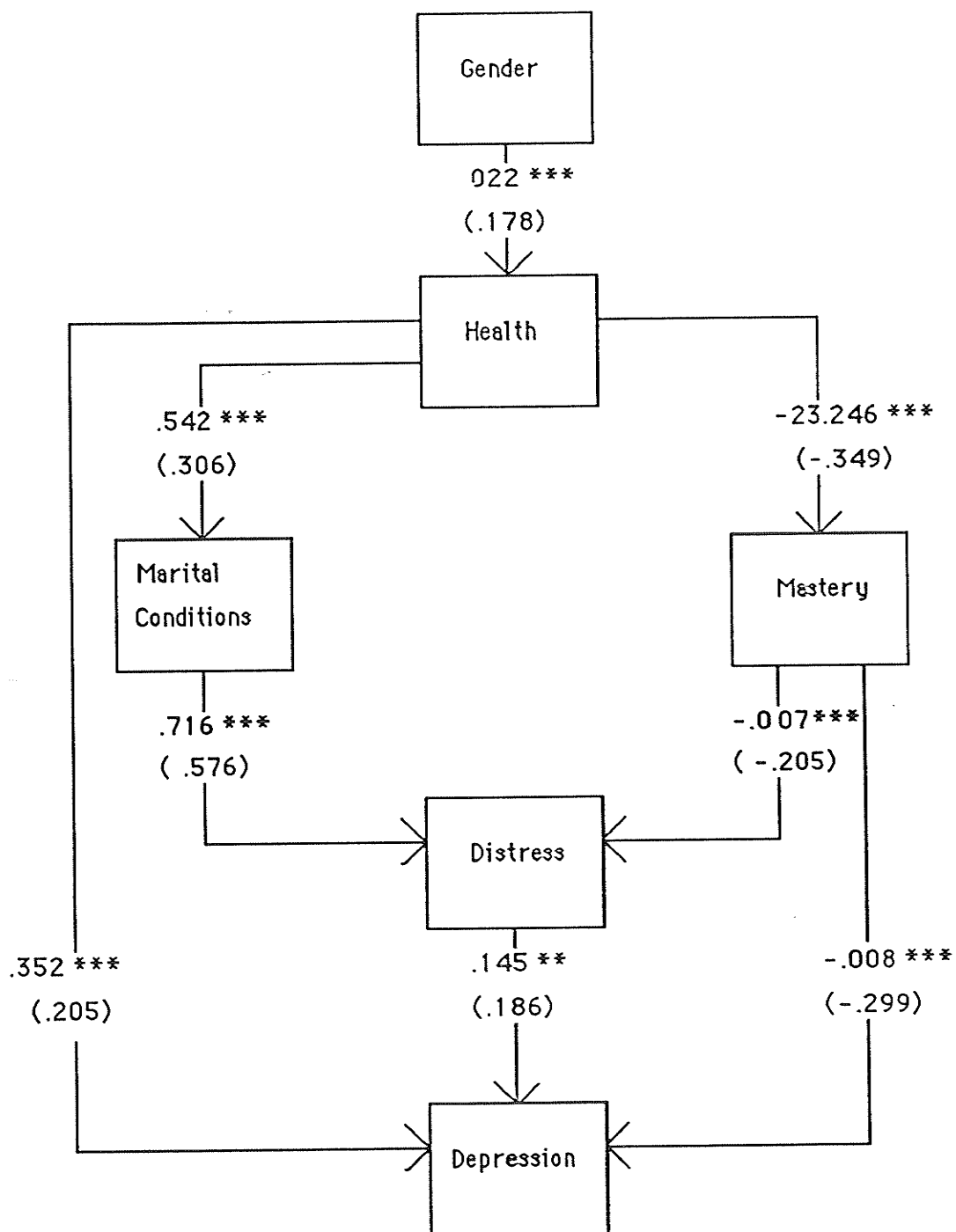


Figure 4. Path diagram illustrating the relationship between gender and depression through health, mastery, chronic marital conditions and marital distress.

As illustrated, the observed gender difference in health appears pivotal to understanding the observed gender difference in depression.

Figure 5 illustrates the effect of gender and health on coping responses and, ultimately, on depression. Again, only significant pathways are diagrammed. Being female leads to reporting greater health problems which, in turn, leads to more Advice Seeking, less Negotiation, and more Rumination. The impact of health on these coping responses is primarily an indirect one, through its relationship with past coping, chronic marital conditions, and mastery. These then lead to greater marital distress which, in turn, leads to greater depression.

Finally, Figure 6 illustrates the impact of marital conditions and mastery, through coping responses, on depression. Both low mastery and high chronic marital conditions lead to less frequent Negotiation and more frequent Rumination. In addition, high chronic conditions lead to high Advice Seeking. All three coping responses impact on marital distress, which further impacts on depression. Both chronic conditions and mastery affect marital distress over and above their relationship with coping responses. As is illustrated, high chronic conditions leads to high depression, primarily indirectly, through marital distress. Low mastery leads to depression, both indirectly through marital distress and directly.

Finances: Examination of Model

Tables 14 through 17 summarize the series of hierarchical regression analyses performed within the financial area. Since analyses with health, past active coping, and mastery are identical to those summarized in the marital area (see Tables 9 and 10), they will not be presented again.

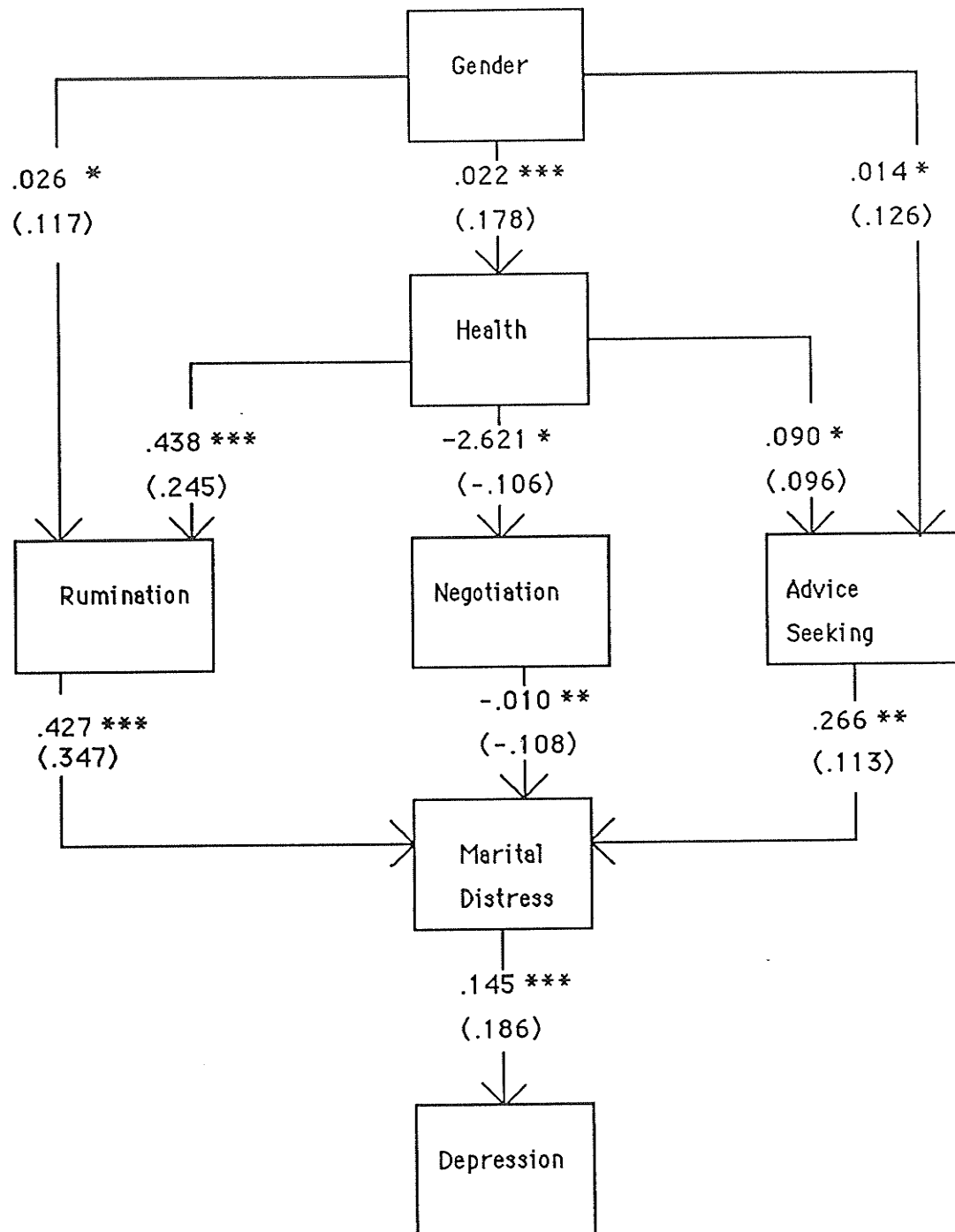


Figure 5. Path diagram illustrating the relationship between gender and depression through health, marital coping responses and marital distress.

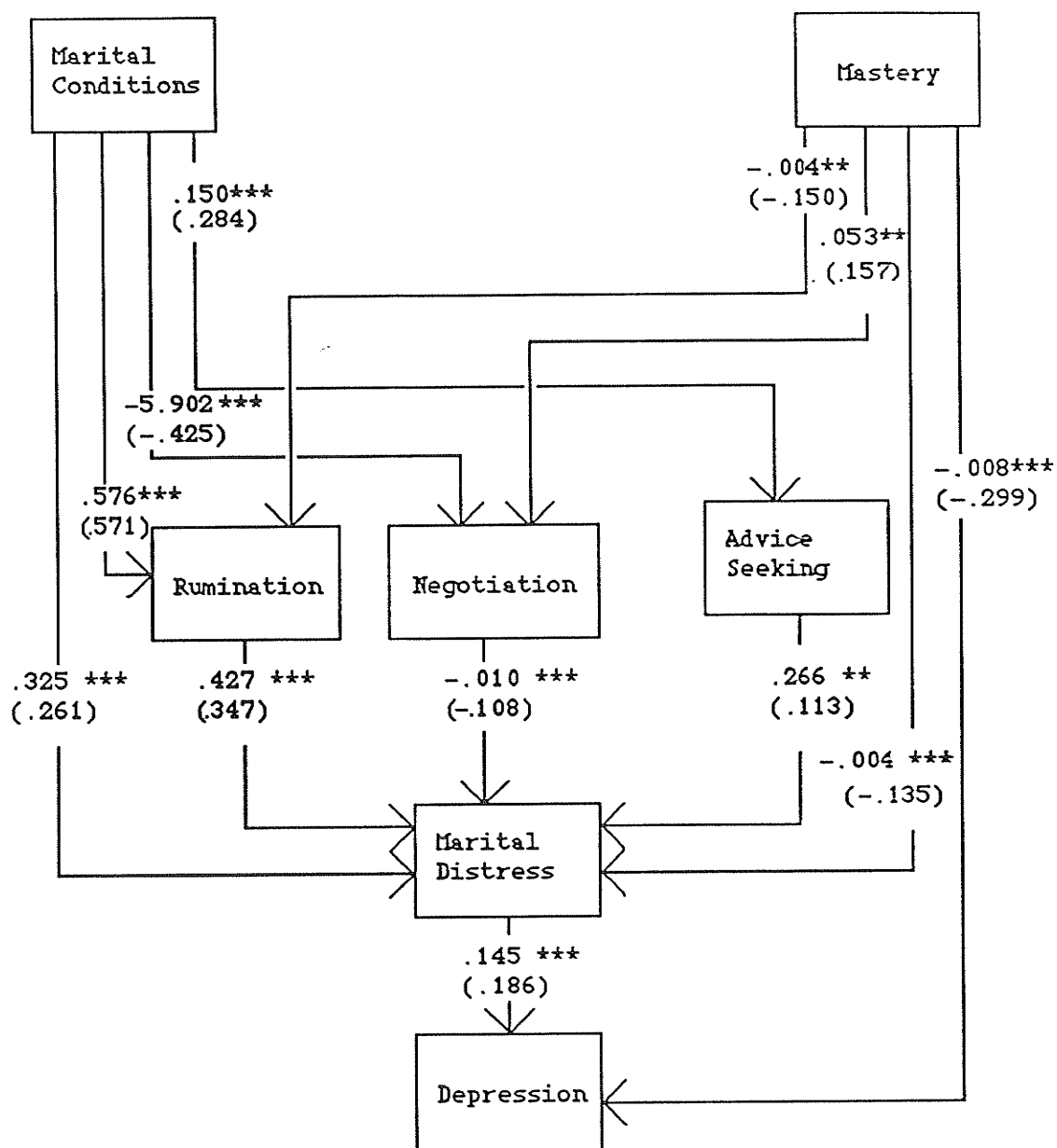


Figure 6. Path diagram illustrating the relationships between mastery and chronic marital conditions, and depression through marital coping responses and marital distress.

Table 14 identifies the significant total and direct effects on chronic financial conditions. Health exhibited a significant total effect on financial conditions ($p < .001$) and a significant direct effect ($p < .001$), with greater health problems related to greater chronic financial conditions. Past active coping was significantly related to chronic financial conditions, with less effective past coping related to greater chronic conditions ($p < .05$).

Effects on financial coping responses. Table 15 summarizes the effects of all variables on financial coping responses. The significant total effect of health on Devaluation ($p < .001$), combined with a nonsignificant direct effect ($p > .05$), indicates that the relationship between higher health problems and less use of Devaluation was mainly indirect, through chronic financial conditions. The significant effect of chronic financial conditions on Devaluation ($p < .001$) indicates that higher financial conditions were related to less use of Devaluation.

Gender was significantly related to Selective Ignoring ($p < .001$ and $p < .05$ for total and direct effects, respectively), with women using Selective Ignoring more frequently than men. Past active coping had a significant total effect on Selective Ignoring ($p < .05$), with greater effectiveness of past coping related to greater use of Selective Ignoring.

Health had significant total and direct effects on Positive Comparison (p 's $< .05$), with greater health problems related to more frequent use of Positive Comparison. Women were more likely than men to use Acceptance to deal with financial problems ($p < .05$ for total effect). Health had a significant total effect on Acceptance ($p < .01$), with greater health prob-

Table 14

Total and Direct Effects of Gender, Demographics, Health and Past Active Coping on
Chronic Financial Conditions: Hierarchical Regression Analysis (N = 400)

	Chronic Financial Conditions							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.009	.046	.002	0.86	-.019	-.096	.005	2.32
Demographics								
Family Income	-.011	-.223	.037	16.72 ***	-.009	-.194	.027	13.33 ***
Education	-.000	-.004	.000	0.01	.000	.009	.000	0.04
Age	-.011	-.303	.082	37.43 ***	-.011	-.295	.077	36.67 ***
Personal Income	.004	-.108	.006	2.55	-.005	-.119	.007	3.25
Health	.321	.193	.035	16.74 ***	.300	.180	.031	14.61 ***
Past Active Coping	.063	.097	.009	4.29 *				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 15

Total and Direct Effects Of Gender, Demographics, Health, Past Active Coping, Chronic Financial Conditions and Mastery On Financial Coping Responses: Hierarchical Regression Analysis (N=400)

	Devaluation							
	Total Effect				Direct Effect			
	b	β	sr ²	F	b	β	sr ²	F
Gender	-.204	-.044	.002	0.77	.340	.073	.003	2.02
Demographics								
Family Income	.042	.037	.001	0.50	-.106	.095	.006	4.48 *
Education	.093	.093	.007	3.66	.081	.081	.005	3.90
Age	.395	.453	.192	94.07 ***	.267	.312	.078	55.79 ***
Personal Income	.081	.087	.004	1.79	.034	.037	.001	0.46
Health	-6.491	-.171	.028	14.07 ***	-1.923	-.051	.002	1.50
Past Active Coping	-.648	-.043	.002	0.91	.390	.026	.001	0.42
Financial Conditions	-11.609	-.508	.203	144.90 ***				
Mastery	.042	.073	.002	2.70				
Selective Ignoring								
	Total Effect				Direct Effect			
	b	β	sr ²	F	b	β	sr ²	F
Gender	1.134	.204	.042	17.34 ***	.784	.141	.011	4.40 *
Demographics								
Family Income	.105	.079	.005	1.92	.074	.056	.002	0.91
Education	-.035	-.029	.001	0.31	-.050	-.042	.002	0.63
Age	.053	.052	.002	1.01	.029	.028	.001	0.26
Personal Income	-.114	-.103	.005	2.13	-.111	-.100	.005	1.99
Health	-.584	-.013	.000	0.07	.878	.019	.000	0.13
Past Active Coping	-1.998	-.112	.012	5.01 *	-.175	-.098	.008	3.49
Financial Conditions	-.968	-.035	.001	0.41				
Mastery	.026	.038	.001	0.42				

Table continued....

Table 15 (continued)

Positive Comparison								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.003	.009	.000	0.03	-.008	-.027	.004	0.16
Demographics								
Family Income	.012	.181	.024	9.94 **	.013	.195	.026	10.94 ***
Education	-.009	.155	.021	8.46 **	-.009	-.147	.018	7.53 **
Age	-.002	-.041	.001	0.61	-.003	-.058	.003	1.12
Personal Income	.001	.025	.000	0.12	.001	.018	.000	0.06
Health	.267	.116	.013	5.36 *	.246	.107	.009	3.90 *
Past Active Coping	-.426	-.047	.002	0.88	-.056	-.062	.003	1.39
Financial Conditions	-.037	-.027	.001	0.24				
Mastery	-.002	-.064	.003	1.19				
Acceptance								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.378	.128	.016	6.58 *	.009	.003	.000	0.00
Demographics								
Family Income	-.016	-.023	.000	0.16	.030	.041	.001	0.52
Education	-.009	-.014	.000	0.07	.005	.008	.000	0.02
Age	-.080	-.460	.019	7.97 **	-.056	-.103	.008	3.65
Personal Income	-.090	-.152	.011	4.60 *	-.087	-.147	.010	4.46 *
Health	2.809	.116	.013	5.35 *	1.050	.043	.002	0.67
Past Active Coping	.635	.066	.004	1.78	.176	.018	.000	0.13
Financial Conditions	1.944	.133	.014	6.06 *				
Mastery	-.047	-.128	.012	4.98 *				

Table continued....

Table 15 (continued)

	Budgeting							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.108	-.027	.001	0.28	-.747	-.184	.018	8.54 **
Demographics								
Family Income	-.179	-.185	.025	11.73 ***	-.159	-.164	.019	8.87 **
Education	.058	.069	.004	1.78	.053	.061	.003	1.47
Age	.065	.087	.007	3.15	.088	.118	.011	5.27 *
Personal Income	-.268	-.331	.053	24.68 ***	-.251	-.310	.046	21.82***
Health	-.994	-.030	.001	0.40	-1.738	-.052	.002	1.07
Past Active Coping	-1.124	-.086	.007	3.32	-1.391	-.106	.010	4.69 *
Financial Conditions	2.783	.140	.015	7.30 **				
Mastery	-.013	-.025	.000	0.21				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

lems related to more frequent use of Acceptance. Both chronic financial conditions and mastery were significantly related to use of Acceptance (p 's $< .05$), with greater chronic financial conditions and lower mastery related to more frequent use of Acceptance.

Past active coping had a significant direct effect on Budgeting ($p < .05$), although its total effect was not significant. More effective past active coping was related, directly, to more frequent use of Budgeting ($p < .05$). Greater chronic financial conditions were related to more frequent use of Budgeting as a means of coping with financial problems ($p < .01$). Although gender did not exhibit a significant total effect ($p > .05$), its direct effect was significant ($p < .01$), indicating that men used Budgeting more frequently than women.

In summary, examination of the effects on financial coping responses indicates that women used Selective Ignoring and Acceptance to a greater extent than men. These effects tended to be indirect, through their relationships with other variables. Women used Budgeting less frequently than men, but this effect was observed only after the effects of other variables was taken into consideration. Greater health problems were associated with less frequent use of Devaluation (appraisal-focused response), more frequent Positive Comparison (appraisal-focused response), and more frequent Acceptance (emotion-focused response). Greater effectiveness of past coping was, largely, indirectly related to more frequent use of Selective Ignoring (appraisal-focused response). It was directly related to more frequent use of Budgeting (problem-focused response). Mastery was related to only one coping response, with low mastery related to frequent use of Acceptance (emotion-focused response). Greater chronic financial condi-

tions were related to less use of Devaluation (appraisal-focused), more frequent Acceptance (emotion-focused), and more frequent Budgeting (problem-focused). In contrast to its relative importance in accounting for coping responses in marriage, chronic financial conditions were not as singularly important, except with regard to Devaluation of money, for which it accounted for 20% of the variance.

Effects on financial distress and depression. Table 16 summarizes the results of the variables' effects on financial distress. Health, financial conditions, and mastery exhibited significant total effects ($p's < .001$), and significant direct effects ($p < .01$, $p < .001$, and $p < .001$, respectively) on financial distress. As can be seen from the changes in squared semi-partial correlations of health and financial conditions, a large portion of their effects were indirect, through other variables. Only two coping responses were significantly related to financial distress. These were Devaluation and Selective Ignoring ($p's < .001$). More frequent use of Devaluation and more frequent Selective Ignoring, both appraisal-focused responses, related to less financial distress.

Table 17 summarizes the effects of all variables on self-reported symptoms of depression. Gender had a significant total effect on depression ($p < .05$) but not a significant direct effect, indicating that gender was related to depression through its relationship with other variables in the model. Women reported more depressive symptoms than did men. Effectiveness of past active coping, and chronic financial conditions exhibited significant total effects ($p < .001$ and $p < .01$, respectively) but no direct effects (all $p's > .05$). This indicates that the relationships between less effective past coping, greater chronic financial conditions, and high-

Table 16

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping,
Mastery, Chronic Financial Conditions and Financial Coping Responses On Financial
Distress: Hierarchical Regression Analysis
(N = 400)

	Financial Distress							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.011	.040	.002	0.64	.014	.053	.001	1.24
Demographics								
Family Income	-.013	-.204	.031	13.58 ***	-.004	-.068	.003	2.63
Education	-.004	-.060	.003	1.37	-.001	-.016	.000	0.18
Age	-.015	-.302	.081	35.97 ***	-.002	-.035	.001	0.72
Personal Income	.001	.027	.000	0.15	.003	.054	.001	1.15
Health	.709	.319	.097	47.92 ***	.266	.120	.012	10.19 **
Past Active Coping	.156	.178	.030	15.60 ***	.055	.063	.003	2.95
Financial Conditions	.578	.433	.147	107.38 ***	.314	.235	.030	26.74 ***
Mastery	-.008	-.242	.042	30.24 ***	-.007	-.197	.027	23.46 ***
Coping Responses								
Devaluation	-.021	-.360	.066	57.60 ***				
Selective Ignoring	-.010	-.205	.030	26.47 ***				
Positive Comparison	.059	.061	.003	2.37				
Acceptance	.005	.057	.003	2.25				
Budgeting	.001	.011	.000	0.08				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 17

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping, Mastery,
Chronic Financial Conditions, Financial Coping Responses and Financial Distress On
Self-Reported Depression: Hierarchical Regression Analysis (N = 400)

	Depression							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.103	.011	4.24 *	.015	.070	.002	1.72
Demographics								
Family Income	-.008	-.165	.020	8.32 *	-.000	-.006	.000	0.02
Education	-.004	-.090	.007	2.84	-.000	-.015	.000	0.13
Age	-.002	-.054	.001	1.18	.001	.037	.001	0.65
Personal Income	-.002	-.054	.001	0.59	.000	.001	.000	0.00
Health	.726	.422	.170	84.84 ***	.368	.214	.036	25.14 ***
Past Active Coping	.123	.181	.031	16.36 ***	.015	.023	.000	0.30
Financial Conditions	.129	.125	.012	8.04 **	.027	.026	.000	0.24
Mastery	-.011	-.423	.127	83.22 ***	-.009	-.367	.088	61.24 ***
Coping Responses								
Devaluation	-.004	-.092	.004	2.89	-.001	-.017	.000	0.09
Selective Ignoring	-.006	-.153	.017	11.34 ***	-.004	-.110	.046	5.69 *
Positive Comparison	.001	.001	.000	0.00	-.009	-.012	.000	0.07
Acceptance	.002	.024	.000	0.31	.001	.012	.000	0.08
Budgeting	-.002	-.038	.001	0.82	-.002	-.041	.001	0.94
Financial Distress	.161	.208	.019	13.27 ***				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

er symptoms of depression were indirect effects. Both health and mastery had significant total effects and significant direct effects (all p 's < .001), with greater health problems and lower mastery related to greater symptoms of depression. It should be noted that both health and mastery accounted for substantial amounts of variance in depression (17% and 12.7%, respectively), when considering their total effects. However, the direct effect of mastery, compared to health, accounted for more variance in depression (8.8% vs. 3.6% for health). This indicates that, in contrast to health, much of mastery's effect on depression was a direct one. Only one coping response was related to depression, with both a significant total effect ($p < .001$) and a significant direct effect ($p < .05$). Less frequent use of Selective Ignoring was related to greater symptoms of depression. Financial distress was significantly related to depression ($p < .001$), with greater financial distress related to greater self-reported symptoms of depression.

Summary

Figures 7 through 9 summarize the important findings from the series of hierarchical regressions in the financial area. As in the marital role area, path diagrams are simplified by identifying only significant pathways and highlighting relationships among different variables by separating the findings into three path diagrams. Figure 7 illustrates how gender indirectly affects depression, through its relationships with other significant variables. Women report greater health problems than do men. Greater health problems, in turn, lead to lower mastery and greater chronic financial conditions. These significant pathways include health's direct

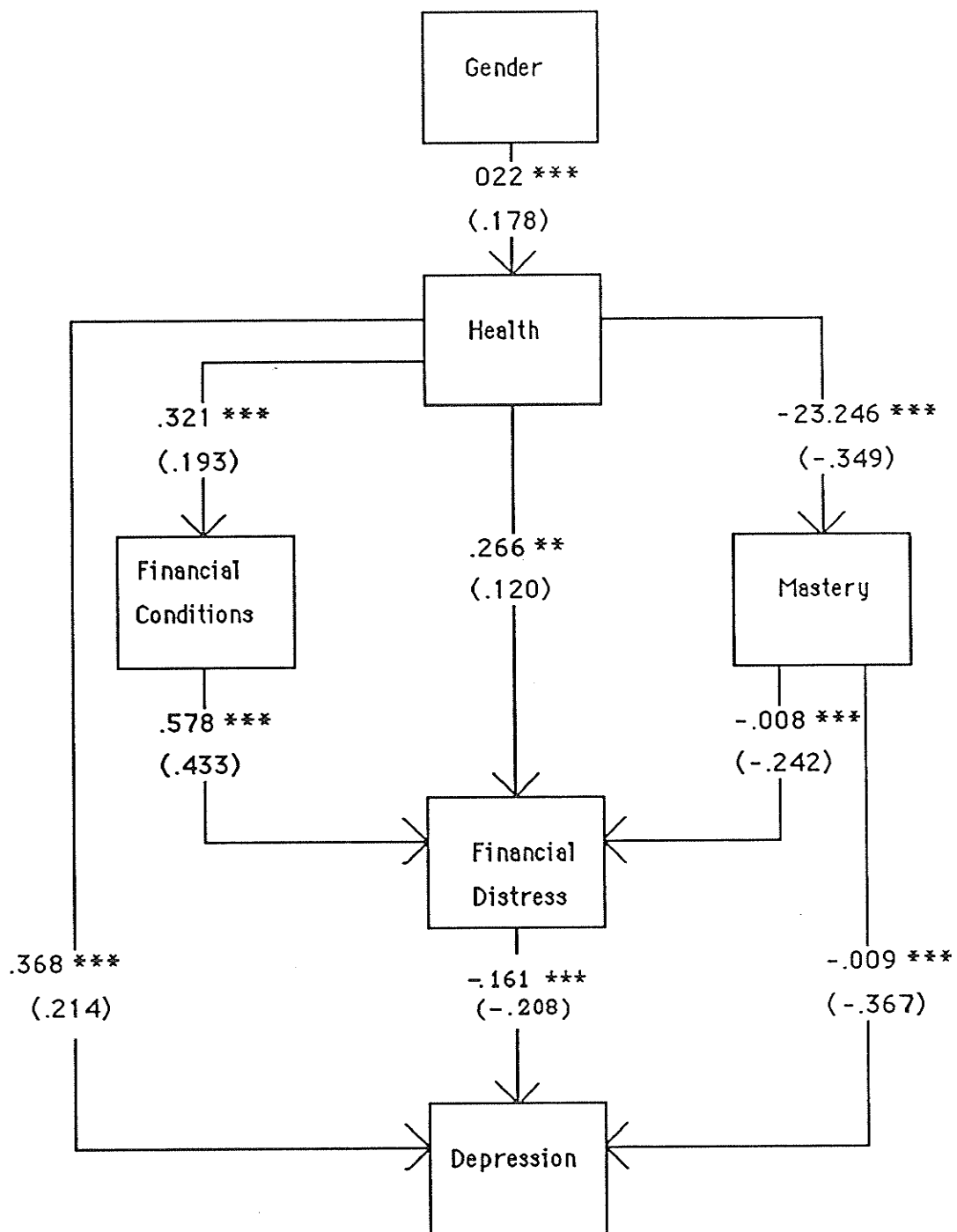


Figure 7. Path diagram illustrating the relationship between gender and depression through health, mastery, chronic financial conditions and financial distress,

effects on each of these variables, as well as its indirect effect through past coping (i.e., coefficients are for total effects of health). Low mastery and high financial conditions, in turn, lead to high financial distress and, finally, to high symptoms of depression. Higher health problems and lower mastery also lead to greater symptoms of depression independent of other variables. Thus, we see how women's report of greater health problems indirectly leads to their report of greater symptoms of depression.

Figure 8 illustrates how gender and health are related to financial distress and depression, through coping responses. Only two coping responses are related to either gender or health, and affect financial distress and, in turn, depression. Higher health problems are related to less frequent use of Devaluation which, in turn, leads to more financial distress and more symptoms of depression. Women report using Selective Ignoring as a means of coping with financial problems more than do men. Interestingly, more frequent use of Selective Ignoring leads, both directly and indirectly, to lower depression. Thus, women more than men report using a coping strategy which leads to lower financial distress and lower reported symptoms of depression.

Figure 9 illustrates the significant relationships of two variables, chronic financial conditions and mastery, with coping responses and how these, in turn, relate to financial distress and depression. As illustrated in the path diagram, higher financial conditions lead to more frequent use of Budgeting and Acceptance, and less frequent use of Devaluation. Lower mastery leads only to more frequent use of Acceptance but has no significant bearing on any other coping response. Only Devaluation impacts on distress, with low devaluation leading to higher financial distress

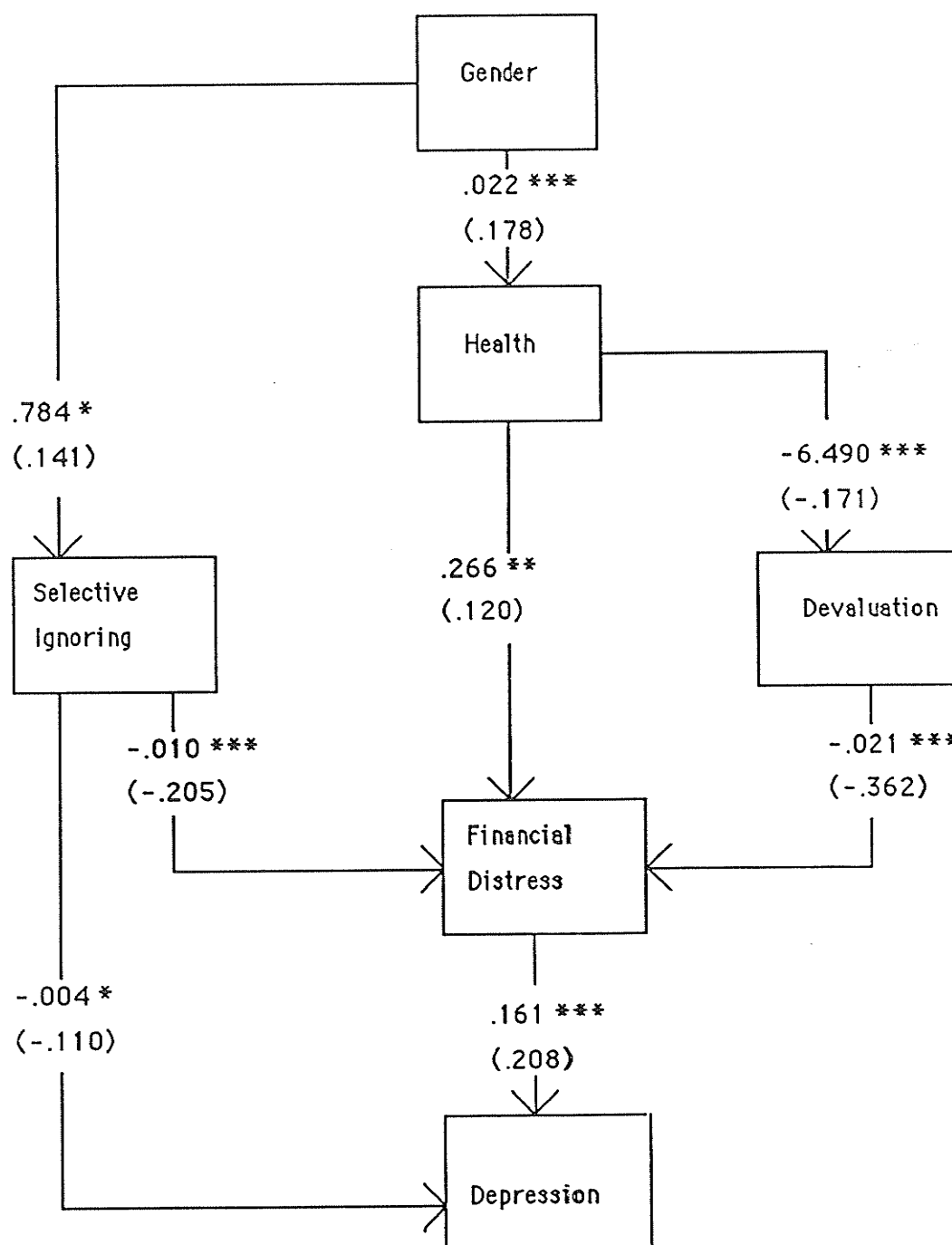


Figure 8. Path diagram illustrating the relationship between gender and depression through health, financial coping responses and financial distress.

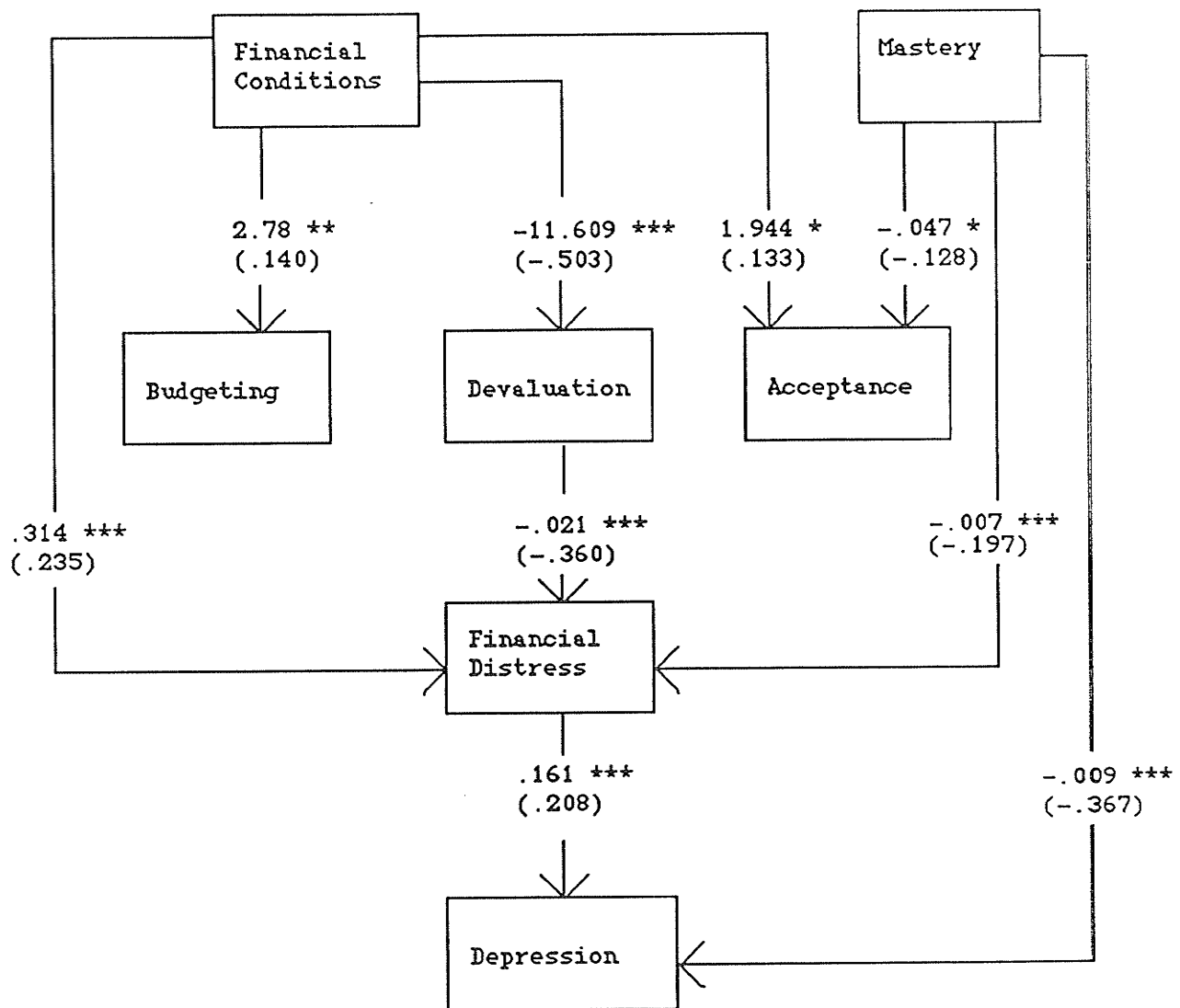


Figure 9. Path diagram illustrating the relationships between mastery and chronic financial conditions, and depression through financial coping responses and financial distress.

and, in turn, to higher symptoms of depression. Thus, we see from this path diagram that low mastery leads to depression, both directly and indirectly through financial distress, rather than through its impact on coping responses. Chronic financial conditions only affect one coping response which impacts on distress and, ultimately, on depression. Much of its effects on depression are indirect, through financial distress.

Job Area: Examination of Model

Tables 18 through 22 summarize the results from the series of hierarchical regression analyses relating to the job area. Only respondents who were working, either outside or within the home ($N = 331$), completed questions regarding chronic job conditions. Therefore, only data from these respondents were included in these regression analyses.

Effects on health, past coping, mastery, and job conditions. Table 18 summarizes the effects of variables in the model on health and past active coping. As is indicated, gender had a significant total effect and a significant direct effect on health (p 's $< .001$), indicating that women reported more health problems than did men. Table 19 summarizes the variable effects on mastery and chronic job conditions. Greater health problems were significantly related to lower mastery, with both a significant total effect and a significant direct effect (p 's $< .001$). Effectiveness of past active coping significantly affected mastery, with greater effectiveness related to greater mastery ($p < .001$). Gender was not significantly related to mastery ($p > .05$). Health exhibited significant total and direct effects on chronic job conditions, (p 's $< .001$), with greater health problems related to greater chronic job conditions. Although gender

Table 18

Total And Direct Effects of Gender, Demographics, Health, Past Active Coping On
Health and Past Active Coping: Hierarchical Regression Analysis (N = 331)

	Health							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.027	.227	.051	17.83 ***	.036	.303	.046	16.23 ***
Demographics								
Family Income	-.004	-.128	.014	4.79				
Education	.002	.087	.007	2.41				
Age	-.000	-.011	.000	0.04				
Personal Income	.002	.099	.004	1.55				
	Past Active Coping							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.005	.018	.000	0.11	.007	.024	.000	0.10
Demographics								
Family Income	-.012	-.163	.022	7.52	-.011	-.150	.018	6.31 *
Educations	-.006	-.083	.006	2.13	-.006	-.092	.008	2.61
Age	-.007	-.114	.013	4.25	-.007	-.113	.012	4.20 *
Personal Income	.005	.081	.003	1.01	.004	.071	.002	0.77
Health	.259	.103	.010	3.39				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Analysis reported in tables 18 to 22 included only individuals either working full time or part-time outside the home, and homemakers.

Table 19

Total and Direct Effects of Gender, Demographics, Health and Past Active Coping on
Mastery and Chronic Job Conditions: Hierarchical Regression Analysis (N = 331)

Mastery								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.412	-.050	.003	0.84	.396	.048	.001	0.51
Demographics								
Family Income	.529	.262	.057	20.17***	.351	.174	.024	10.84 ***
Education	.182	.100	.009	3.23	.193	.106	.010	4.49 *
Age	-.036	-.021	.000	0.16	-.096	-.056	.003	1.36
Personal Income	-.058	-.037	.001	0.22	.029	.018	.000	0.07
Health	-24.835	-.360	.120	49.15***	-22.868	-.332	.101	45.23 ***
Past Active Coping	-7.600	-.276	.072	32.35***				
Chronic Job Conditions								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.008	.057	.003	1.09	-.026	-.182	.016	6.02 *
Demographics								
Family Income	-.002	-.057	.003	0.94	-.000	-.014	.000	0.06
Education	-.003	-.111	.011	3.85 *	-.004	-.133	.016	5.91 *
Age	-.004	-.121	.014	4.89 *	-.003	-.113	.012	4.62 *
Personal Income	-.005	-.192	.017	5.85 *	-.006	-.224	.023	8.54 **
Health	.334	.290	.078	29.63 ***	.339	.286	.075	28.49 ***
Past Active Coping	.018	.038	.001	0.52				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

did not exhibit a significant total effect on job conditions ($p > .05$), its direct effect was significant ($p < .05$), with men reporting more chronic job conditions than women.

Effects on job-related coping responses. Table 20 summarizes the effects of all variables on job-related coping responses. Although gender did not exhibit a significant total effect on Reward Substitution, its direct effect was significant ($p < .05$), with women using Reward Substitution more frequently than men.

Only two variables were related to the use of Positive Comparison in coping with job related problems. Effectiveness of past active coping had a significant total effect ($p < .01$) and a significant direct effect ($p < .05$), with more effective past active coping related to greater use of Positive Comparison. Chronic job conditions were also significantly related to positive comparison ($p < .05$), with more chronic conditions related to less frequent use of Positive Comparison.

Both health and effectiveness of past active coping had significant total effects on Selective Ignoring (p 's $< .05$) but no direct effects (p 's $> .05$). This indicates that greater health problems and less effective past active coping were related to more frequent use of Selective Ignoring. Chronic job conditions were significantly related to Selective Ignoring ($p < .001$), with greater job conditions related to more frequent Selective Ignoring.

Regarding the use of action in dealing with job-related problems, effectiveness of past active coping had both a significant total effect and a significant direct effect on action (p 's $< .001$), indicating that greater

Table 20

Total and Direct Effects Of Gender, Demographics, Health, Past Active Coping, Mastery, and Chronic Job Conditions On Job-Related Coping Responses: Hierarchical Regression Analysis (N=331)

	Reward Substitution							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.248	.041	.002	0.56	.952	.158	.012	4.40 *
Demographics								
Family Income	.202	.136	.015	5.63 *	.156	.104	.008	3.16
Education	.283	.211	.040	14.92 ***	.249	.186	.030	11.19 ***
Age	-.078	-.061	.004	1.35	-.089	-.071	.005	1.73
Personal Income	.192	.166	.013	4.63 *	.187	.162	.012	4.30 *
Health	.620	.012	.000	0.05	3.338	.066	.003	1.25
Past Active Coping	-1.971	-.097	.009	3.32	-1.379	-.068	.004	1.48
Job Conditions	-1.450	-.035	.001	0.36				
Mastery	.074	.101	.007	2.54				
Positive Comparison								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.476	.094	.009	2.95	.072	.014	.000	0.03
Demographics								
Family Income	.042	.034	.001	0.31	.018	.015	.000	0.06
Education	-.046	-.041	.002	0.51	-.089	-.079	.005	1.85
Age	.061	.058	.002	1.06	.026	.024	.001	0.19
Personal Income	-.061	-.063	.003	0.60	-.088	-.091	.004	1.25
Health	1.794	.042	.002	0.55	4.329	.101	.008	2.75
Past Active Coping	-2.493	-.147	.020	6.87 **	-2.387	-.141	.017	5.80 *
Job Conditions	-5.507	-.153	.019	6.37 *				
Mastery	.001	.002	.000	0.00				

Table 20 (continued)

Selective Ignoring								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.011	.047	.002	0.73	.014	.058	.002	0.58
Demographics								
Family Income	-.002	-.040	.001	0.43	.001	.020	.000	0.12
Education	.001	.020	.000	0.14	.004	.066	.004	1.39
Age	-.001	-.029	.001	0.26	.000	.007	.000	0.01
Personal Income	.000	.007	.000	0.01	.002	.043	.001	0.29
Health	.283	.139	.018	5.97 *	.031	.015	.000	0.06
Past Active Coping	.093	.114	.012	4.13 *	.057	.070	.004	1.53
Job Conditions	.426	.248	.049	17.69 ***				
Mastery	-.004	-.125	.010	3.76				
Action								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.161	-.061	.003	1.24	.088	.033	.001	0.20
Demographics								
Family Income	.114	.174	.025	9.12 **	.084	.129	.013	4.90 *
Education	.080	.137	.017	6.14 *	.063	.108	.010	3.84
Age	-.057	-.104	.011	3.81	-.073	-.132	.016	6.17 *
Personal Income	.064	.127	.007	2.68	.068	.135	.008	3.03
Health	-.575	-.026	.001	0.22	.555	.025	.000	0.18
Past Active Coping	-1.968	-.222	.047	17.70 ***	-1.840	-.207	.037	14.03 ***
Job Conditions	-.840	-.045	.002	0.53				
Mastery	.015	.046	.001	0.60				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

effectiveness of past coping was related to greater use of action to deal with job-related problems.

In summary, gender was related to only one coping response, with women using Reward Substitution (appraisal-focused response) more frequently than men. This effect was evident only after the effects of other variables was accounted for. Health only had a significant total effect on Selective Ignoring, with greater health problems related to more frequent use of Selective Ignoring (appraisal-focused response). Effectiveness of past active coping was related to three of the four coping responses, Positive Comparison, Selective Ignoring and Action. More effective past active coping was related to more frequent Positive Comparison, less frequent Selective Ignoring, and more frequent use of Action. The former two are appraisal-focused responses, while the latter is a problem-focused response. Greater chronic job conditions were related to less frequent use of Positive Comparison and more frequent use of Selective Ignoring. Only mastery had no significant effects on any coping responses.

Effects on job distress and depression. Table 21 summarizes the effects of all variable on job related distress. Effectiveness of past active coping exerted a significant total effect on distress ($p < .001$), with less effective past coping related to greater job distress. Health, chronic job conditions, and mastery all had significant total effects (all p 's $< .001$) and significant direct effects ($p < .01$, $p < .001$, and $p < .001$, respectively). This indicates that greater health problems, greater chronic job conditions, and lower mastery were related to greater job distress. It should be noted that the direct effect of chronic job conditions accounted for a substantial proportion of variance in job distress, as compared with

Table 21

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping,
 Mastery, Chronic Job Conditions and Job-Related Coping Responses On Job Distress:
 Hierarchical Regression Analysis (N = 331)

	Job Distress							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.015	-.056	.003	1.02	.005	.019	.000	0.10
Demographics								
Family Income	-.006	-.096	.008	2.61	.001	.011	.000	0.05
Education	.002	.029	.001	0.25	.005	.081	.005	3.18
Age	-.008	-.152	.022	7.55 **	-.004	-.078	.005	3.24
Personal Income	.008	.152	.011	3.56	.010	.190	.015	9.09 **
Health	.797	.359	.119	46.06 ***	.290	.131	.013	7.80 **
Past Active Coping	.134	.152	.022	8.61 **	.066	.075	.005	2.72
Job Conditions	.848	.452	.162	95.95 ***	.826	.440	.140	83.70 ***
Mastery	-.009	-.264	.047	27.66 ***	-.009	-.266	.046	27.69 ***
Coping Responses								
Reward Substitution	-.001	-.014	.000	0.10				
Positive Comparison	-.004	-.072	.004	2.30				
Selective Ignoring	.025	.023	.000	0.26				
Action	.013	.126	.011	6.70				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

other variables (14% vs. less than 5%). Neither gender nor any of the coping responses, was significantly related to job distress.

Table 22 summarizes the total and direct effects of all variables within the job area on self-reported symptoms of depression. Gender had a significant total effect on depression ($p < .05$), indicating that women reported more depressive symptoms than did men. The absence of a direct effect indicates that its effect was through other variables in the model. Effectiveness of past active coping and chronic job conditions exhibited only significant direct effects ($p < .001$ and $p < .01$, respectively), with less effective past coping and greater chronic job conditions related to greater symptoms of depression. Health and mastery exhibited both significant total effects and significant direct effects (all p 's $< .001$), indicating that higher health problems and lower mastery were related to greater symptoms of depression. Job distress was significantly related to depression, with higher job distress related to greater symptoms of depression. As with job distress, no coping responses were significantly related to depression (all p 's $> .05$). While chronic job conditions accounted for a substantial amount of variance in job distress, mastery accounted for a substantial amount of variance in depression, as compared to other variables (10% vs. less than 4%).

Summary

Figures 10 through 12 outline, diagrammatically, the significant findings in the job area. Figure 10 outlines how gender is related to depression, through its relationship with the other, more salient, variables in the model. As is illustrated in the path diagram, the indirect relationship

Table 22

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping, Mastery, Chronic Job Conditions, Job-Related Coping Responses and Job Distress On Self-Reported Depression: Hierarchical Regression Analysis (N = 331)

	Depression							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.030	.138	.019	6.41 *	.020	.091	.004	2.31
Demographics								
Family Income	-.010	-.192	.031	10.59 **	-.002	-.032	.008	0.46
Education	-.003	-.060	.003	1.11	-.002	-.041	.001	0.79
Age	-.002	-.040	.002	0.52	-.000	-.011	.000	0.06
Personal Income	.004	.088	.003	1.20	.001	.025	.000	0.16
Health	.777	.425	.168	70.22 ***	.374	.205	.031	18.68 ***
Past Active Coping	.133	.182	.032	13.69 ***	.021	.029	.001	0.41
Job Conditions	.187	.121	.012	6.69 **	.069	.045	.001	0.68
Mastery	-.012	-.456	.139	80.21 ***	-.011	-.420	.107	63.63 ***
Coping Responses								
Reward Substitution	.002	.054	.002	1.38	.002	.056	.003	1.54
Positive Comparison	-.003	-.079	.005	2.78	-.003	-.068	.003	2.03
Selective Ignoring	-.026	-.029	.001	0.39	-.029	-.033	.001	0.51
Action	-.002	-.023	.000	0.22	-.004	-.044	.001	0.79
Job Distress	.135	.164	.014	8.50 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

between gender and depression is virtually identical to those outlined for the marital and financial areas (see Figures 4 and 7). There are two exceptions. First, the coefficients and relative importance of each variable in the model differs and, second, the relationship between gender and chronic conditions differs. As with the marital and financial areas, gender is related to chronic conditions through its effect on health and past coping. However, with regard to job conditions, gender also has an opposite, direct effect on chronic conditions. Thus, these two opposing forces appear to nullify each other.

Figure 11 outlines the relationship between gender and depression, through health, job-related coping responses, and job distress. As is outlined in this path diagram, gender and health are each significantly related to only one coping response. As is illustrated, women use Reward Substitution more frequently than do men. Gender relates to Selective Ignoring indirectly, through health problems, with higher health problems leading to greater use of Selective Ignoring. In contrast to the areas of marriage and finances, no coping responses significantly impact on job distress or depressive symptoms.

Figure 12 outlines the impact of both chronic job conditions and mastery on coping responses, and how these, in turn, impact on job distress and depression. As is illustrated here, higher chronic job conditions lead to more frequent use of Selective Ignoring and less frequent use of Positive Comparison. On the other hand, mastery has no significant impact on any coping responses. These coping responses have no significant effect on either job distress or depression. The effect of chronic job conditions on depression is, therefore, primarily indirect, through job distress, while

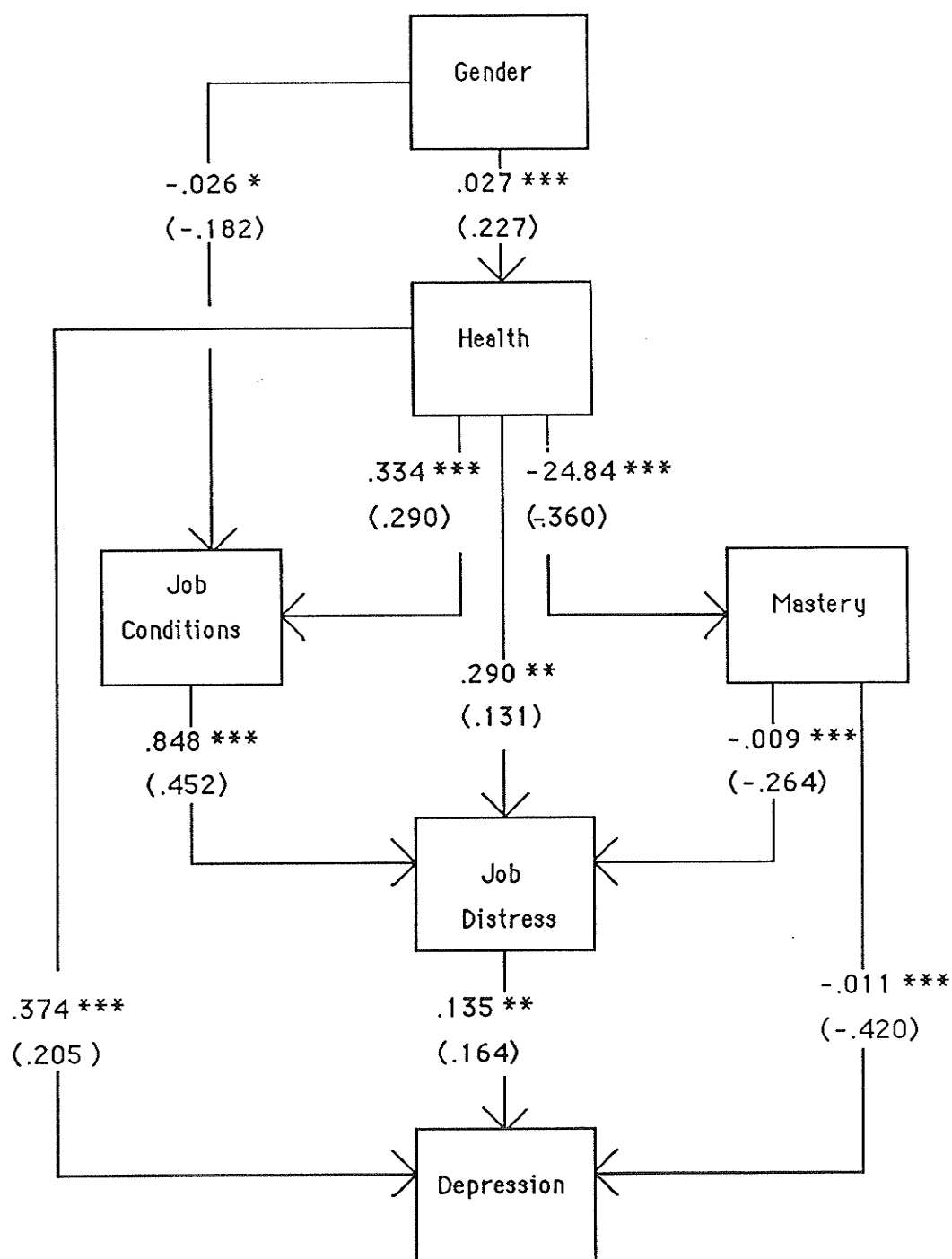


Figure 10 Path diagram illustrating the relationship between gender and depression through health, mastery, chronic job conditions and job distress.

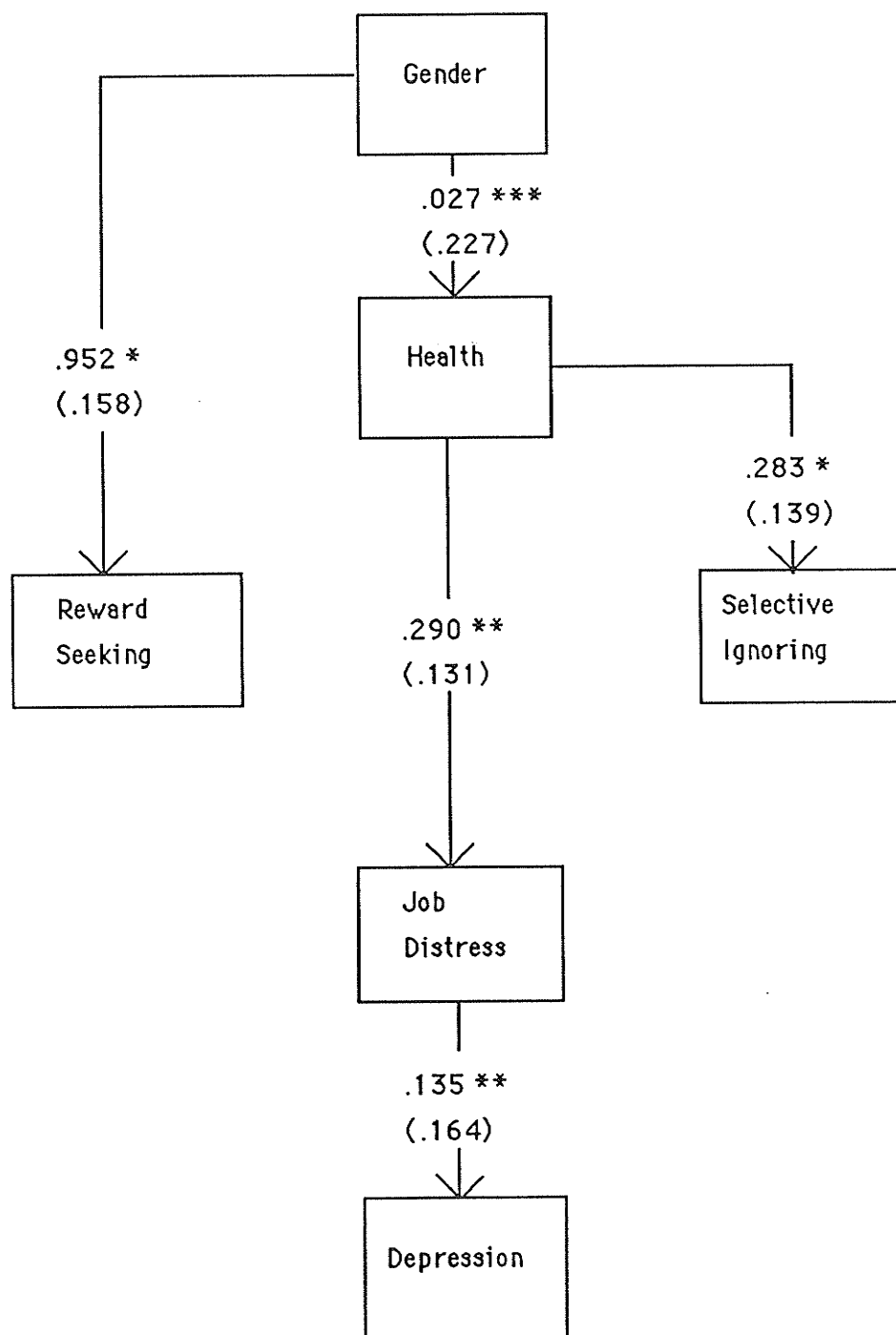


Figure 11. Path diagram illustrating the relationship between gender and depression through health, job coping responses and job distress.

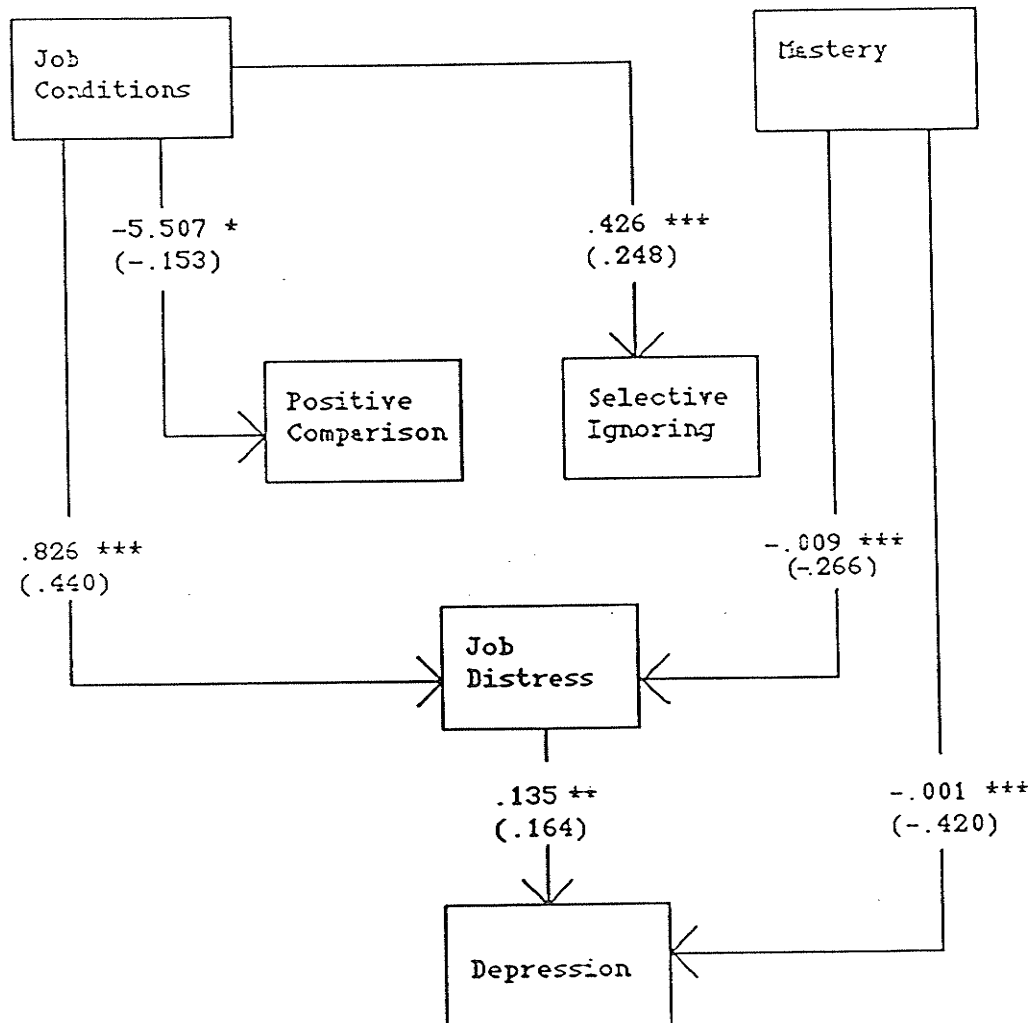


Figure 12. Path diagram illustrating the relationships between mastery and chronic job conditions, and depression through job-related coping responses and job distress.

mastery exerts both an indirect and direct effect. Thus, in the job area, the use of coping responses has little bearing on either job distress or depressive symptoms.

Parenting: Examination of Model

Tables 23 through 27 summarize the results of the series of hierarchical regression analyses related to parenting. Only data from respondents who have children were included in these analyses ($N = 332$). In contrast to questions related to chronic conditions in marriage, finances, and jobs, questions pertaining to chronic parental conditions were designed such that different questions were geared to having children of specific ages. Therefore, this section of questions was divided into subsections which encompassed questions regarding children of various age groups (i.e., children 16 and older, 6 and older, and under age 15). As a consequence, depending upon the ages of people's children, they may or may not have answered certain questions. In order to make each person's scale score comparable (i.e., every question was answered), individuals who did not answer a question because they did not have children in that age group received a score on the item which reflected "never experiencing that situation." With this scoring method, there is no way to discriminate between a "never" response, which means the experience is possible but does not happen, and a "never" response, which means the question is not applicable to their situation.

Since gender differences in chronic parental conditions could, therefore, reflect differences in the applicability of questions, it was important to look for gender differences in the applicability of questions.

Three variables were created, using dummy coding, which reflected whether or not people answered each subsection of questions. These variables ("children over five," "children over fifteen" and "children under sixteen") were coded either 1 (indicating completion of the subsection) or 0 (indicating no completion of the subsection). There were no gender differences on any of these variables $X^2(1, N = 332) = .004, p > .95$, $X^2(1, N = 332) = .747, p > .38$, $X^2(1, N = 332) = 2.63, p > .10$, respectively, indicating that males and females did not significantly differ with respect to the subsections of questions they completed. Since there were no gender differences on these three variables, and since they did not significantly relate to depression when included in the regression analyses, these variables were omitted from the final series of regression equations.

Effects on health, past coping, mastery, and parental conditions. Table 23 summarizes the effects of variables on health and effectiveness of past active coping, for all parents. As is indicated, women reported more health problems than did men, both prior to and after accounting for the effects of demographic variables (p 's $< .001$). Higher health problems were significantly related to less effectiveness of past active coping ($p < .01$). No other variables significantly affected either health or past active coping.

Table 24 summarizes the effects of demographic variables, health, and past active coping on mastery and chronic parental conditions. Both health and past active coping were significantly related to mastery (p 's $< .001$), with greater health problems and less effectiveness of past coping related to lower mastery. Only health and past active coping significantly affected chronic parental conditions. Health had a significant total effect

Table 23

Total And Direct Effects of Gender, Demographics, Health, Past Active Coping On
 Health and Past Active Coping: Hierarchical Regression Analysis (N = 332)

	Health							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.025	.204	.042	14.35 ***	.032	.262	.034	11.68 ***
Demographics								
Family Income	-.003	-.116	.010	3.51				
Education	-.001	-.051	.002	0.77				
Age	.001	.060	.003	1.14				
Personal Income	.002	.069	.002	0.74				
	Past Active Coping							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.002	.006	.000	0.01	-.008	-.025	.000	0.10
Demographics								
Family Income	-.007	-.100	.008	2.51	-.006	-.034	.005	1.78
Educations	-.005	-.080	.005	1.82	-.005	-.073	.005	1.54
Age	-.004	-.061	.003	1.14	-.004	-.069	.004	1.49
Personal Income	.002	.025	.000	0.09	.001	.016	.000	0.04
Health	.352	.138	.018	6.00 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Analyses reported in tables 23 to 27 included only individuals with children.

Table 24

Total and Direct Effects of Gender, Demographics, Health and Past Coping on Mastery
and Chronic Parental Conditions: Hierarchical Regression Analysis (N = 332)

	Mastery							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.183	-.022	.000	0.16	.477	.058	.002	0.71
Demographics								
Family Income	.372	.193	.028	9.81 **	.244	.127	.012	5.29 *
Education	.285	.163	.023	7.99**	.218	.125	.013	5.93 *
Age	.058	.036	.001	0.43	.067	.042	.002	0.73
Personal Income	-.054	-.035	.001	0.19	-.006	-.004	.000	0.00
Health	-25.884	-.388	.141	58.29 ***	-23.587	-.354	.115	51.30 ***
Past Active Coping	-6.530	-.250	.060	26.84 ***				
Chronic Parental Conditions								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.011	.067	.004	1.47	.009	.050	.002	0.41
Demographics								
Family Income	.000	.001	.000	0.00	.002	.038	.001	0.37
Education	-.001	-.016	.000	0.07	.000	.005	.000	0.01
Age	.002	.061	.003	1.13	.002	.059	.003	1.10
Personal Income	.001	.039	.001	0.22	.001	.022	.000	0.08
Health	.290	.209	.041	13.93 ***	.262	.188	.033	11.37 **
Past Active Coping	.080	.147	.021	7.21 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

($p < .001$) and a significant direct effect ($p < .01$), indicating that higher health problems were related to greater chronic parental conditions. Lower effectiveness of past active coping was also related to greater chronic parental conditions ($p < .01$).

Effects on parental coping responses. Table 25 summarizes the effects of variables in the model on parental coping responses. Health exhibited a significant total effect on Selective Ignoring ($p < .05$), but not a significant direct effect ($p > .05$), indicating that the relationship between greater health problems and more frequent use of Selective Ignoring as a coping response was primarily indirect. Past active coping had both a significant total effect ($p < .01$) and a significant direct effect ($p < .05$), indicating that less effectiveness of past active coping was related to more frequent use of Selective Ignoring. Both health and chronic parental conditions had significant total effects on Punitive Action ($p < .05$ and $p < .001$, respectively), indicating that greater health problems and greater chronic parental conditions are related to more frequent use of punitive action.

Gender was significantly related to Advice Seeking ($p < .001$), with women using Advice Seeking more frequently than men. The absence of a direct gender effect indicates that this relationship was primarily through gender's relationship with other variables related to Advice Seeking. Both chronic parental conditions and mastery were significantly related to Advice Seeking ($p < .05$), with greater chronic parental conditions and lower mastery related to more frequent use of Advice Seeking.

Table 25

Total and Direct Effects Of Gender, Demographics, Health, Past Active Coping, Mastery, and Chronic Parental Conditions On Parental Coping Responses: Hierarchical Regression Analysis (N=332)

	Selective Ignoring							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.003	.013	.000	0.06	-.006	-.023	.000	0.12
Demographics								
Family Income	.002	.041	.001	0.42	.004	.031	.005	1.64
Education	-.000	-.010	.000	0.03	.001	.019	.000	0.10
Age	.004	.105	.010	3.35	.005	.113	.012	3.95 *
Personal Income	-.002	-.046	.001	0.31	-.002	-.053	.001	0.50
Health	.237	.134	.017	5.63 *	.159	.090	.006	2.15
Past Active Coping	.100	.144	.020	6.79 **	.088	.127	.014	4.83 *
Parental Conditions	-.044	-.035	.001	0.33				
Mastery	-.002	-.087	.005	1.85				
Punitive Action								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.091	.008	2.78	-.010	-.041	.001	0.36
Demographics								
Family Income	.000	.002	.000	0.00	.001	.014	.000	0.07
Education	.001	.024	.001	0.20	.002	.040	.001	0.62
Age	-.019	-.409	.153	60.49 ***	-.020	-.429	.166	76.74 ***
Personal Income	-.002	-.044	.001	0.34	-.003	-.060	.002	0.73
Health	.206	.105	.010	4.09 *	.016	.008	.000	0.03
Past Active Coping	.028	.036	.001	0.50	-.026	-.033	.001	0.44
Parental Conditions	.480	.339	.106	48.94 ***				
Mastery	-.002	-.078	.004	2.00				

Table continued....

Table 25 (continued)

	Advice							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.038	.260	.068	23.96 ***	.019	.131	.008	3.53
Demographics								
Family Income	.002	.063	.003	1.27	.003	.078	.004	1.93
Education	.002	.072	.004	1.93	.003	.088	.006	2.86
Age	-.011	-.394	.142	61.26 ***	-.011	-.398	.143	63.09 ***
Personal Income	-.002	-.089	.003	1.51	-.003	-.094	.004	1.74
Health	.052	.044	.002	0.77	-.020	-.017	.000	0.10
Past Active Coping	-.004	-.009	.000	0.03	-.025	-.054	.003	1.13
Parental Conditions	.091	.107	.011	4.66 *				
Mastery	-.002	-.118	.010	4.43 *				
	Reassurance							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.015	.064	.004	1.36	-.028	-.118	.007	2.47
Demographics								
Family Income	.007	.127	.012	4.08 *	.010	.181	.024	9.04 **
Education	-.005	-.094	.007	2.54	-.003	-.054	.002	0.92
Age	-.005	-.105	.010	3.50	-.005	-.117	.012	4.71 *
Personal Income	-.006	-.123	.007	2.44	-.007	-.152	.010	3.86 *
Health	.520	.273	.070	25.25 ***	.341	.179	.025	9.45 **
Past Active Coping	.073	.097	.009	3.33	.029	.039	.001	0.50
Parental Conditions	.185	.135	.017	6.34 *				
Mastery	-.004	-.155	.017	6.57 *				

Table continued....

Table 25 (continued)

Positive Comparison								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	-.013	-.058	.003	1.10	-.033	-.141	.009	3.11
Demographics								
Family Income	-.002	-.043	.001	0.46	-.001	-.022	.000	0.11
Education	-.004	-.079	.005	1.79	-.003	-.064	.003	1.14
Age	-.001	-.024	.001	0.17	-.001	-.024	.001	0.17
Personal Income	-.004	-.089	.004	1.17	-.004	-.095	.004	1.34
Health	.156	.083	.007	2.15	.102	.054	.002	0.77
Past Active Coping	.027	.037	.001	0.45	.015	.021	.000	0.13
Parental Conditions	.002	.077	.000	0.00				
Mastery	-.002	-.065	.003	1.02				
Rationalization								
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.059	.019	.000	0.11	.190	.060	.002	0.69
Demographics								
Family Income	-.020	-.027	.001	0.21	.008	.011	.000	0.04
Education	-.031	-.046	.002	0.72	-.009	-.013	.000	0.05
Age	.247	.401	.142	58.14 ***	.254	.413	.154	63.10 ***
Personal Income	-.021	-.035	.001	0.21	-.024	-.040	.001	0.29
Health	1.154	.045	.002	0.73	-1.008	-.039	.001	0.48
Past Active Coping	1.112	.110	.012	4.63 *	.621	.061	.003	1.35
Parental Conditions	.229	.012	.000	0.06				
Mastery	-.072	-.187	.025	10.31 **				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Health was significantly related to the use of Reassurance ($p < .001$ and $p < .01$ for total and direct effects, respectively), with greater health problems related to more frequent use of Reassurance. Both chronic parental conditions and mastery were significantly related to Reassurance (p 's $< .05$), with greater chronic parental conditions and lower mastery related to more frequent use of Reassurance.

Past active coping exhibits only a significant total effect ($p < .05$), with lower effectiveness of past active coping related to more frequent use of rationalization. Mastery significantly impacted on Rationalization ($p < .01$), with lower mastery related to more frequent Rationalization. No variable significantly related to Positive Comparison, in coping with problems as a parent.

In summary, examining the effects on parental coping responses, reveals several things. Gender was significantly related only to Advice Seeking, with women using Advice Seeking more frequently than men. This relationship was, primarily, through gender's relationship with other variables in the model. Greater health problems were related to more frequent Selective Ignoring (appraisal-focused), more frequent use of Punitive Action (problem-focused), and more frequent use of Reassurance (appraisal-focused). The former two relationships were indirect. Lower effectiveness of past active coping was related to more frequent use of Selective Ignoring (appraisal-focused) and more frequent use of Rationalization (emotion-focused). Greater chronic parental conditions were related to more frequent use of Punitive Action and Advice Seeking (both problem-focused), and more frequent Reassurance (appraisal-focused). Lower mastery was also related to more frequent Advice Seeking, more frequent use of Reassurance, and more frequent use of Rationalization.

Effects on parental distress and depression. Table 26 summarizes the results of hierarchical regression analysis on parental distress. Health and past active coping exhibited significant total effects (p 's $< .001$), but not significant direct effects (p 's $> .05$). Both chronic parental conditions and mastery had significant total and direct effects on marital distress (all p 's $< .001$), indicating that greater chronic parental conditions and lower mastery were related to higher parental distress. The only coping response significantly related to parental distress was Advice Seeking, with more frequent advice seeking related to greater parental distress ($p < .01$).

Table 27 summarizes the effects of all variables on self-reported depression for parents. In contrast to the other areas, when considering only parents, there was no overall gender difference in depression ($p > .05$ for total effect). Although not reported in this summary table, women did report more depressive symptoms, after the effects of other demographic variables were accounted for ($p < .05$). Health exhibited a significant total effect and a significant direct effect on depression, while past active coping had only a significant direct effect (all p 's $< .001$), indicating that greater health problems and less effective past active coping were related to higher symptoms of depression. As with the other areas, mastery exhibited both significant total and direct effects (p 's $< .001$), while chronic parental conditions exhibited only a significant total effect ($p < .05$). Lower mastery and greater chronic parental conditions were associated with greater symptoms of depression. Only one coping response was significantly related to depression. Rationalization exhibited a significant direct effect on depression ($p < .05$), indicating that more

Table 26

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping,
Mastery, Parental Conditions and Parental Coping Responses On Parental Distress:
Hierarchical Regression Analysis (N = 332)

	Parental Distress							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.091	.008	2.78	-.003	-.010	.000	0.03
Demographics								
Family Income	-.005	-.085	.005	1.87	-.002	-.030	.001	0.32
Education	-.006	-.111	.011	3.66	-.003	-.062	.003	1.66
Age	-.009	-.181	.030	10.34 **	-.005	-.114	.008	3.92 *
Personal Income	.001	.014	.000	0.03	.001	.016	.000	0.06
Health	.553	.278	.072	26.73 ***	.153	.077	.004	2.30
Past Active Coping	.160	.204	.040	15.60 ***	.062	.080	.005	2.83
Parental Conditions	.471	.329	.100	48.75 ***	.401	.280	.062	31.98 ***
Mastery	-.009	-.299	.064	31.44 ***	-.008	-.251	.043	22.11 ***
Coping Responses								
Selective Ignoring	.085	.075	.004	2.07				
Punitive Action	.098	.096	.006	3.19				
Advice	.279	.165	.019	9.90 **				
Reassurance	-.002	-.002	.000	0.00				
Positive Comparison	.059	.055	.003	1.39				
Rationalization	.004	.057	.002	1.25				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 27

Total and Direct Effects of Gender, Demographics, Health, Past Active Coping, Mastery,
Chronic Parental Conditions, Parental Coping Responses and Parental Distress On
Self-Reported Depression: Hierarchical Regression Analysis (N = 332)

	Depression							
	Total Effect				Direct Effect			
	b	B	sr ²	F	b	B	sr ²	F
Gender	.022	.101	.010	3.41	.013	.063	.002	1.03
Demographics								
Family Income	-.009	-.173	.022	7.75 **	-.003	-.056	.002	1.27
Education	-.006	-.124	.013	4.57 *	-.002	-.037	.001	0.63
Age	-.003	-.071	.005	1.59	-.001	-.018	.000	0.11
Personal Income	.004	.106	.005	1.71	.003	.063	.002	0.97
Health	.768	.440	.181	77.17 ***	.396	.227	.038	21.87 ***
Past Active Coping	.126	.184	.033	14.49 ***	.035	.051	.002	1.24
Parental Conditions	.138	.110	.011	6.29 *	.103	.082	.005	2.75
Mastery	-.012	-.441	.140	78.90 ***	-.011	-.427	.115	65.58 ***
Coping Responses								
Selective Ignoring	.063	.064	.003	1.61	.055	.056	.002	1.23
Punitive Action	-.002	-.002	.000	0.00	-.011	-.012	.000	0.06
Advice	.057	.038	.001	0.58	.030	.020	.000	0.16
Reassurance	-.016	-.018	.000	0.12	-.016	-.018	.000	0.12
Positive Comparison	-.044	-.047	.002	1.09	-.049	-.053	.002	1.39
Rationalization	-.006	-.092	.006	3.57	-.007	-.098	.007	4.08 *
Parental Distress	.094	.108	.007	4.02 *				

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

frequent use of Rationalization was related to lower symptoms of depression. Parental distress was significantly related to symptoms of depression ($p < .05$), with higher parental distress related to higher self-reported symptoms of depression.

Summary

Figures 13 through 15 summarize, diagrammatically, the results of the series of hierarchical regression analyses in the area of parenting. The path diagram illustrated in Figure 13 diagrams how gender relates to depression, indirectly, through the other variables in the model. These relationships are similar to those illustrated in Figures 4, 7, and 10. Women report greater health problems. These greater health problems, in turn, lead to lower mastery and greater chronic parental conditions which, in turn, lead to greater parental distress and, finally, to higher depressive symptoms. Again, as in the other areas, greater health problems and lower mastery lead to higher symptoms of depression, independent of other variables.

Figure 14 diagrams how gender and health are related to depression, through their relationships with coping responses and parental distress. Being female leads to greater health problems which, in turn, leads to more frequent use of Reassurance, Selective Ignoring, and Punitive Action. None of these coping responses, however, lead to either parental distress or depression. The dotted line between gender and Advice Seeking indicates that there is a total, but not direct, effect of gender on Advice Seeking, with women using more Advice Seeking than men. Much of this relationship is, therefore, through gender's relationship with other variables.

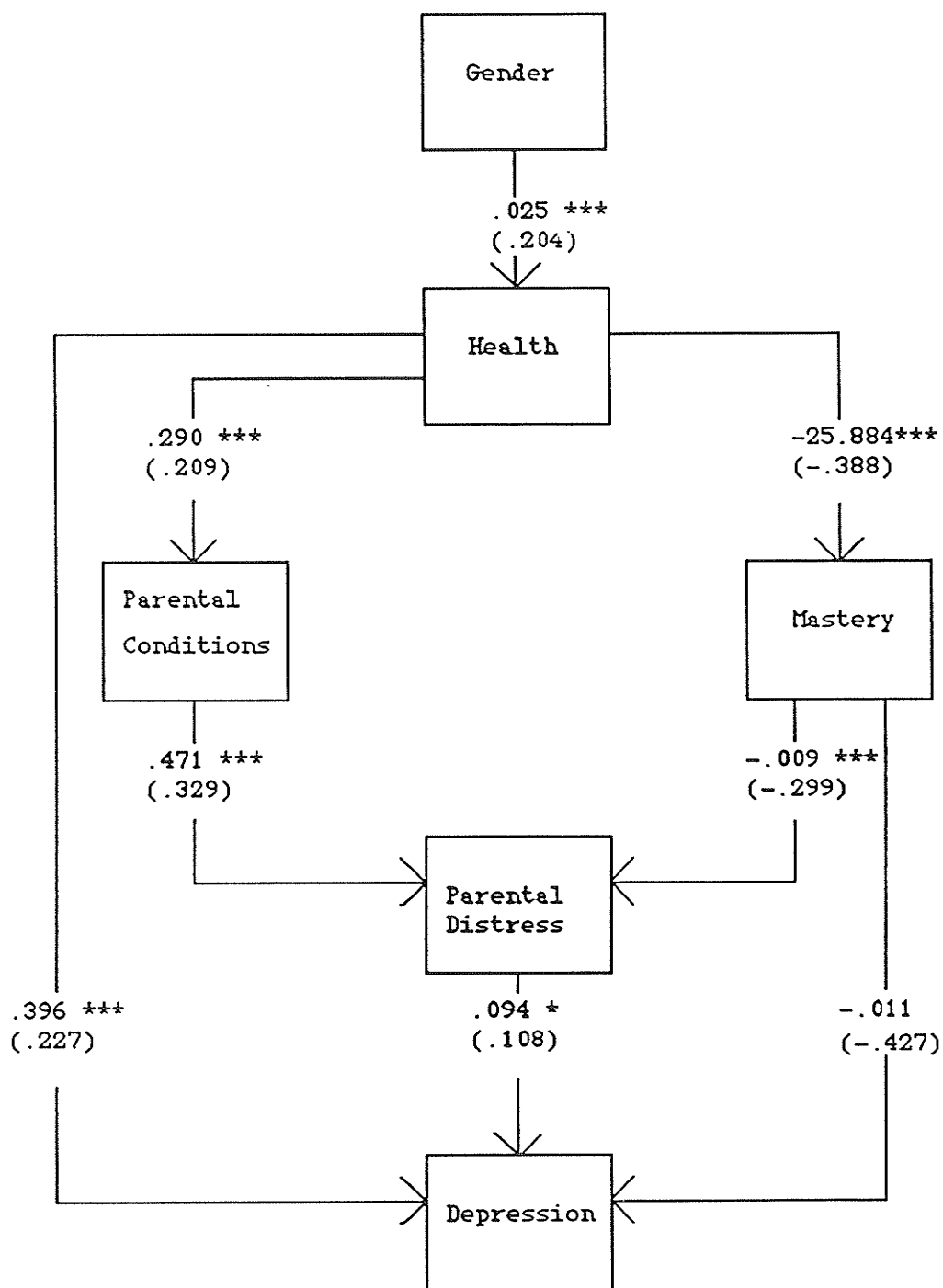


Figure 13. Path diagram illustrating the relationship between depression through health, mastery, chronic parental conditions and parental distress.

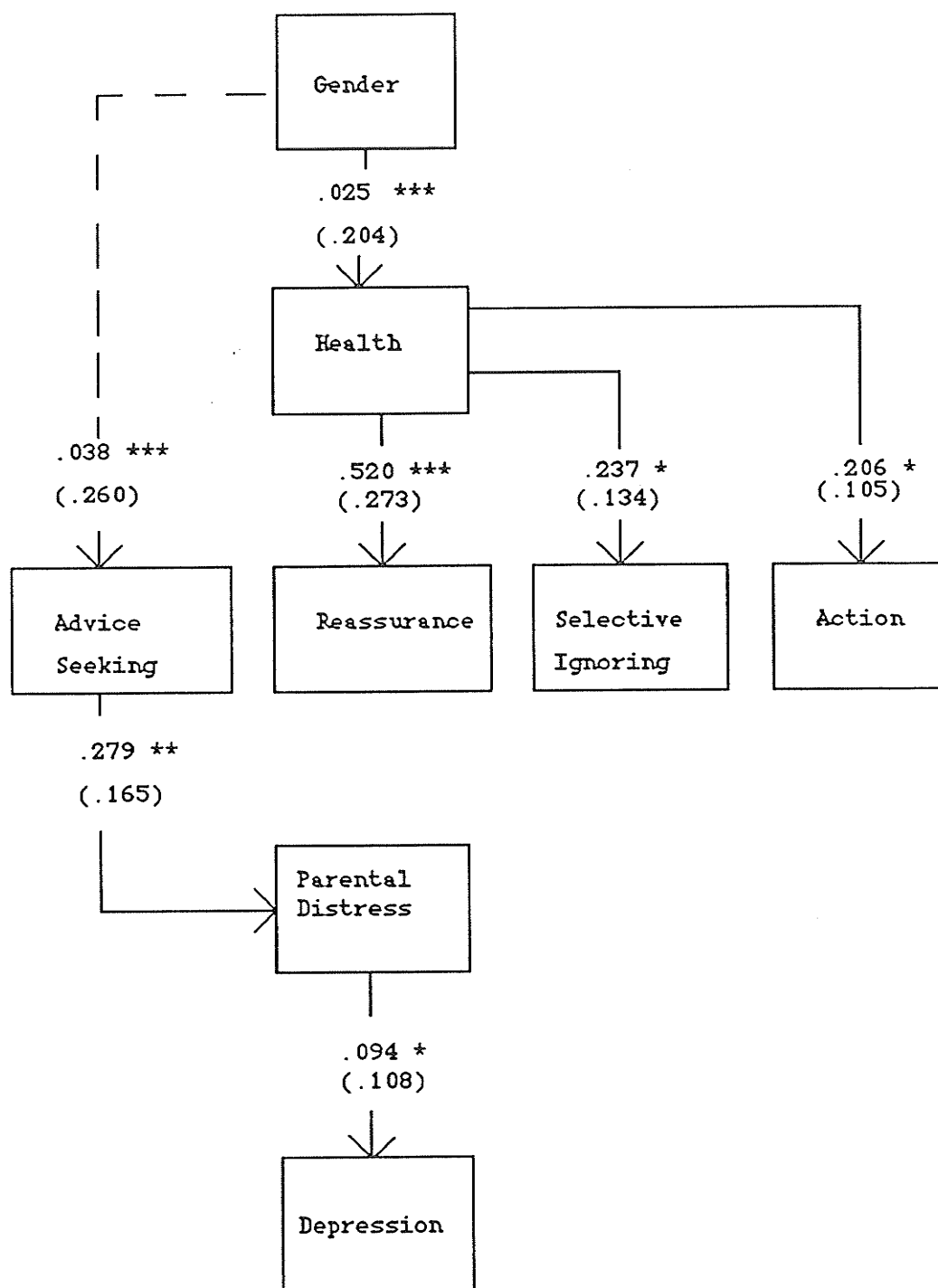


Figure 14. Path diagram illustrating the relationship between gender and depression through health, parental coping responses and parental distress.

As is illustrated, more frequent Advice Seeking leads to greater parental distress and, finally, to higher self-reported symptoms of depression.

Figure 15 illustrates the relationship of the two variables mastery and chronic parental conditions with coping responses, and how these, in turn, relate to parental distress and depression. As is illustrated, both lower mastery and greater parental conditions lead to more frequent Advice Seeking and more frequent Reassurance. Of these two coping responses, only Advice Seeking significantly leads to distress which, in turn, leads to depression. Greater chronic parental conditions also lead to greater use of Punitive Action, which has no significant impact on either parental distress or depression. On the other hand, lower mastery leads to more frequent use of Rationalization which, in turn, lead to lower symptoms of depression. Greater chronic parental conditions and lower mastery both lead to greater parental distress. Lower mastery, independent of all other variables, leads to higher self-reported symptoms of depression.

Hypotheses

The following section will examine, one by one, the hypotheses predicted in this study. All hypotheses, except Hypotheses 6 and 8, represent a summary and/or integration of the results already presented in the previous section. Hypotheses one through five will be presented first, followed by hypotheses seven. Finally, hypotheses six and eight will be presented together, as they represent similar predictions and were examined simultaneously. Examination of all hypotheses was based on the models already

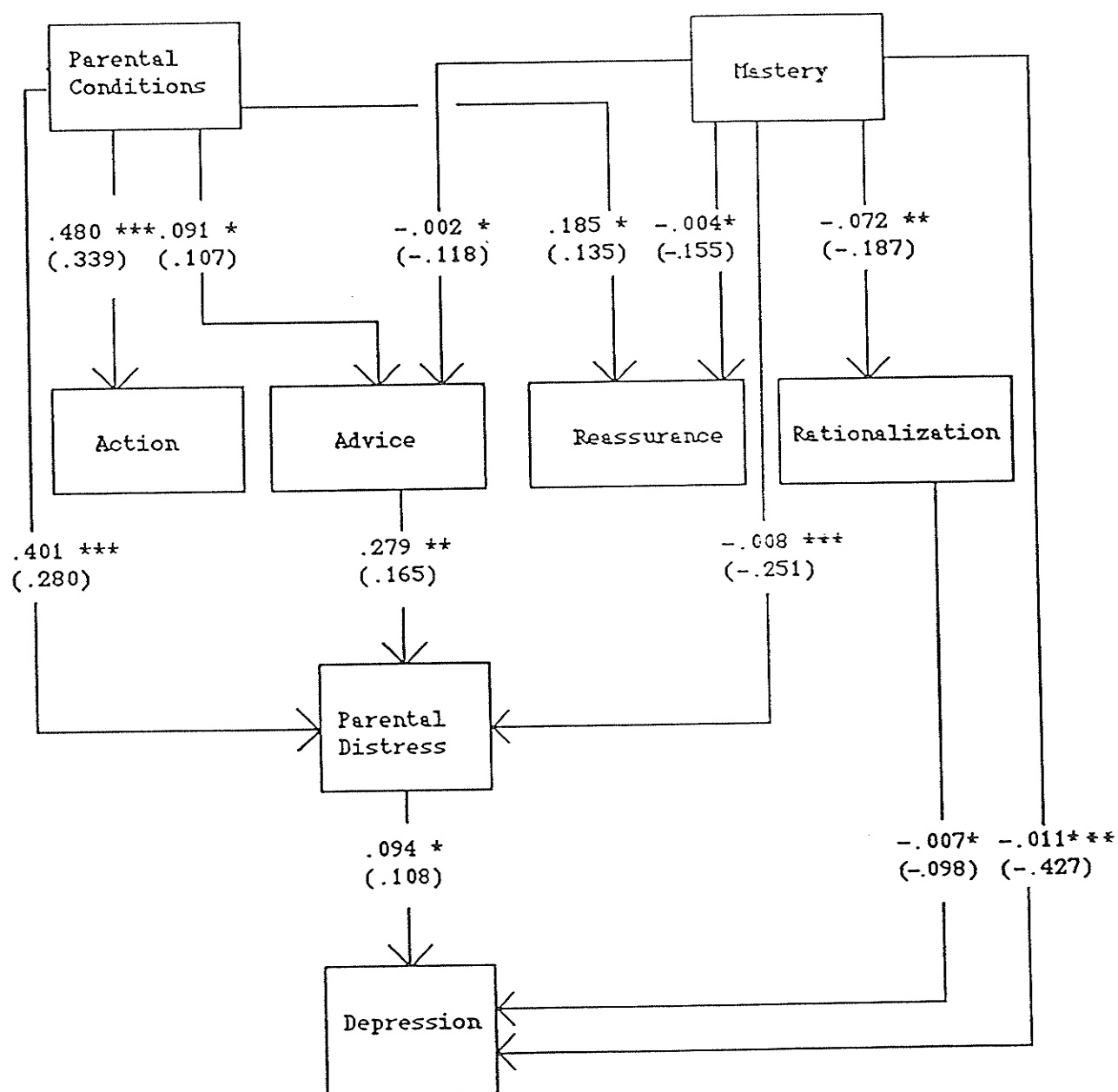


Figure 15. Path diagram illustrating the relationships between mastery and chronic parental conditions, and depression through parental coping responses and parental distress.

presented. Therefore, relationships between variables were examined only on the basis of their predetermined order in the hierarchical regression equations. For example, Hypothesis 2 predicted a positive relationship between mastery and depression. This relationship was only examined when mastery was entered into the equation, after all causally prior variables were in the regression equation.

Hypothesis 1: Effect Of Gender On Depression

As predicted, there was a significant gender difference in self-reported depressive symptoms, with women reporting more symptoms of depression than men. This was true before controlling for demographic variables $F(1,398) = 4.24, p < .05$, and after controlling for demographic variables other than gender $F(1,394) = 3.86, p < .05$. When considering only individuals working, either inside or outside the home (i.e., excluding those retired or unemployed, or students), women again reported significantly more symptoms of depression, both before controlling for demographic variables $F(1,329) = 6.41, p < .05$, and after $F(1,325) = 6.20, p < .05$. When including only parents in the analysis, there were no overall gender differences in self-reported depression $F(1,330) = 3.41, p > .05$, although after controlling for demographic variables, mothers did report significantly more depressive symptoms than fathers $F(1,326) = 4.26, p < .05$.

Using the traditional cutoff score of 16 to identify individuals at high risk for depression (Weissman et. al., 1977), data were examined to identify the percentage of men and women falling into this "high risk" category. Twenty-three males and 46 females (representing 12.1% of the males and 21.8% of the females) attained scores of 16 or greater on the CES-D. This

difference was statistically significant, with a greater proportion of women than men falling into the "high risk" category $X^2(1, N = 401) = 6.60$, $p < .01$. As is evident, overall, the data support the hypothesis that women report significantly more depressive symptoms than do men.

Hypothesis 2: Effect Of Mastery On Depression

It was predicted that there would be a significant relationship between mastery and depression, with lower mastery related to higher symptoms of depression. When mastery was first entered into the regression equation (i.e., total effect), this relationship was highly significant for all subjects $F(1,391) = 95.97$, $p < .001$, only "workers" $F(1,322) = 98.45$, $p < .001$, and only parents, $F(1,323) = 82.23$, $p < .001$. When the effects of all later variables were held constant (i.e., direct effect), these relationships remained significant $F(1,383) = 39.58$, $p < .001$, $F(1,316) = 63.63$, $p < .001$, $F(1,315) = 65.58$, $p < .001$ for all respondents, "workers," and parents, respectively. These results strongly support the prediction regarding the relationship between mastery and symptoms of depression.

Hypothesis 3: Effect of Chronic Conditions on Depression

It was hypothesized that there would be significant positive relationships between chronic conditions in the areas of marriage, finances, job, and parenting, and self-reported symptoms of depression. Examination of the results indicates that this hypothesis was supported in all role areas. Greater marital conditions were related to greater symptoms of depression $F(1,390) = 35.64$, $p < .001$, as were greater chronic financial condition $F(1,390) = 8.04$, $p < .01$, greater chronic job conditions, $F(1,321) = 6.69$,

$p < .01$, and greater chronic parental condition, $F(1,322) = 6.29$, $p < .05$. Only the total effects of chronic conditions on depression were significant. In contrast to mastery, chronic conditions in all areas did not exhibit any significant direct effects on depression (all p 's $> .05$). Examining the F values, significance levels, and percentage of variance accounted for by each variable revealed that, relative to financial, job, and parental conditions, chronic marital conditions seemed to have the strongest relationship to depression, accounting for 5% of the variance in depression, compared to 1% accounted for by chronic conditions in the three other areas. In summary, the hypothesis was supported, with chronic marital conditions having the strongest relationship with depression, compared to chronic financial, job, and parental conditions.

Hypothesis 4: Effect Of Gender On Coping Responses

It was predicted that women and men would differ in their frequency of using emotion-focused and appraisal-focused coping responses. Gender differences in coping responses were examined in each role area separately. Since numerous significance tests were performed in each area, to control for an inflated Type I error-rate each coping response was tested using an alpha of .01 as the criterion for significance.²

Table 28 identifies those coping responses for which there were significant gender differences. Within the marital area, prior to controlling for the effects of other variables, women reported using Advice Seeking

² An alpha of .01 was chosen as the significance criterion, for each test, on the basis of the Bonferroni method of controlling Type I error-rate (Keppel, 1982).

Table 28

Relationship Between Gender and Coping Responses

	Total Effects		Demographics Controlled		Direct Effects	
	b (B)	F	b (B)	F	b (B)	F
Marriage						
Advice Seeking	.031 (.273)	31.93 ***	.019 (.169)	6.93	.014 (.125)	4.00
Positive Comparison	.449 (.108)	4.67	.667 (.144)	4.69	.844 (.182)	8.75 **
Rumination	.035 (.159)	10.36 **	.046 (.212)	10.22 **	.026 (.117)	5.12
Finances						
Selective Ignoring	1.134 (.204)	17.34 ***	.804 (.145)	4.76	.784 (.141)	4.40
Budgeting	-.108 (-.027)	0.28	-.818 (-.202)	10.33 **	-.747 (-.184)	8.54 **
Parenting						
Advice Seeking	.038 (.260)	23.96 ***	.020 (.141)	4.18	.019 (.131)	3.53

Note. ** $p < .01$. *** $p < .001$.

$F(1,398) = 31.93, p < .001$ and Rumination $F(1,398) = 10.36, p < .01$ more frequently than men. After partialling the effects of other demographic variables, women still reported more frequent use of Rumination in marriage than did men $F(1,394) = 10.22, p < .01$. There was a significant gender difference in using Positive Comparison in marriage only after the effects of all other variables were controlled $F(1,390) = 8.75, p < .01$, with women reporting more frequent use of Positive Comparison in marriage than men. Within the financial area, women reported more frequent use of Selective Ignoring than did men, only prior to controlling for the effects of other variables $F(1,398) = 17.34, p < .001$. Men reported more frequent use of financial budgeting after controlling for the effects of demographic variables $F(1,394) = 10.33, p < .01$, and after controlling for the effects of all variables in the model $F(1,390) = 8.54, p < .01$. In the parenting area, women reported more frequent use of Advice Seeking than men, only prior to controlling for the effects of other variables $F(1,330) = 23.96, p < .001$. There were no other gender differences with respect to the use of coping responses. In summary, results lend partial support for the prediction that women would report more frequent use of emotion-focused coping and appraisal-focused coping. Although women did not report more frequent use of all coping responses in these areas, those coping responses for which women did report more frequent use, with the exception of Advice Seeking, fell into these categories.

Hypothesis 5: Effect Of Gender On Mastery

The results indicated that men and women did not significantly differ in their reported levels of mastery. This was the case when all subjects were

included in the analysis $F(1,398) = .33, p > .05$, when only "workers" were included $F(1,329) = .84, p > .05$, and when only parents were included $F(1,330) = .16, p > .05$. As is evident, the prediction of gender differences in levels of mastery was not supported by the data.

Hypothesis 7: Effect of Gender On Chronic Conditions

It was hypothesized that women would report more chronic conditions than men, particularly with regard to those chronic conditions most strongly related to depression. Overall, women did not report more chronic marital conditions than did men $F(1,398) = 1.43, p > .05$. However, when the effects of demographic variables were controlled, women did report more chronic marital conditions than did men, $F(1,394) = 4.38, p < .05$. There were no other significant gender differences in reporting chronic conditions in the financial, job, or parenting areas, either prior to controlling for demographic variables (all p 's $> .05$) or after controlling for demographic variables (all p 's $> .05$). There was, however, a significant gender difference in the report of chronic job conditions, after controlling for the effects of all other variables in the model. Men reported significantly more chronic job conditions than did women $F(1,323) = 6.02, p < .05$. In summary, results lend partial support to the predicted hypothesis. Women reported more chronic marital conditions than did men, after controlling for the effects of age, education, and family and personal income. As previously mentioned, of all chronic conditions, marital conditions were most strongly related to symptoms of depression. There were no gender differences in the report of chronic financial or parental conditions. Contrary to prediction, after controlling for the effects of all other variables in

the model, men reported significantly more chronic job conditions than did women.

Hypotheses 6 and 8: Effect Of Gender Through Mastery and Conditions

Hypotheses six and eight were examined together, as they represented similar predictions, one extending from the social-role theory and the other extending from the sex-role theory. As previously reported, gender differences in chronic conditions were evident only in the marital area and in the job area, the latter opposite to the prediction. Further, there was no gender difference in mastery. However, as previously illustrated in the path diagrams, in all role areas there were significant pathways from gender to depression, through both mastery and chronic conditions, albeit indirectly, through health. The question then becomes, do both these pathways significantly contribute to the model? If so, is one pathway more important than the other? One way of assessing the former is to examine the amount of variance explained by each portion of the model (Cohen and Cohen, 1983), while the effects of the other variables in the model are held constant.

In order to examine this, several new hierarchical regression analyses were performed. To examine the contributions of the pathways from mastery to depression, both directly and through coping and distress, the variables gender, demographics, health, past active coping, and chronic conditions were entered into the regression equation as the first set, adding mastery, coping responses, and distress as the second set. This method allows for the determination and testing of the incremental proportion of variance accounted for by the latter part of the model (set 2). Similarly, to exam-

line the contribution of the pathways from chronic conditions through coping responses and distress, the variables gender, demographics, health, past active coping, and mastery were entered together as the first set. Chronic conditions, coping responses, and distress were added as the second set of variables. As is illustrated in Table 29, for the marital and financial areas, both the portion of the model including the pathways from mastery to conditions (directly and indirectly), and the portion including the pathways from chronic conditions to depression, accounted for significant proportions of variance. Pathways from mastery and from chronic conditions accounted for 12% and 8.6% of the variance in depression in the marital area, and 17% and 5.5% in the financial area, respectively (all p 's $< .001$). Within the job area, pathways from mastery accounted for 16.6% of the variance in depression ($p < .001$), while pathways from chronic conditions only accounted for approximately 4% of the variance in depression ($p < .01$). In parenting, only the pathways from mastery to depression accounted for a significant proportion of variance, approximately 15% ($p < .001$), while the 3% accounted for by the pathways from chronic conditions was not significant ($p > .05$).

These results illustrate that for the areas of marriage, finances, and jobs, pathways from mastery to depression and from chronic conditions to depression both explained a significant proportion of variance in depression. The parenting area was an exception, with pathways from chronic parental conditions to depression not adding significantly to the model.

In order to examine whether there were significant differences in the relative importance of mastery and conditions with respect to depression, the Beta coefficients for their total effects were statistically com-

Table 29

Proportion of Variance In Depression Accounted For By Mastery And
Chronic Conditions

Marriage			
Variable Set	Incremental R ² For Set	Df	F
Set 1: (Hypothesis 6)			
Gender, Demographics, Health			
Past Coping, Marital Conditions	.359	8,331	27.41 ***
Set 2: (Hypothesis 6)			
Mastery, Coping, Distress	.122	8,333	11.25 ***
Set 1: (Hypothesis 8)			
Gender, Demographics, Health			
Past Coping, Mastery	.395	8,331	31.89 ***
Set 2: (Hypothesis 8)			
Conditions, Coping, Distress	.086	8,333	7.92 ***
R ² Total	.481		
Finances			
Variable Set	Incremental R ² For Set	Df	F
Set 1: (Hypothesis 6)			
Gender, Demographics, Health			
Past Coping, Conditions	.281	8,331	19.06 ***
Set 2: (Hypothesis 6)			
Mastery, Coping, Distress	.169	7,334	16.86 ***
Set 1: (Hypothesis 8)			
Gender, Demographics, Health			
Past Coping, Mastery	.395	8,331	31.89 ***
Set 2: (Hypothesis 8)			
Conditions, Coping, Distress	.055	7,334	5.48 ***
R ² Total	.450		

Table continued...

Table 29 (continued)

Job			
Variable Set	Incremental R ² For Set	Df	F
Set 1: (Hypothesis 6)			
Gender, Demographics, Health			
Past Coping, Conditions	.303	8,322	15.53 ***
Set 2: (Hypothesis 6)			
Mastery, Coping, Distress	.166	6,316	16.47 ***
Set 1: (Hypothesis 8)			
Gender, Demographics, Health			
Past Coping, Mastery	.431	8,322	30.49 ***
Set 2: (Hypothesis 8)			
Conditions, Coping, Distress	.038	6,316	3.77 **
R ² Total	.469		
Parenting			
Variable Set	Incremental R ² For Set	Df	F
Set 1: (Hypothesis 6)			
Gender, Demographics, Health			
Past Coping, Conditions	.287	8,323	16.38 ***
Set 2: (Hypothesis 6)			
Mastery, Coping, Distress	.158	8,315	11.24 ***
Set 1: (Hypothesis 8)			
Gender, Demographics, Health			
Past Coping, Mastery	.418	8,323	28.94 ***
Set 2: (Hypothesis 8)			
Conditions, Coping, Distress	.029	8,315	2.05
R ² Total	.446		

Note. ** $p < .01$. *** $p < .001$.

pared (Cohen and Cohen, 1983). There was no difference between the total effects of mastery and marital conditions on depression, $t(390) = 1.81$, $p > .05$. Mastery exhibited a significantly greater effect on depression than did chronic financial conditions, $t(390) = 5.23$, $p < .001$, chronic job conditions, $t(321) = 5.68$, $p < .001$, and chronic parental conditions, $t(322) = 5.25$, $p < .001$.

In summary, except for the area of parenting, the portion of the model containing pathways from mastery to depression and that containing pathways from chronic conditions to depression accounted for significant proportions of variance in depression. In the area of parenting, the portion of the model including the pathways from chronic conditions to depression did not contribute significantly. Except for the area of marriage, mastery exhibited a significantly greater effect on depression than did chronic conditions. In the area of marriage, their effects on depression were not significantly different.

DISCUSSION

The central focus of this study was to examine the role of gender differences regarding chronic life conditions and mastery in accounting for gender differences in depression. These relationships were examined within a more general model relating chronic life conditions, mastery, and coping to depression.

This study replicated the well documented gender difference in depression, with women reporting more depression than men. The results suggest that mastery is, overall, more strongly related to depression than are chronic life conditions. However, results suggest that the gender difference in depression is more related to gender differences in chronic life conditions, specifically marital conditions, than gender differences in mastery. These findings lend support to the social-role hypothesis explaining women's higher rates of depression. Unexpectedly, gender differences in health emerged as highly significant in understanding gender differences in depression.

The following discussion will focus first on the overall models presented, then on the predictions made relating gender to depression, and finally, on a discussion of the limitations and implications of this research.

Examination of Model

Results of this study indicated that, overall, the data support the conceptual model relating chronic life conditions, personal mastery, and distress to depression. Examination of the path diagrams reveals that, as outlined in the conceptual model, both mastery and chronic life conditions significantly affect the use of certain coping responses, distress, and depression. It is important to note that the causal ordering of variables was supported, as the ordered inclusion of variables was guided by the conceptual model. These significant effects are consistent with previous research. In all role areas, the inclusion of all variables in the analysis accounts for approximately 45 % of the variance in depression. This observation highlights the importance of psychosocial factors in determining the level of self-reported symptoms of depression. In addition, the significance of the pathways from gender to depression highlights the importance of these psychosocial variables in explaining the observed gender differences in depression. To the extent that the CES-D indicates a high risk of becoming clinically depressed (Weissman et al., 1977), these psychosocial factors may be important in understanding the development of clinical depression.

The results of this study support the predicted relationships between chronic conditions, mastery, and depression. High levels of chronic conditions in all role areas were related to high levels of depression. This finding is consistent with past research findings (e.g., Billings & Moos; Ilfeld, 1977; Makosky, 1982). In addition, the finding that chronic marital conditions had the strongest relationship with depression, as compared to other role-related conditions, is consistent with Ilfeld's (1977) find-

ings. In contrast to mastery, chronic conditions did not affect depression directly, but indirectly, through coping responses and through role-related distress. It is unclear why chronic conditions, as opposed to mastery, exerted only indirect effects on depression. It may be that role-specific sets of circumstances, as opposed to more generalized beliefs about oneself and/or one's environment, do not have a direct effect on depression or other types of adaptational outcomes but exert an impact only through affecting some more role-specific psychological states.

The relative importance of mastery and chronic conditions in accounting for depression is noteworthy. With the exception of the parental area, both mastery and chronic conditions accounted for a significant proportion of variance in depression. While mastery accounted for significantly more variance than did chronic financial, job-related, and parental conditions, mastery and chronic marital conditions accounted for similar proportions of variance. These relative differences were due to marital conditions accounting for 6% to 7% more variance in depression than other role-related conditions. These results suggest that mastery is more important than financial, job, and parental conditions in accounting for depression. The equal importance of chronic marital conditions and mastery in accounting for depression is due to the greater importance of chronic marital conditions, relative to other role-related conditions. This suggests that the quality of relationships with significant others is one of the most salient factors related to the experience of depression.

Results indicate that, depending on the role area, chronic conditions and mastery differ in their effects on different coping responses. In the areas of job and finances, mastery had little effect on coping responses,

affecting only Financial Acceptance. Conversely, in these areas, chronic conditions impacted on the use of five coping responses. Greater chronic conditions led to less job-related Positive Comparison and greater Selective Ignoring, greater Financial Acceptance and Budgeting, and less Devaluation. In contrast, in the areas of parenting and marriage, chronic conditions affected six coping responses, while mastery affected five coping responses.

It is unclear why mastery had little effect on job-related and financial coping responses. Some people argue (e.g., Folkman et al., 1986; Parkes, 1984) that a person's sense of personal control may or may not affect coping depending upon whether the stressors are perceived as controllable. If specific conditions are not perceived as controllable, one's overall sense of personal mastery may not influence one's use of coping strategies. If this were the case in this study, one might expect chronic job and financial conditions to be perceived as less controllable than chronic conditions in parenting and marriage. Sixty percent of the people responding to questions in all role areas (i.e., individuals who were parents and worked in or outside the home) said that problems they had in their job or with finances could be changed, while 70% and 78% said that problems in their marriage and as parents could be changed. These percentages suggest that marital and parental problems are more likely to be thought of as controllable than are financial and occupational problems. On this basis, one may speculate that levels of chronic conditions consistently affects the frequency of using various coping responses, while the impact of mastery on coping responses may relate to other factors like perceptions of controllability.

Several coping responses were found to affect role-related distress. Frequent use of one emotion-focused response (Rumination) and one problem-focused response (Advice Seeking), and infrequent use of another problem-focused response (Negotiation), were related to high marital distress. Infrequent use of two appraisal-focused responses (Selective Ignoring and Devaluation) were related to high financial distress. Pearlin and Schooler (1978) found similar results, although they found a greater number of coping responses to be significantly related to role-related distress. These findings suggest that, for financial distress, appraisal-focused coping may be more beneficial in minimizing distress. In marriage, however, active problem-solving appears most beneficial. Seeking advice, either regarding marital or parental problems, does not appear to be a helpful coping strategy.

Only three coping responses affected depression. Frequent use of Rumination in marriage, infrequent use of Rationalization in parenting (both emotion-focused responses), and infrequent use of Selective Ignoring regarding finances led to high levels of depression. These results suggest that use of emotion-focused and appraisal-focused coping is sometimes adaptive and sometimes maladaptive. It is notable that, with one exception, low levels of mastery led to the frequent use of coping responses which tended to exacerbate distress and levels of depression. This suggests that a high degree of personal mastery is protective against high levels of distress and depression. The exception is noteworthy. High levels of mastery led to infrequent use of Rationalization in parenting. However, low levels of rationalization led to higher levels of depression. Therefore, in this instance, having a high level of mastery was detrimental, in that it led to the infrequent use of what appears to be an adaptive coping response.

One can only speculate on the reasons for this anomaly. The items making up parental Rationalization consisted of two items; "there is only so much I can do," and "the way my children turn out depends on their inner nature." Not surprisingly then, people who have a high sense of personal mastery may also believe they have a high degree of control over how their children turn out (low rationalization). Even though problems with children are perceived as changeable, what if, in reality, they are not under as much parental control as perceived? In this case, thinking you have control when you actually do not could be detrimental. It may be in this manner that high mastery is detrimental, as it leads parents to think they have more control in a situation than is actually the case. Parents may then blame themselves for the outcome. In contrast to this, Parkes (1984) suggested that internals may be more flexible than externals in matching their coping responses with the perceived controllability of the situation. This result does not support the interpretation of greater flexibility, at least in parental coping, for those with high mastery.

The present findings are not clear cut with regard to the types of coping responses affecting levels of depression. Previous research suggests that emotion-focused and appraisal-focused responses which involve avoidance are most consistently related to depression (Folkman & Lazarus, 1986; Holohan & Moos, 1987). In this study, very few coping responses (three of twenty-one) exhibited a significant effect on symptom levels. Thus, it is difficult to make any generalizations regarding the relationship between coping responses and depression. There are several possible reasons for the absence of significant findings. One reason lies in the difference in methodology used in the present study, as compared with prior research. In

this study, variable entry was based on an assumed causal ordering, with numerous variables entered to the regression equation prior to coping responses. Most other studies either included fewer other variables in their regression equation or only examined coping responses in relation to depression. It may be that, in the presence of other salient variables, the effects of coping responses on depression are redundant.

There is some support for this interpretation. Folkman et al. (1986) found that, while seven of eight coping responses had significant zero-order correlations with depression, only two had significant partial correlations after mastery, interpersonal trust, and appraisal were included. Turner and Wood (1985) found only one of their four coping responses (emotional discharge) was related to depression, after considering other variables including demographics, chronic conditions, life events, social support, and mastery. Other possible reasons for the absence of impressive relationships between coping responses and depressive symptoms include the intercorrelations between coping responses, reliability of coping measures, and the adequacy of these measures in tapping underlying coping dimensions.

Health, although not part of the original conceptual model, emerged as very significant in understanding depression. High levels of health problems were significantly related to high levels of chronic conditions in all role areas, low mastery, high financial and job distress, and high levels of depression. Whereas all these were direct effects, health did not exhibit any direct effects on the frequency of using any coping responses. The failure of health to impact on marital or parental distress may be related to its relative importance in each of these role areas. One may speculate that poor health may affect one's perceptions and attitudes

around being able to effectively cope with job-related or financial problems, to a greater extent than it affects perceptions of marital and parental problems. It may, therefore, lead to more worry, concern, and frustration in the financial and job areas.

The significant relationship between health related problems and depression, although not predicted, is consistent with prior research. The relationship between physical disability or health problems, and depression is well documented (Aneshensel, Frerichs, & Huba, 1984; Craig & VanNata, 1983; Makosky, 1982; Turner & Noh, 1988; Turner & Wood, 1985). Shulberg, McClelland and Burns (1987) suggest three major causes of the co-occurrence of physical disorder and depression. These include: (a) the manifestation of depression as physical illness, (b) symptoms of organic illness as depression, and (c) depression as a reaction to medical illness. Consistent with the latter, Aneshensel et al. (1984) suggest that illness may lead to a failure to meet social role obligations, which may result in decreased self-esteem and disruption of self image. Others (Lipowski, 1975; Moos & Tsu, 1977; Shulberg et al., 1987) suggest that physical illness may influence psychological states through its adverse effects on multiple areas of function, including impaired ability to cope with needs and attain goals, and failure to meet social, sexual, and economic role demands. The relationship between health and depression, through chronic conditions and mastery, is consistent with these suggestions.

Previous research lends support to the observed relationships between chronic conditions, mastery, and health. Research suggests that physical problems are related to role-related difficulties. Mohamed, Weisz, and Waring (1978) found that the experience of chronic pain was positively

related to marital difficulties. Makosky (1982b) found that reports of worries, concerns, and problems regarding health were significantly related to chronic employment and financial conditions. She also found that health problems were significantly related to parental distress. The relationship between greater health problems and lower mastery suggests that individuals with more health problems feel a lower sense of personal control than individuals with fewer health problems. Some previous research has revealed similar findings. Folkman et al. (1986) found that lower mastery was significantly related to lower physical health status. Abel and Hayslip (1987) found that poorer perceived health was related to lower expectancy of control, when effects of gender were partialled out. Makosky (1982b) found that health related problems, concerns, or worries were related to levels of mastery.

The relevance of health to the conceptual model is twofold. First, it exhibits highly significant effects on many variables in the model. Second, it is primarily through gender's relationship with health that the relationship between gender and depression, indirectly through other variables, is illustrated. The following discussion will review the relationship between gender and depression through gender's relationship with health and other variables in the model.

Gender Differences

Several predictions were made in this study regarding gender. It was predicted that women, compared to men, would be more depressed and use more emotion-focused and appraisal-focused coping. On the basis of the social-role hypothesis, it was predicted that women would report more chronic con-

ditions in the role areas most strongly related to depression. On the basis of the sex-role hypothesis, it was predicted that women would have lower personal mastery than men.

Several of these predictions are supported by the data. Women report more depression and more chronic marital conditions than men. Chronic marital conditions, as compared to other role-related conditions, have the strongest relationship to depression. The data provide partial support for the prediction of gender differences in the use of coping responses. The prediction of gender differences in personal mastery is not supported by the data.

Results of this study indicate that women report a greater number of health related problems than do men. This finding is consistent with the bulk of the research to date (for a recent review see Verbrugge, 1985). While men suffer more from life threatening diseases which may cause more permanent disability and earlier death, women experience more acute illness and more frequent chronic illness of a non-life-threatening nature. The health measure used in the present study taps health-related problems more typically reported by women. Numerous explanations have been put forth to account for these gender differences. Many of them parallel common explanations of gender differences in depression. These include: (a) differences in biological risks, (b) differences in acquired risks related to work, leisure activities, health habits, and stress, (c) differences in perceptions, evaluations, and health related actions, and (d) differences in health reporting behavior (Mechanic, 1976; Verbrugge, 1985).

The observed gender difference in depression is not a surprising one, given the volume of research exhibiting similar findings (e.g., Amenson & Lewinsohn, 1981; Clark et al., 1981; Eaton & Kessler, 1981). Examination of individuals falling into the "high risk" category suggests that these findings are similar to those found in other studies. A cut-off point of 15 has been used to identify individuals at risk for the development of depression (Weissman et al., 1977). In this study, 12% of the men and 22% of the women, for a total of 17% of the sample, attained scores on the CES-D of 16 or greater. Similar results have been found in previous research (e.g., Eaton & Kessler, 1981; Folkman & Lazarus, 1986; Frerichs et. al., 1981). This suggests that the gender difference in depression in this sample is comparable to results found in other community surveys using the same measure.

Women and men seem to differ somewhat in their ways of coping. Results suggest that women use more Advice Seeking to deal with marital problems and problems as a parent. Women also tend to make more comparisons in order to appreciate their marriages. Women tend to try to ignore financial problems more frequently than men. Women also use rumination more frequently than do men. This consisted of thinking about problems frequently, feeling discouraged about changing things, and keeping so busy they do not have time to think. Although the first and last item appear contradictory, it may be that the keeping busy is an unsuccessful attempt at avoiding thinking about problems. There is only one coping response which men use more frequently than women. Men use budgeting more frequently than do women. Men, however, do not seem to use other problem-solving strategies more frequently than women. Similarly, women do not use Positive Compari-

son and Selective Ignoring more frequently in all role areas. This highlights the importance of acknowledging that even when gender differences in coping exist, they may not generalize to all role areas of life but may be very situation specific. Except for Advice Seeking, those coping strategies which women use more frequently are either emotion-focused or appraisal-focused responses.

Although there may be gender differences in some types of coping, not all of these coping strategies affect distress or depression. Advice seeking in marriage and parenting did not significantly relate to depression, although it did relate to role-related distress. Thus, seeking advice may lead to increases in distress, which lead to increases in levels of depression. Although Advice Seeking has been conceptualized as a problem-focused coping response (Pearlin & Schooler, 1978), one would then expect it, as other problem-focused coping responses, to lead to decreased distress. This, however, was not the case. There are several possible explanations for this. First, people may only seek advice from others when problems are already out of hand and distress is extremely high, in which case it may not then lead to lower distress. Another possibility is that advice seeking may not, as expected, necessarily lead to problem-solving. It may, in fact, serve more as a means of venting frustrations, discharging emotions, and talking and thinking about problems. These functions of advice seeking may in fact increase distress. There is some support for the latter argument. Some have found that women tend to seek external support more than men (Astor, Dubbin & Hammen, 1984; Belle, 1987) and use more emotional discharge than men (Stone & Neale, 1984). Nolen-Hoeksema (1986) found that, among college students, women were more likely to talk to oth-

ers about "feelings," in response to feeling depressed. Further, others have suggested (Husaini & Neff, 1982; Thoits, 1986) that there are some circumstances in which receiving social support may serve to increase distress.

Of importance are the three coping responses which do impact on depression. These include Rumination in marriage, Selective Ignoring in finances, and Rationalization in parenting. Of these three coping responses, women use Rumination and Selective Ignoring more frequently than do men. Although Rumination was positively related to depression, Selective Ignoring was negatively related to depression. The reason for the latter finding may lie in men and women's traditional roles. If, as is traditional, women are less likely to be the primary breadwinners, they are less likely to have control over changing the family financial situation. Men, on the other hand, may experience both internal as well as external societal pressures to be good providers. These differing expectations could explain women's more frequent use of Selective Ignoring when they feel they have no control over the situation.

These results do not support the hypothesis that women, generally, use coping responses that are less adaptive. It is significant to note, however, that women's greater likelihood of using a maladaptive coping response was in the role area most strongly related to depression. This finding highlights the importance of considering the relationship between different types of stressors and adaptational outcome. Had all role areas been examined together, and had their differing relationships with depression not been considered, we might conclude that the gender differences in coping had no relationship to depression as they would cancel each other out.

The present data partially supports the prediction that, according to Pearlin and Schooler's (1978) categorizations, women used emotion-focused and appraisal-focused coping more frequently than do men. Examining the items comprising these coping responses suggests an additional common element to these coping responses. All of the coping strategies used more frequently by women involve focusing on the problem either by thinking about it or talking about it. Making positive comparisons implies first having to think about one's situation in order to make comparisons. Similarly, financial Selective Ignoring includes three items which also imply having to think about one's situation. Advice Seeking involves talking to others about problems. Rumination involves both thinking about problems and feeling discouraged about changing them. An alternate hypothesis may be that women use those coping strategies which involve dwelling on or thinking about problems more frequently than do men. This possibility gains some support from Nolen-Hoeksema (1986). She argues (and provides supporting evidence) that women's response set of rumination and focusing on their mood (depression or sadness) leaves them prone to more prolonged and exacerbated bouts of depression. If we extend her argument to include dwelling on problems (not just mood), the present data could be interpreted in this light. This suggestion provides interesting possibilities for looking at new ways of categorizing coping responses.

Sex-Role And Social-Role Hypotheses

The observation that women exceed men in their use of at least three maladaptive coping responses does not specifically lend support to either the sex-role or social-role hypotheses. The sex-role hypothesis suggests

that the preponderance of depression in women is due to women's greater sense of helplessness, which leads them to use less active, more passive, and generally less adaptive methods of coping (Radloff, 1980). Results of this study do not generally support the notion that women's more frequent use of maladaptive coping responses (Advice Seeking and Rumination) is due to either women's lower sense of mastery or low mastery leading to less effective coping responses.

Although gender was related to mastery through health, the absence of a significant gender difference in mastery detracts from the viability of the sex-role hypothesis in explaining gender differences in depression. The failure to find a significant gender difference in mastery was somewhat surprising, given that such differences have been found in the past (e.g., Pearlin & Schooler, 1978; Pidano & Tennen, 1985; Radloff & Rae, 1981). One possible reason for the absence of a gender difference in mastery lies in the restricted range of the sample participating in the study. Based on the 1981 census, the present sample was, overall, better educated than the general Winnipeg population. It is possible that this restricted sample may have masked gender differences that may have emerged had less educated people been included in the sample. Further, men and women in this sample did not differ in education level. If men are typically better educated than women, then not only was the present sample overrepresented by more highly educated people in general but, more specifically, overrepresented by better educated women. Since higher education is related to higher mastery, women with lower mastery may have been underrepresented in this sample. Another possible explanation for the absence of a gender difference in mastery is articulated by Kobasa (1987). She suggests that a given

measure of control may be measuring the underlying dimension differently in men and in women. It may be that men and women are interpreting the items differently, each from their own sets of experiences with different situations. Such differences in interpretation might mask gender differences.

The results do not suggest that low mastery leads to use of less adaptive coping responses. Mastery was not significantly related to marital Advice Seeking, while chronic marital conditions were related to Advice Seeking. Although mastery was related to Rumination in marriage, examining the proportion of variance accounted for by each (1.5% and 23.6% for mastery and chronic conditions, respectively) suggests that gender is related to Rumination primarily through chronic conditions. Thus, chronic conditions appear to be more salient than mastery in accounting for gender differences in maladaptive coping responses.

Results of this study lend some support to the social-role hypothesis, implicating gender differences in the experience of chronic conditions in explaining gender differences in depression. The significant gender difference in chronic marital conditions is consistent with Ilfeld's (1976a) findings. The failure to find gender differences in chronic financial and parental conditions highlights several important points. First, it illustrates the importance of separately evaluating any potential stressors by content areas, in making gender comparisons. Had all chronic conditions been evaluated as one measure, this gender difference may have been masked. The second issue relates to the criticisms made by Makosky (1980) and others regarding the potential gender bias in stressor measures. The present study attempted to remedy this by adding items to each of the measures thought to be more applicable to women. Even with these additions, however, gender differences were not evident.

It is notable that women experience more chronic marital conditions, while men experience more chronic job-related conditions. It has been suggested that family roles are viewed as centrally important to women while work roles are viewed as centrally important to men (Aneshensel & Pearlin, 1987; Barnett & Baruch, 1987). To the extent this is true, men and women may differ in their investment, expectations, and evaluations of their work and family roles. Women may have higher or different expectations from marriage than men and, conversely, men may have higher or different expectations from their work situation than women. Given that the scales measuring chronic conditions contain many subjective and evaluative questions, it may be that men and women are answering them using a different set of criteria and standards. This could then lead to gender differences in the perceived experiences.

One might argue that these results do not support the social-role hypothesis because, just as women experience more chronic marital conditions, men experience more chronic job conditions. Two points negate this argument. First, chronic marital conditions appear to be more strongly related to depression than chronic financial, job, and parental conditions. Thus, it is notable that women experience more chronic marital conditions. Second, when examining the relative effects of chronic conditions and mastery on depression, in each of the role areas, it is evident that marital conditions and mastery have about the same impact on depression. In all other role areas, however, lower mastery is significantly more important than higher chronic conditions in leading to higher symptoms of depression. Thus, even though men may experience more chronic job-related conditions, mastery is more important in determining levels of depression. These find-

ings have an important implication. The experience of high levels of chronic marital conditions leaves both men and women more vulnerable to depression than does the experience of high levels of chronic financial, job-related, or parental conditions. Given that chronic conditions in marriage affect depression much more than do other conditions, higher levels of mastery would be required to offset their effects than would be required in other role areas. These results suggest that, while women may not be inherently more vulnerable to depression, they tend to experience, more than do men, certain conditions which leave all individuals more vulnerable to depression. Any greater vulnerability may be due to women having different expectations or standards than men. This, however, is not the type of vulnerability articulated by Radloff and others in explaining gender differences in depression.

In summary, results of the present study lend support to the overall conceptual model of stress, coping, and depression on which this study was based. Unexpectedly, health problems emerged as a particularly important variable in the model, both in its effects on other variables and in its role as a mediator between gender and other variables in the model. Although there were some gender differences in the use of coping responses, only three were significantly related to depression. Most notable was women's greater use of Rumination in marriage, a coping response related to higher levels of depression. Results of this study did not support the sex-role hypothesis. Although personal mastery did emerge as important in accounting for depression for all individuals, women and men did not differ in their reported levels of personal mastery. Further, in the most salient area, marriage, personal mastery and chronic conditions were equally impor-

tant in accounting for depression. The present study tended to support the social-role hypothesis of gender differences in depression. Women, compared to men, did not report more chronic conditions in all role areas. They did, however, report significantly more chronic marital conditions, the experience of which seems to leave all individuals more vulnerable to the development of depression.

Limitations of Present Research

The results of the present study serve to shed light on current psychosocial theories of gender differences in depression and, more generally, on the relationship between chronic life conditions, mastery, coping, and depression. These results however must be interpreted within the context of certain limitations of the study.

The generalizability of this study is limited to married men and women who are English speaking and relatively well educated. It is unclear whether the findings would be changed by including unmarried, non-English speaking, and less educated people. In addition, the under-representation and over-representation of certain age groups may also have affected the results.

Another issue of generalizability relates to the measure of depression used in this study. Although the CES-D identifies symptoms of depression and may identify people at risk to develop clinical depression, it is not a measure of clinical depression. Therefore, the results are only applicable to examining the effects of various factors on the level of depression in a community sample. It is impossible to assess whether the results would hold in relation to clinical depression.

The validity of mail questionnaires is always subject to scrutiny. Given the unsupervised completion of such questionnaires, the possibility of differences in interpreting questions, misunderstanding questions, or answering in a haphazard manner is always possible. Several factors, however, support the validity of this data. First, similar results were found in other studies using an interview format. Second, at least one-half of the respondents completing the questionnaire wrote additional comments in the space provided. In addition, over one-half the respondents requested a summary of the results. Both these factors suggest that the questionnaire was taken seriously. The high reliabilities of most of the measures suggest people were not answering questions in a random manner.

Although the reliability of most scales was quite high, the reliabilities of several of the coping factors were quite low (nine of the twenty-one coping responses had reliabilities less than 0.6). In addition, factors with two or three items are less than desirable. In light of these issues the results pertaining to coping responses must be interpreted with caution.

Several independent but related issues caution the reader from over-interpretation of the present data. These issues involve the validity of the theoretical model and the limitations of cross-sectional data. Data analysis in this study was based on an assumed theoretical model, relating a variety of variables to depression. Although the data supported this model, and the model was developed on the basis of the current literature and research, this says nothing about the "truth" or validity of the model. It may be that the data also would have supported different models. For example, instead of the direction of causality being from chronic con-

ditions through coping and distress to depression, the causal direction could have gone from depression to use of certain coping responses which in turn lead to chronic conditions. This possibility was not tested, nor were any others.

A related issue is the limitations of cross-sectional data. Direction of causality can only be assumed in cross-sectional studies. Longitudinal research is required to predetermine the causal ordering of variables. Because of the cross-sectional nature of the data, it might be argued that people who were feeling depressed at the time of completing the survey (and therefore likely scoring high on the depression scale) may have tended to answer questions in a more negative way than others. This alone could account for the significant relationships with depression. The nature of the relationships between variables suggests that a tendency to respond negatively, through a "veil" of depression, could not be the only factor contributing to relationships among variables. For example, the fact that chronic conditions in different role areas impact on depression differently does not support this argument. Extending from this argument, given that women are more depressed than men, one would expect them to respond more "negatively" than men on many more variables than is the case. Overall, the pattern of results does not suggest that people responded to questions on the basis of a "depressed" or "nondepressed" mindset.

These two issues are particularly noteworthy with regard to the relationships between health and other variables. Health was the one variable for which a position in the model was not determined on the basis of the theory and research relating stress, coping, and depression. In contrast to other variables, its position was based on the intent to examine the

relationships between other variables, after accounting for the effects of health. Its position in the hierarchical regression analyses was also justified by the fact that many of the questions pertained to health conditions "lasting for six or more months," thus temporally placing it prior to other variables. It may be, however, that other positions in the model are equally or more viable.

In summary, although this study sheds light on the psychosocial theories of gender differences in depression, the results must be interpreted cautiously in light of the methodological limitations outlined.

Implications For Future Research

The results of this study, as well as its methodological limitations have several implications for future research.

Longitudinal research is required to adequately test the causal model presented. In addition, it would provide the opportunity of examining how depression at one point affects factors like chronic conditions, coping resources and responses, or health at a later time. Such a design would involve assessing all measures several times at various time intervals.

Given the low reliabilities of coping measures used here, continued work in developing these measures is warranted. Although there are other coping measures used in this area of research (e.g., Folkman and Lazarus, 1984; Moos, 1984; Stone & Neale, 1984), these coping measures require responses in terms of specific stressful situations that occur to people. It would be useful to further develop the present measure as a more general measure of role-related coping. In developing such a measure, it would be useful

to have similar types of coping responses across each role area and to include more action oriented coping responses. In addition, factors need to be expanded to include more items to increase the stability and reliability of factors. Based on Nolan-Hokesma's (1986) argument, it may be worthwhile to examine coping in terms of other dimensions, like dwelling on problems versus distracting oneself from problems.

Results of the present study have implications for future research examining gender differences in depression. First, it is important when examining potential stressors to look at different content areas separately. Failing to do so may obscure important findings. Second, it is important to examine any gender differences in potential stressors in the context of the strength of the relationship of the potential stressors to depression. Although the present study attempted to assess additional chronic conditions that may pertain particularly to women, additional effort may be warranted in this area. Methodologically, it may be important to develop scales that have an equal distribution of salient items which pertain to both men and women, in addition to those which may pertain more to women and those that pertain more to men. It is only in this manner that we can get an accurate picture of how men and women differ in their experiences, and how these differences relate to their emotional well-being.

Further examination of the role of personal mastery in relating to gender differences in depression is warranted. It may be fruitful to examine different conceptions of personal control, as well as perceived controllability of specific situations, within the context of gender differences.

The significance of chronic marital conditions to the development of depression in general, and for women in particular, highlights the importance of exploring this area further. This may include examining specific aspects of marital relationships that are relevant to increasing vulnerability to depression. Extending this exploration to other types of intimate relationships may also be fruitful. Clearly, how men and women interact with their respective social networks, and the implications for gender differences in depression, is worthy of further examination.

One area that clearly deserves greater attention is the role of gender differences in health in determining gender differences in depression. Examining how health status affects one's sense of personal control, and examining gender differences in these effects, would be a fruitful pursuit. In addition, the manner in which health impinges on men's and women's role-related activities may provide greater understanding of the obstacles and stresses that affect their emotional well-being.

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Appendix A

COPY OF COVERING LETTERS AND REMINDER LETTER



THE UNIVERSITY OF MANITOBA

DEPARTMENT OF PSYCHOLOGY

Winnipeg, Manitoba
Canada R3T 2N2

March 24, 1987

Mrs. Jane Doe
000 Maple Street
Winnipeg, Postal Code

Dear Mrs. Doe,

As you know, people experience different situations in their lives. Some of these are problematic and some are not. Each person deals with these situations in their own way. The types of situations people encounter, and the ways they deal with them may play an important role in how they feel about their lives and in their general well-being. We are conducting research, funded by the Manitoba Mental Health Research Foundation, to better understand this important area. Such an understanding may help both to educate the public and to bring mental health services more in line with the public's needs.

You are one of 800 people chosen at random from a list of Winnipeg residents. Enclosed is a survey which is designed to gather information about a variety of conditions in different areas of your life, and how you deal with problems in these areas. There are also questions which ask about thoughts and feelings you may have about yourself. There are no correct or incorrect answers. Although many of the questions are personal in nature, they are included because they represent situations which commonly occur in many people's lives. We think you will find the questions meaningful and interesting.

The usefulness of this study depends on receiving replies from as many people as possible. For accurate results, please complete the survey by yourself, answering the questions in the order they are written, and, if possible, completing it in one sitting. After answering all questions that apply to you, return the completed survey in the enclosed stamped, self-addressed envelope.

We can assure you that your answers will be completely anonymous. The questionnaire has an identification number for mailing purposes only. This is so that we may check your name off of the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

Thank you for taking the time to read this letter. We hope you take the opportunity to complete this survey. You may receive a summary of the results, by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself. Should you have any questions do not hesitate to contact Jaye Miles at 775-2118 in the evenings.

Thank you in advance for your contribution to this research.

Yours Sincerely,

A handwritten signature in cursive script that reads 'Jaye Miles'.

Jaye Miles, M.A.
Graduate Studies
Department of Psychology
University of Manitoba

A handwritten signature in cursive script that reads 'David G. Martin'.

David G. Martin, Ph.D.
Professor, Dept. of Psychology
University of Manitoba



THE UNIVERSITY OF MANITOBA

DEPARTMENT OF PSYCHOLOGY

Winnipeg, Manitoba
Canada R3T 2N2

March 31, 1987

Mrs. Jane Doe
000 Maple Street
Winnipeg, Postal Code

Dear Mrs. Doe,

Last week you were mailed a questionnaire which examines the types of situations people experience in their daily lives, how they deal with them, and how they come to feel about themselves and their lives. Yours was one of 800 names chosen at random, from a list of Winnipeg residents, to receive the questionnaire.

If you have already completed and returned the questionnaire to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small sample of Winnipeg residents, your contribution is important in making the results accurate.

If by some chance you did not receive the questionnaire, or it got misplaced, please call Jaye Miles at 775-2118 (evenings) and we will make sure one is sent to you.

Your contribution is greatly appreciated.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Jaye Miles'.

Jaye Miles, M.A.
Graduate Studies
Department of Psychology
University of Manitoba

A handwritten signature in cursive script, appearing to read 'David Martin'.

David G. Martin, Ph.D.
Professor, Department of Psychology
University of Manitoba



THE UNIVERSITY OF MANITOBA

DEPARTMENT OF PSYCHOLOGY

Winnipeg, Manitoba
Canada R3T 2N2

April 21, 1987

Mr. John Doe
000 Maple Street
Winnipeg, Postal Code

Dear Mr. Doe,

Several weeks ago you were mailed a questionnaire which examines the situations people experience in their daily lives, how they deal with them, and how they come to feel about themselves and their lives. You were one of 800 Winnipeg residents, chosen at random from a city directory, who received this questionnaire. As of today, we have not yet received your completed questionnaire.

I am writing to you again because of the significance each questionnaire has to the usefulness of this study. In order for the results of this study to truly represent the experiences of adults of all ages and backgrounds, it is essential that each person in the sample return their completed questionnaire. It is also important that all questions be answered as accurately as possible.

In the event your questionnaire has been misplaced a replacement along with a stamped self-addressed envelope is enclosed.

If you have any questions please call Jaye Miles at 775-2118 (evenings).

Your contribution to this research is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads 'Jaye Miles'.

Jaye Miles, M.A.
Graduate Studies
Department of Psychology
University of Manitoba

A handwritten signature in cursive script that reads 'David G. Martin'.

David G. Martin, Ph.D.
Professor, Department of Psychology
University of Manitoba

Appendix B
COPY OF FINAL QUESTIONNAIRE

Is there anything else you would like to tell us about the kinds of situations you experience in your daily life, how you deal with them, or how they make you feel? If so please use this space for that purpose.

Also, any other comments you wish to make that you think may help us in future efforts to understand people's every-day experiences, will be greatly appreciated.

DAILY LIVING SURVEY

The purpose of this survey is to better understand the situations we experience in our daily lives, how we deal with them and how they make us feel. The survey, which is divided into seven sections, includes questions regarding physical health, work conditions, finances, parenting, and relationships. Please answer all questions in the order they appear. The instructions enclosed in boxes throughout the questionnaire indicate which items (if any) you should omit. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins.

Thank you for your help.

Department of Psychology
University of Manitoba
Winnipeg, Manitoba, R3T 2N2

Your contribution to this effort is greatly appreciated. If you would like a summary of the results, please print your name and address on the back of the return envelope (NOT on this questionnaire) and we will see that you get it.

PART I

Physical health is an important part of our every-day lives. It may affect what we do and how we feel about other aspects of our lives. I would like to ask you some questions about YOUR physical health.

1. Do you have a physical condition, WHICH HAS LASTED FOR 6 OR MORE MONTHS, and which... (circle number - For example, if you have a physical condition, which has lasted for 6 or more months, which DOES NOT "limit the kind or amount of work you can do", circle "1". If you have a physical condition which DOES "limit the kind or amount of work you can do", circle "2".)

	NO	YES
a. limits the kind or amount of work you can do at a job outside the home?.....	1	2
b. prevents you from working outside the home?.....	1	2
c. limits the kind or amount of work you can do within the home?.....	1	2
d. prevents you from working inside the home?.....	1	2

2. Please indicate if you have had any of these physical ailments IN THE PAST 6 MONTHS. (circle appropriate number)

	NO	YES
a. frequent cramps in the legs?.....	1	2
b. pain in the heart or tightness or heaviness in the chest?.....	1	2
c. trouble breathing or shortness of breath?.....	1	2
d. swollen ankles?.....	1	2
e. pains in the back or spine?.....	1	2
f. repeated pains in the stomach?.....	1	2
g. frequent headaches?.....	1	2
h. stiffness, swelling, or aching in any joint or muscle?.	1	2
i. getting very tired in a short time?.....	1	2

3. Here is a list of activities that people sometimes have trouble with. For instance, some people have trouble dressing themselves. (Circle the appropriate number)

DO YOU HAVE TROUBLE.....	NO	YES
a. dressing yourself?.....	1	2
b. moving around?.....	1	2
c. climbing stairs?.....	1	2
d. getting outdoors?.....	1	2

4. Would you say you have more energy, the same energy, or less energy than most people your age? (circle number)

- 1 MORE ENERGY
- 2 SAME ENERGY
- 3 LESS ENERGY

5. How often do you have trouble getting to sleep or staying asleep? (circle number)

- 1 EVERY NIGHT
- 2 AT LEAST ONCE A WEEK
- 3 MAYBE ONCE A MONTH
- 4 HARDLY EVER

6. When you have only four or five hours of sleep during the night, how tired do you feel the next day? (circle number)

- 1 VERY TIRED
- 2 A LITTLE TIRED
- 3 NOT VERY TIRED
- 4 NOT AT ALL TIRED

7. How often are you completely worn out at the end of the day? (circle number)

- 1 VERY OFTEN
- 2 SOMEWHAT OFTEN
- 3 ONCE IN A WHILE
- 4 HARDLY EVER

8. Compared with others about the same age, would you say your health is..... (circle number)

- 1 EXCELLENT
- 2 GOOD
- 3 FAIR
- 4 POOR

9. a. In the past 6 months, have you taken any pills or medication to help you sleep? (circle number)

1 NO ———> GO TO QUES. 10

2 YES

9.b Are you currently taking these pills or medication?

1 NO

2 YES

10. a. In the past 6 months, have you taken any pills or medication to calm your nerves? (circle number)

1 NO ———> GO TO QUES. 11

2 YES

10.b Are you currently taking these pills or medication?

1 NO

2 YES

11. a. In the past 6 months, have you taken any pills or medication to put you in a better mood? (circle number)

1 NO ———> GO TO PART II

2 YES

11.b Are you currently taking these pills or medication?

1 NO

2 YES

PART II

Work is a big part of many people's lives. Many of us spend at least one-third of our day doing some type of work. Some of us do not work, either by choice or for other reasons. I would like to ask you some questions about YOUR work situation.

12. What is your present work situation? (circle number that best describes your work situation: circle ONLY ONE category)

- 1 FULL-TIME WORK OUTSIDE HOME (30 HOURS/WEEK OR MORE)
- 2 PART-TIME WORK OUTSIDE HOME (LESS THAN 30 HOURS/WEEK)
- 3 FULL-TIME HOMEMAKER
- 4 UNEMPLOYED ———> GO TO QUES. 21
- 5 RETIRED ———> GO TO QUES. 21
- 6 FULL-TIME STUDENT > GO TO QUES. 21

Questions 13 to 21 ask about various aspects of your PRESENT work situation. If you are in FULL-TIME WORK or PART-TIME WORK answer these questions in terms of your present job. If you have MORE THAN ONE PAID JOB outside the home answer in terms of the job you spend the most time at. FULL-TIME HOMEMAKERS answer questions 13 to 21 in terms of your job as a homemaker.

13. Do you currently have any plans to change your place of work or the type of work that you do? (circle number)

1 NO

2 YES

14. How effective are you in dealing with/coping with problems that arise in your job? (circle number)

1 VERY EFFECTIVE

2 MODERATELY EFFECTIVE

3 SLIGHTLY EFFECTIVE

4 NOT AT ALL EFFECTIVE

15. Work means different things to different people. I'd like to know what it means to you personally. How much do you AGREE or DISAGREE with these statements. (circle appropriate number under category that best applies)

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. I can put up with a lot on my job as long as the pay is good...	1	2	3	4
b. As soon as I leave work, I put it out of my mind.....	1	2	3	4
c. I have to accept my job as it is, because there's nothing I can do to change it.....	1	2	3	4
d. The most important thing about my job is that it provides me the things I need in life.....	1	2	3	4
e. Time solves most problems on my job.....	1	2	3	4

16. Here are conditions that people sometimes have to work with in their jobs. I'd like you to indicate how much of the time you have these conditions in your job. (circle appropriate number)

HOW MUCH OF THE TIME...	ALMOST ALWAYS	MUCH OF THE TIME	ONCE IN AWHILE	NEVER OR ALMOST NEVER
a. do you have more work than you can handle?.....	1	2	3	4
b. do you have a lot of noise in your job?.....	1	2	3	4
c. do you work in a lot of dirt or dust?.....	1	2	3	4
d. are you in danger of illness or injury in your job?.....	1	2	3	4
e. do you do the same thing over and over again?.....	1	2	3	4
f. are you under pressure to keep up with new ways of doing things?.....	1	2	3	4
g. are you under pressure, because of threats to your job, to have a personal relationship with a co-worker or boss?.....	1	2	3	4
h. do you work too many hours?...	1	2	3	4
i. are you not appreciated for the work you do?.....	1	2	3	4
j. are you uninterested or bored with your work?.....	1	2	3	4
k. are you tired out from doing your work?.....	1	2	3	4
l. are you lonely for the company of adults during your work time?.....	1	2	3	4
m. are you concerned you are not doing a good enough job?..	1	2	3	4
n. do you really enjoy the work you do?.....	1	2	3	4
o. do you use your talents and abilities in doing your work?..	1	2	3	4
p. are you able to have some free time for yourself during your work time?.....	1	2	3	4
q. Other: (list any other conditions you frequently experience in your job which have not been listed).				

17. Now I'd like you to indicate how much you AGREE or DISAGREE with these statements about different job benefits as they apply to YOUR CURRENT JOB (circle appropriate number)

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. I get paid about the right amount for the job that I have...	1	2	3	4
b. I can count on a steady income...	1	2	3	4
c. My chances for getting paid more in the next year or so are good..	1	2	3	4
d. The work I'm doing now is preparing me for a better work situation later.....	1	2	3	4
e. My work has good fringe benefits (eg. health, dental, pension plans, flexible hours, etc.).....	1	2	3	4
f. There is always a chance I may be out of a job.....	1	2	3	4
g. Other: (list any other job benefits that you experience in your work that have not already been listed).				

18. Here are different things that sometimes happen to people in their jobs. (circle number)

On your job, HOW OFTEN....	NEVER	ONCE IN AWHILE	FAIRLY OFTEN	VERY OFTEN
a. do people act toward you as if you are a person without real feelings?.....	1	2	3	4
b. do people come to you for your opinions about how the work should be done?.....	1	2	3	4
c. do you have to do tasks that no one else wants to do?.....	1	2	3	4
d. do people treat you in an unfriendly way?.....	1	2	3	4
e. are you told that you're doing a good job?.....	1	2	3	4
f. are you treated unfairly by another person?.....	1	2	3	4
g. do you experience unwanted looks, comments, or touches, which may be sexual in nature?.....	1	2	3	4

19. Overall, when you think of the problems you have in your work situation do you feel they are things that can be changed, or do you feel they are things that must be accepted or adjusted to? (circle number)

- 1 CAN BE CHANGED OR SOMETHING CAN BE DONE
2 MUST BE ACCEPTED OR ADJUSTED TO

20. Here are different things that people do to help themselves to get along in their jobs. I'd like you to indicate, by CIRCLING YOUR ANSWER...

HOW OFTEN DO YOU....

	NEVER	ONCE IN A WHILE	FAIRLY OFTEN	VERY OFTEN
a. try to pay attention only to your duties in order to overlook difficulties in your work situation?...	1	2	3	4
b. talk to others to find a solution to difficulties in your work situation?...	1	2	3	4
c. remind yourself that your work life now is better than it was?.....	1	2	3	4
d. tell yourself that difficulties in your work are not important in your life?...	1	2	3	4
e. tell yourself that your work life will be better in the future?.....	1	2	3	4
f. remind yourself that for everything bad about your work situation there is also something that is good?.....	1	2	3	4
g. notice people who have more difficulties in their job than you have?.....	1	2	3	4
h. take some action to get rid of the difficulties in your work situation?...	1	2	3	4
i. tell yourself that your job is as good as, or better than most other people you know?.....	1	2	3	4
j. just wait for a difficulty to work itself out?.....	1	2	3	4

21. EMPLOYED PEOPLE AND HOMEMAKERS: I want to know the kinds of feelings you get when you think of your day-to-day job, your daily working conditions, your pay and other benefits, and the people you work with. Adding up all the GOOD and BAD points about your job.... To what extent do you feel each of the following? (see list below and circle appropriate number for each item)

UNEMPLOYED AND RETIRED PEOPLE, AND FULL-TIME STUDENTS, I want to know the kinds of feelings you get when you think of the things that happen to you because you are unemployed. Adding up all the GOOD and BAD points about being unemployed.... To what extent do you feel each of the following? (see list below and circle appropriate number for each item)

	VERY	SOMEWHAT	ONLY A LITTLE	NOT AT ALL
a. Bothered or upset.....	1	2	3	4
b. Worried.....	1	2	3	4
c. Relaxed.....	1	2	3	4
d. Frustrated.....	1	2	3	4
e. Unhappy.....	1	2	3	4
f. Contented.....	1	2	3	4
g. Tense.....	1	2	3	4

22. Some people who work outside the home, are retired or unemployed, or those who are full-time students also do some work around their home. Some full-time homemakers have help with their work around the house.

a. Do you do all, most, some, or none of the work around your house?

b. Does your partner/spouse (husband or wife) do all, most, some, or none of the work around your house?

22.a

- 1 ALL
- 2 MOST
- 3 SOME
- 4 NONE

22.b

- 1 ALL
- 2 MOST
- 3 SOME
- 4 NONE
- 5 NOT APPLICABLE

FULL-TIME HOMEMAKERS SKIP QUESTION 23 AND GO TO PART III.

23. In your experiences with your work around the house....

HOW OFTEN ARE YOU....

	ALMOST ALWAYS	MUCH OF THE TIME	ONCE IN A WHILE	NEVER OR ALMOST NEVER
a. not appreciated for your work in the house?.....	1	2	3	4
b. uninterested or bored with doing household chores?.....	1	2	3	4
c. tired out from doing your household chores?.....	1	2	3	4
d. lonely for the company of adults when doing your chores?..	1	2	3	4
e. really enjoying the work you do at home?.....	1	2	3	4
f. using your talents and abilities in doing your household jobs?..	1	2	3	4
g. able to make free time for yourself?.....	1	2	3	4
h. concerned that you are not doing a good enough job?.....	1	2	3	4

PART III

Finances can affect the kinds of things we are able to do in our day-to-day lives and the way we feel. Now I would like to ask you some questions about YOUR financial situation.

24. How effective are you in dealing with/coping with financial problems that arise?

- 1 VERY EFFECTIVE
- 2 MODERATELY EFFECTIVE
- 3 SLIGHTLY EFFECTIVE
- 4 NOT AT ALL EFFECTIVE

25. During a typical week, about how much are money problems on your mind? (circle number)

- 1 ALMOST ALWAYS
- 2 A GOOD PART OF THE TIME
- 3 VERY LITTLE
- 4 NEVER

26. How often does it happen that you DO NOT have enough money to afford....

	NEVER	ONCE IN A WHILE	FAIRLY OFTEN	VERY OFTEN
a. the kind of food other family members (ie. partner, and or children you financially support) should have?.....	1	2	3	4
b. the kind of food you should have?...	1	2	3	4
c. the kind of medical or dental care other family members should have?...	1	2	3	4
d. the kind of medical or dental care you should have?.....	1	2	3	4
e. the kind of clothing other family members should have?.....	1	2	3	4
f. the kind of clothing you should have?.....	1	2	3	4
g. the leisure activities that other family members want?.....	1	2	3	4
h. the leisure activities that you want?.....	1	2	3	4
i. the kind of education opportunities other family members should have?...	1	2	3	4
j. the kind of education opportunities you should have?.....	1	2	3	4
k. the kind of child-care arrangements you need?.....	1	2	3	4

27. At the present time are you able to afford.... (circle number)

	NO	YES
a. a home that is large enough and comfortable enough for you and your family?.....	1	2
b. furniture or household equipment that needs to be replaced?..	1	2
c. the kind of car you need?.....	1	2

28. Overall, when you think of the problems you have regarding finances, do you feel they are things that can be changed, or do you feel they are things that must be accepted or adjusted to?

- 1 CAN BE CHANGED OR SOMETHING CAN BE DONE
- 2 MUST BE ACCEPTED OR ADJUSTED TO

29. When you are short of money how often do you think or do these things?

HOW OFTEN DO YOU.....	NEVER	ONCE IN A WHILE	FAIRLY OFTEN	VERY OFTEN
a. just sit back and wait for things to work out by themselves?.....	1	2	3	4
b. tell yourself that your income is higher than most people with the same education as yours?.....	1	2	3	4
c. notice people around who are worse off than you?.....	1	2	3	4
d. tell yourself that money isn't worth getting upset about?.....	1	2	3	4
e. remind yourself that your standard of living is better than it was?.....	1	2	3	4
f. tell yourself that your income is higher than most of your friends?.....	1	2	3	4
g. accept the money pinch, because there is little you can do about it?..	1	2	3	4
h. remind yourself that your income is higher than most of your relatives?...	1	2	3	4
i. tell yourself that your money situation will get better in the future?.....	1	2	3	4
j. concentrate on more important things in life?.....	1	2	3	4
k. borrow money?.....	1	2	3	4
l. tell yourself that your income is higher than most of your neighbors?...	1	2	3	4

30. Thinking of yourself and your family, how much do you AGREE or DISAGREE with these statements.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. We live on a strict budget.....	1	2	3	4
b. We are very careful how we spend money.....	1	2	3	4
c. financial success does not interest me.....	1	2	3	4
d. We limit what we buy so we can be secure.....	1	2	3	4
e. Our money never seems to be enough for our wants.....	1	2	3	4

31. Think for a moment of your financial situation, the things you are able to afford and the things you would like to have for yourself and your family but are unable to afford. When you think of these things.....

To what extent do you feel each of the following?

	VERY	SOMEWHAT	ONLY A LITTLE	NOT AT ALL
a. Bothered or upset.....	1	2	3	4
b. Tense.....	1	2	3	4
c. Contented.....	1	2	3	4
d. Worried.....	1	2	3	4
e. Frustrated.....	1	2	3	4
f. Relaxed.....	1	2	3	4
g. Unhappy.....	1	2	3	4
h. Insecure.....	1	2	3	4

PART IV

Families are a very important part of our lives. Now I would like to ask you some questions about YOUR family.

32. What is your current marital status? (circle number)

- 1 SINGLE (NEVER MARRIED)
- 2 MARRIED (LIVING TOGETHER)
- 3 COMMON-LAW (LIVING TOGETHER AS A COUPLE)
- 4 DIVORCED
- 5 SEPARATED
- 6 WIDOWED

33. Do you have any children? (include biological, adopted, or step-children and children for whom you are a legal guardian).

1 NO —————>GO TO QUES. 51

2 YES

→ 34a. Starting with the oldest, what is the age of each of your children? (record on chart below under column marked QUES. 34a.)

34b. Starting with the oldest, are your children MALE or FEMALE? (circle appropriate numbers under column marked QUES. 34b. on chart below)

34c. Are each of your children living with you or away from home? (circle appropriate numbers under column marked QUES. 34c. on chart below).

34d. Have you adopted any of your children, or are you a step-parent or legal guardian to any of them? (circle appropriate numbers under columns marked QUES. 34d. on chart below).

	QUES.34a.	QUES.34b.	QUES.34c.		QUES.34d.				
	AGE	MALE	FEMALE	LIVING AT HOME	LIVING AWAY	BIOLOGICAL	ADOPTED	STEP	LEGAL GUARDIAN
OLDEST	—	1	2	1	2	1	2	3	4
2nd	—	1	2	1	2	1	2	3	4
3rd	—	1	2	1	2	1	2	3	4
4th	—	1	2	1	2	1	2	3	4
5th	—	1	2	1	2	1	2	3	4
6th	—	1	2	1	2	1	2	3	4
7th	—	1	2	1	2	1	2	3	4
8th	—	1	2	1	2	1	2	3	4
9th	—	1	2	1	2	1	2	3	4
10th	—	1	2	1	2	1	2	3	4

35. How effective are you in dealing with/coping with problems that arise as a parent? (circle number)

- 1 VERY EFFECTIVE
- 2 MODERATELY EFFECTIVE
- 3 SLIGHTLY EFFECTIVE
- 4 NOT AT ALL EFFECTIVE

36. a. Do any of your children have any special kinds of health problems or conditions? (circle number)

- 1 NO
- 2 YES

→ 36.b How serious a problem is this to you?

- 1 VERY SERIOUS
- 2 SOMEWHAT SERIOUS
- 3 SLIGHTLY SERIOUS
- 4 NOT AT ALL SERIOUS

IF ALL YOUR CHILDREN ARE 15 YEARS OLD OR YOUNGER SKIP QUESTION 37 AND GO TO QUESTION 38.

37. As a parent, how often do you wonder if your child/ren.....(When answering this question think of all your children 16 or older).

	NEVER	ONCE IN WHILE	FAIRLY OFTEN	VERY OFTEN
a. are living too much for the present and thinking too little of what lies ahead?.....	1	2	3	4
b. are not practicing the moral beliefs that are important?.....	1	2	3	4
c. are showing too little interest in religion?.....	1	2	3	4
d. might be tempted by others to try illegal drugs?.....	1	2	3	4
e. are not trying hard enough to prepare themselves for their life ahead?.....	1	2	3	4
f. might be using too much alcohol?.....	1	2	3	4
g. are not headed for the success you want for them?.....	1	2	3	4
h. Other (list any other things you frequently wonder concerning your children which are not listed above)				

38. As a parent how strongly do you AGREE or DISAGREE with these statements.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. The way my child (or children) is (are) turning out depends on their inner nature and there is little I can do about it.....	1	2	3	4
b. There is only so much I can do as a parent and after that I just accept my child/ren as they are?..	1	2	3	4

IF ALL YOUR CHILDREN ARE 5 YEARS OLD OR YOUNGER SKIP QUESTIONS 39 AND 40 AND GO TO QUESTION 41.

39. As a parent, how often do you have these experiences? (When answering questions 39 and 40 think about all your children 6 years old or older).

HOW OFTEN DOES IT HAPPEN THAT....

	NEVER	ONCE IN WHILE	FAIRLY OFTEN	VERY OFTEN
a. you are treated without proper respect?..	1	2	3	4
b. your advice and guidance are ignored?....	1	2	3	4
c. you are helped with household chores without asking?.....	1	2	3	4
d. you are disobeyed?.....	1	2	3	4

40. As a parent, HOW OFTEN DO YOU HAVE TO GIVE SOME ATTENTION TO THE CORRECTION OF.....

	NEVER	ONCE IN WHILE	FAIRLY OFTEN	VERY OFTEN
a. misbehavior in the house?.....	1	2	3	4
b. your child/ren having the wrong kinds of friends?.....	1	2	3	4
c. your child/ren failing to get along with others the same age?.....	1	2	3	4
d. carelessness about personal appearance?..	1	2	3	4
e. poor school work?.....	1	2	3	4
f. poor use of spare time?.....	1	2	3	4
g. Other (list any other behaviors or situations, which are not listed above, that you frequently have to give attention to their correction).				

ALL PARENTS ANSWER QUESTIONS 41 AND 42.

41. HOW OFTEN....

NEVER OR
ALMOST
NEVER ONCE IN
A WHILE MUCH OF
THE TIME ALMOST
ALWAYS

- a. is it primarily your responsibility to make sure that your child/ren are cared for?..... 1 2 3 4
- b. do you wonder if your child/ren are getting the quality of care they should have?..... 1 2 3 4
- c. are you disturbed about feelings you have towards your child/ren?.. 1 2 3 4
- d. do you disagree with the way your spouse treats your child/ren?..... 1 2 3 4

42. Not including when you are working, do you have regular periods of time away from your child/ren? (circle number).

- 1 NO
2 yes

IF ALL YOUR CHILDREN ARE 16 YEARS OLD OR OLDER SKIP QUESTIONS 43 AND 44 AND GO TO QUESTION 45.

43. a. Is there anyone other than your spouse who regularly helps you with your childcare? (eg. day-care, babysitter, relative, neighbour). (answer in terms of all your children 15 years old or younger).

- 1 NO —————> GO TO QUES. 44
2 YES

→ 43.b. How often do you wonder if they are giving your child/ren the quality of care they should have?

- 1 NEVER
2 ONCE IN A WHILE
3 FAIRLY OFTEN
4 VERY OFTEN

44. If you just feel like going out for a while or doing something for pleasure, can you count on someone to take care of your child/ren?

- 1 NO
2 YES - without any prior planning
3 YES - but only if previously planned

ALL PARENTS ANSWER QUESTIONS 45 TO 51.

45. Have you read any books or magazines in recent months about raising children?..... NO YES
1 2
46. Have you gone to a doctor, teacher, or other professional person in the past year for advice in dealing with your child/ren's behavior? (Not physical or medical problems).... 1 2
47. In the past year or so, have you asked for the advice of a relative in dealing with any difficulties in your child/ren's behavior?..... 1 2
48. In the past year or so have you asked the advice of friends or neighbors in dealing with any difficulties in your child/ren's behavior?..... 1 2
49. Here are different things parents do when they find something in their children's behavior that is troublesome.

HOW OFTEN DO YOU.....

NEVER ONCE IN
A WHILE FAIRLY
OFTEN VERY
OFTEN

- a. just try to ignore what's going on..... 1 2 3 4
- b. look around at other parents to see how much better off you are than they?.. 1 2 3 4
- c. remind yourself that things could be worse?..... 1 2 3 4
- d. think that it's behavior your child/ren will just outgrow?..... 1 2 3 4
- e. remind yourself how much easier it is now being a parent than it used to be?.. 1 2 3 4
- f. tell yourself it is not really important?..... 1 2 3 4
- g. tell yourself that parenting will become easier in the future?..... 1 2 3 4
- h. try to notice only the good things?..... 1 2 3 4
- i. decide there is really nothing you can do to change things?..... 1 2 3 4
- j. scold your child/ren?..... 1 2 3 4
- k. take away a privilege?..... 1 2 3 4
- l. threaten some kind of punishment?..... 1 2 3 4

50. Overall, when you think of the problems you have as a parent, do you feel that these are things that can be changed, or do you feel these are things that must be accepted or adjusted to?

- 1 CAN BE CHANGED OR SOMETHING CAN BE DONE
2 MUST BE ACCEPTED OR ADJUSTED TO

ALL RESPONDENTS (PARENTS AND NONPARENTS) ANSWER QUESTION 51

51. ALL PARENTS, think now of your experiences as a parent - all the daily pleasures and daily problems that you have. When you think of your experiences as a parent.....
To what extent do you feel each of the following? (see list below and circle appropriate number for each item)

ALL NONPARENTS, think of your experiences that arise out of not having any children. Adding up all the GOOD points and BAD points of not having children.....
To what extent do you feel each of the following? (see list below and circle appropriate number for each item)

	VERY	SOMEWHAT	ONLY A LITTLE	NOT AT ALL
a. bothered or upset.....	1	2	3	4
b. worried.....	1	2	3	4
c. contented.....	1	2	3	4
d. tense.....	1	2	3	4
e. frustrated.....	1	2	3	4
f. successful.....	1	2	3	4
g. unhappy.....	1	2	3	4
h. unsure of yourself.....	1	2	3	4
i. emotionally worn out.....	1	2	3	4

PART V

Another very important part of our lives is our intimate relationships. So now I would like to ask you some questions about your marriage (relationship) and your experiences as a partner in your relationship.

IF YOU ARE MARRIED (LIVING TOGETHER) OR COMMON-LAW (LIVING AS MARRIED), ANSWER QUESTIONS 52 TO 66.

IF YOU ARE SINGLE, DIVORCED, SEPARATED, OR WIDOWED, SKIP QUESTIONS 52 TO 65 AND GO TO QUESTION 66.

52. How long have you been living with your current partner?

- 1 LESS THAN ONE YEAR
- 2 ONE TO TWO YEARS
- 3 THREE TO FIVE YEARS
- 4 SIX TO TEN YEARS
- 5 ELEVEN TO FIFTEEN YEARS
- 6 MORE THAN FIFTEEN YEARS

53. How effective are you in dealing with/coping with problems that arise in your marriage? (circle number)

- 1 VERY EFFECTIVE
- 2 MODERATELY EFFECTIVE
- 3 SLIGHTLY EFFECTIVE
- 4 NOT AT ALL EFFECTIVE

54. Have you ever been separated from your current partner for more than a couple of days because of relationship difficulties?

- 1 NO
- 2 YES

55. From your experience in your current marriage, I'd like you to indicate how strongly you AGREE or DISAGREE with these statements.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. My spouse (partner) insists on having his/her own way.....	1	2	3	4
b. My spouse usually expects more from me than he/she is willing to give back.....	1	2	3	4
c. I can count on my spouse to help me with most of the problems that have to be taken care of in the family.....	1	2	3	4
d. When we argue, my spouse often calls me names.....	1	2	3	4
e. My spouse usually acts as if he/she were the only important person around.....	1	2	3	4
f. Most of the time, I give in more to my spouse's wishes than he/she gives in to mine.....	1	2	3	4
g. When we argue, my spouse often hits me.....	1	2	3	4

56. MY SPOUSE IS SOMEONE.....

a. I can really talk with about things that are important to me..	1	2	3	4
b. who is affectionate towards me...	1	2	3	4
c. who spends money wisely.....	1	2	3	4
d. who is a good wage earner.....	1	2	3	4
e. who does a fair share of work around the house.....	1	2	3	4
f. who is a good sexual partner.....	1	2	3	4
g. who appreciates the job I do as a wage earner (if employed outside the home).....	1	2	3	4
h. who appreciates the work I do around the house.....	1	2	3	4

57. Here are some statements of how people feel about themselves in their marriages. Please indicate how strongly you AGREE or DISAGREE with them.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. My spouse seems to bring out the best qualities in me..	1	2	3	4
b. My spouse appreciates me just as I am.....	1	2	3	4
c. My marriage doesn't give me enough opportunity to become the sort of person I'd like to be.....	1	2	3	4
d. I cannot completely be myself around my spouse.....	1	2	3	4

58. a. At present does your spouse have any problem with health, any sickness injury, or handicap?

1 NO —————> GO TO QUES. 59.

2 YES

→ 58.b. How much does this bother, upset, worry, or concern you?

1 VERY MUCH

2 SOMEWHAT

3 ONLY A LITTLE

4 NOT AT ALL

59. At present, does your spouse have any problems with the following? (circle number). If YES, how much does this bother, upset, worry, or concern you?

	NO	YES	VERY MUCH	SOMEWHAT	ONLY A LITTLE	NOT AT ALL
a. employment.....	1	2 —————>	1	2	3	4
b. money (if not pooled)...	1	2 —————>	1	2	3	4
c. ex-spouses or ex-lovers.....	1	2 —————>	1	2	3	4
d. relatives.....	1	2 —————>	1	2	3	4
e. children.....	1	2 —————>	1	2	3	4
f. law.....	1	2 —————>	1	2	3	4
g. school.....	1	2 —————>	1	2	3	4
h. alcohol or drugs.....	1	2 —————>	1	2	3	4

h. Other (list any other problems that your partner may have and indicate using the categories above how much they bother, upset, worry, or concern you)

60. Overall, when you think of the problems you have in your marriage, do you feel they are things that can be changed, or do you feel they are things that must be accepted or adjusted to?

1 CAN BE CHANGED OR SOMETHING CAN BE DONE

2 MUST BE ACCEPTED OR ADJUSTED TO

61. Here are some techniques that couples use to avoid difficulties or to settle differences between themselves.

HOW OFTEN DO YOU....

	NEVER	ONCE IN A WHILE	FAIRLY OFTEN	VERY OFTEN
a. try to ignore difficulties by looking only at good things?.....	1	2	3	4
b. appreciate your own marriage more after seeing what other marriages are like?.....	1	2	3	4
c. yell or shout to let off steam?.....	1	2	3	4
d. remind yourself of how much better your relationship is than that of most other people like yourself?.....	1	2	3	4
e. keep out of your spouse's way for a while?.....	1	2	3	4
f. give in more than half way?.....	1	2	3	4
g. tell yourself how much better your relationship gets with time?.....	1	2	3	4
h. sit down and talk things out?.....	1	2	3	4
i. just get completely discouraged about changing things?.....	1	2	3	4
j. keep so busy you don't have time to think?.....	1	2	3	4
k. tell yourself the difficulties are not important?.....	1	2	3	4
l. try to over look your spouse's faults and pay attention only to his/her good points?.....	1	2	3	4
m. wait for time to remedy the difficulty?.....	1	2	3	4
n. just keep hurt feelings to yourself?...	1	2	3	4
o. try to find a fair compromise?.....	1	2	3	4
p. How often do you find yourself thinking over problems in your relationship during a typical week?....	1	2	3	4

62. Have you read any books or magazines in recent months about getting along in relationships?..... 1 2
63. In the past year have you gone to a doctor, counselor, or other professional person for marriage advice?..... 1 2
64. Have you asked for the advice of a friend or neighbor in the past year or so about getting along in marriage?..... 1 2
65. Have you asked the advice of a relative in the past year or so about getting along in marriage?..... 1 2

66. MARRIED INDIVIDUALS AND THOSE LIVING COMMON-LAW: think now of all the pleasures and problems that go into daily life with your spouse. When you think of these things.....
How much do you feel each of the following? (see list below and circle appropriate number for each item)

UNMARRIED INDIVIDUALS, (including SINGLE, SEPARATED, DIVORCED or WIDOWED): think about your current marital situation, the experiences that arise out of being unmarried. Adding up all the GOOD things and BAD things about being unmarried.....
To what extent do you feel each of the following? (see list below and circle appropriate number for each item)

	VERY	SOMEWHAT	ONLY A LITTLE	NOT AT ALL
a. bothered or upset.....	1	2	3	4
b. contented.....	1	2	3	4
c. tense.....	1	2	3	4
d. bored.....	1	2	3	4
e. frustrated.....	1	2	3	4
f. relaxed.....	1	2	3	4
g. unhappy.....	1	2	3	4
h. worried.....	1	2	3	4
i. neglected.....	1	2	3	4

PART VI

ALL RESPONDENTS ANSWER QUESTIONS 67 TO 74

67. How strongly do you AGREE or DISAGREE with this statement about yourself. Considering my life circumstances, I have a lot of control over what happens to me.

- 1 STRONGLY AGREE
2 SOMEWHAT AGREE
3 SOMEWHAT DISAGREE
4 STRONGLY DISAGREE

68. Below is a list of the ways you might have felt or behaved. Please indicate how often you have felt this way during THE PAST WEEK. (Circle the appropriate alternative)

- 1....rarely or none of the time (less than 1 day)
2....some or a little of the time (1-2 days)
3....occasionally or a moderate amount of time (3-4 days)
4....most or all of the time (5-7 days)

	RARELY OR NONE OF THE TIME	SOME OR A LITTLE OF THE TIME	MODERATE AMOUNT OF THE TIME	MOST OR ALL OF THE TIME
a. I was bothered by things that usually don't bother me.....	1	2	3	4
b. I did not feel like eating; my appetite was poor.....	1	2	3	4
c. I felt that I could not shake off the blues even with help from my family or friends.....	1	2	3	4
d. I felt that I was just as good as other people.....	1	2	3	4
e. I had trouble keeping my mind on what I was doing.....	1	2	3	4
f. I felt depressed.....	1	2	3	4
g. I felt that everything I did was an effort.....	1	2	3	4
h. I felt hopeful about the future.	1	2	3	4
i. I thought my life had been a failure.....	1	2	3	4
j. I felt fearful.....	1	2	3	4
k. My sleep was restless.....	1	2	3	4
l. I was happy.....	1	2	3	4
m. I talked less than usual.....	1	2	3	4
n. I felt lonely.....	1	2	3	4
o. People are unfriendly.....	1	2	3	4
p. I enjoyed life.....	1	2	3	4
q. I had crying spells.....	1	2	3	4
r. I felt sad.....	1	2	3	4
s. I felt that people dislike me.	1	2	3	4
t. I could not get "going".....	1	2	3	4

69. People use many different ways of dealing with problems they have. One of the ways people deal with problem situations is by taking some specific actions to solve problem situations.

In the past, when you DID take specific actions, HOW EFFECTIVE WERE THESE SPECIFIC ACTIONS IN SOLVING PROBLEMS YOU HAD.....

	VERY EFFECTIVE	MODERATELY EFFECTIVE	SLIGHTLY EFFECTIVE	NOT AT ALL EFFECTIVE	NEVER TOOK ACTIONS
a. in your job?.....	1	2	3	4	5
b. with finances?....	1	2	3	4	5
c. as a parent? (if ever a parent).	1	2	3	4	5
d. marital problems? (if ever married)...	1	2	3	4	5

70. How strongly do you AGREE or DISAGREE with these statements about yourself? (circle number)

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
a. There is really no way I can solve some of the problems I have.....	1	2	3	4
b. Sometimes I feel that I am being pushed around in life.....	1	2	3	4
c. I have little control over the things that happen to me.....	1	2	3	4
d. I can do just about anything I really set my mind to.....	1	2	3	4
e. I often feel helpless in dealing with the problems of life.....	1	2	3	4
f. What happens to me in the future mostly depends on me.....	1	2	3	4
g. There is little I can do to change many of the important things in my life.....	1	2	3	4

Alcohol consumption is a common part of North American life. I would like to ask you some questions about YOUR use of alcohol.

71. a. Have you ever had a drink of beer, wine, whiskey, or any other liquor?

1 NO → GO TO PART VII

2 YES

→ 71b. About how often do you take at least one drink of beer, wine, whiskey, or any other liquor?

1 ONCE A DAY

2 FIVE TO SIX TIMES A WEEK

3 THREE TO FOUR TIMES A WEEK

4 ONE TO TWO TIMES A WEEK

5 TWO TO THREE TIMES A MONTH

6 ABOUT ONCE A MONTH

7 LESS THAN ONCE A MONTH BUT AT LEAST ONCE A YEAR

The following table might help you answer the next few questions.

ONE DRINK EQUALS..... one bottle of beer (12 oz.)
one small glass of wine (4-5 oz.)
one shot of liquor or spirits (1-1 1/2 oz.)
with or without mix. (count doubles as two drinks)

72. What is the average number of drinks you usually have at one sitting (drinking occasion)?

- 1 ONE
2 TWO TO THREE
3 FOUR TO SIX
4 SEVEN TO NINE
5 TEN OR MORE

73. Beginning with yesterday how many drinks did you have on each of the last seven days (circle number of drinks consumed under column for each of last seven days)?

7 days ago	6 days ago	5 days ago	4 days ago	3 days ago	2 days ago	yesterday
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2 TO 3	2 TO 3	2 TO 3	2 TO 3	2 TO 3	2 TO 3	2 TO 3
4 TO 6	4 TO 6	4 TO 6	4 TO 6	4 TO 6	4 TO 6	4 TO 6
7 TO 9	7 TO 9	7 TO 9	7 TO 9	7 TO 9	7 TO 9	7 TO 9
10 PLUS	10 PLUS	10 PLUS	10 PLUS	10 PLUS	10 PLUS	10 PLUS

74. People drink wine, beer, whiskey, or liquor for different reasons. Here are some statements people have made about why they drink. How important would you say that each of the following is to you as a reason for drinking —very important, fairly important, or not at all important.

	VERY IMPORTANT	FAIRLY IMPORTANT	NOT AT ALL IMPORTANT
a. I drink because it helps me relax.....	1	2	3
b. I drink to be sociable.....	1	2	3
c. I like the taste.....	1	2	3
d. I drink because the people I know drink..	1	2	3
e. I drink when I want to forget everything.	1	2	3
f. I drink to celebrate special occasions...	1	2	3
g. A drink helps me to forget my worries....	1	2	3
h. A small drink improves my appetite for food.....	1	2	3
i. I accept a drink because it is the polite thing to do in certain situations.....	1	2	3
j. A drink helps cheer me up when I'm in a bad mood.....	1	2	3
k. I drink because I need it when tense and nervous.....	1	2	3

PART VII

Finally, I would like to ask you some questions about you and your family to help interpret the results.

ALL RESPONDENTS ANSWER QUESTIONS 75 TO 81

75. Are you male or female?

- 1 MALE
- 2 FEMALE

76. a. What is your current age? (circle number on left column of table below)

b. What is your partner's current age? (circle number on right column of table below).

QUES. 76a.	QUES. 76b.
<u>YOUR AGE</u>	<u>PARTNER'S AGE</u>
1 18 TO 24	1 18 TO 24
2 25 TO 29	2 25 TO 29
3 30 TO 34	3 30 TO 34
4 35 TO 39	4 35 TO 39
5 40 TO 44	5 40 TO 44
6 45 TO 49	6 45 TO 49
7 50 TO 54	7 50 TO 54
8 55 TO 59	8 55 TO 59
9 60 TO 64	9 60 TO 64
10 OVER 65	10 OVER 65

77. What is your partner's current work situation?

- 1 EMPLOYED FULL-TIME (MORE THAN 30 HOURS PER WEEK)
- 2 EMPLOYED PART-TIME (LESS THAN 30 HOURS PER WEEK)
- 3 FULL-TIME HOME MAKER
- 4 UNEMPLOYED
- 5 RETIRED
- 6 FULL-TIME STUDENT

78. What kind of paid work outside the home do/did you normally do?

OCCUPATION _____

79. What kind of paid work outside the home does/did your partner normally do?

OCCUPATION _____

80. a. What is the HIGHEST level of education you have completed?
(Please circle ONLY ONE category on left column of table below).

b. What is the HIGHEST level of education your partner has completed?
(Please circle ONLY ONE category on right column of table below).

QUES. 80a.	QUES. 80b.
<u>YOUR'S</u>	<u>PARTNER'S</u>
1	2 NO FORMAL EDUCATION
2	2 SOME ELEMENTARY (GRADE) SCHOOL
3	3 COMPLETED ELEMENTARY (GRADE) SCHOOL
4	4 SOME HIGH SCHOOL
5	5 COMPLETED HIGH SCHOOL
6	6 SOME VOCATIONAL/TECHNICAL/TRADES/NURSING SCHOOL
7	7 COMPLETED VOCATIONAL/TECHNICAL/TRADES/NURS.DIPLOMA
8	8 SOME UNIVERSITY
9	9 COMPLETED BACHELORS DEGREE
10	10 SOME POST-GRADUATE WORK
11	11 COMPLETED POSTGRADUATE DEGREE

81. a. Which of the following categories best describes YOUR PERSONAL income in 1986 from all sources (include wages, self-employment, pension, family allowance, unemployment benefits, investments, etc.) before taxes?

b. Which of the following categories best describes YOUR FAMILY income from all sources in 1986, before taxes?

QUES. 81a.	QUES. 81b.
<u>YOUR INCOME</u>	<u>FAMILY INCOME</u>
1	1 LESS THAN \$4,000
2	2 \$4,000 TO \$9,999
3	3 \$10,000 TO \$14,999
4	4 \$15,000 TO \$19,999
5	5 \$20,000 TO \$24,999
6	6 \$25,000 TO \$29,999
7	7 \$30,000 TO \$39,999
8	8 \$40,000 TO \$49,999
9	9 \$50,000 TO \$59,999
10	10 \$60,000 TO \$69,999
11	11 MORE THAN \$70,000