CHAPTER II

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With a view to seek some guidelines* from the previous researches, which could be helpful in formulating the present investigation, the results of some of the representative studies are discussed below. The review of studies has been used for the formulation of hypotheses. The present review is by no means exhaustive, it is an attempt to indicate the main trends in research and theory which have a direct or indirect bearing on the present problem.

Disorders in which anxiety or depression is the predominant feature constitute a large part of contemporary psychiatric practice. As such depression is a matter of social and public health concern. Although there is considerable agreement regarding depression as a common and significant problem for the general population and the client in psychotherapy in particular, the literature regarding possible symptoms and correlates of depression is extensive and sometimes conflicting. There are theories and research in the literature which stress or examine particular symptoms and factors related to depression which has been recognized for thousand of years.

* What is already known, what others have attempted to find out, what problems remain to be solved, what methods of attack have been promising or disappointing, the techniques and methodology followed by earlier investigators, etc.
Serious depressive disorders were among the earliest diseases described in the history of medicine. References to serious depression appear in Pharaonic medical texts such as the Eber Papyrus, the Old Testament, and the writings of the Classical Greeks. In general, most of these writers appear to have assumed that depression was endogenously or biologically caused. Greek physicians, for example, referred to depression as "melan-cholia", or a disease due to an excess of black bile. The Book of Job illustrates the profound mood alteration, loss of interest, social withdrawal, self-deprecation, self-blame, and sleep disturbance that characterize depression. A 3,900-year-old Egyptian manuscript provides a distressingly accurate picture of the sufferer's pessimism, his loss of faith in others, his inability to carry out the everyday tasks of life, and his serious consideration of suicide (Thacker, 1958).

In the historical perspective, deranged behaviours were typically considered curses from the gods by the Ancients or as a sign of moral or personal weakness. Hippocrates, the first clinician to describe depression carefully, argued that psychiatric problems originated from natural rather than from supernatural causes. He emphasized the critical role of the brain in the development of these disorders (Beck, Brady, & Quen, 1977).

Aretaeus of Cappadocia (A.D. 120-180) was the first to recognize organic (more recently called endogenous) and external (situational) depressions as two separate illnesses. He also
described both manic and depressive episodes, noting that some disorders included only recurrent episodes of depression (now called unipolar depressions), whereas others involved episodes of both depression and mania (now called bipolar depressions).

During the Dark Ages, Western civilization returned to beliefs in possession and supernatural forces as explanations for psychiatric disorders. Not until the Renaissance was there a return to enlightened empiricism, observation, and reasoned thought. Johann Weyer (1515-1588), a 16th century physician noted for his opposition to witchcraft, was one of the first to focus his studies on mental illness. He considered depression to be linked to somatic or bodily symptoms. Timothy Bright, a physician at London's St. Bartholomew's Hospital, was the first to recognize suicide as a manifestation of despair. In his Anatomy of Melancholy (1630), Robert Burton summarized the existing theories and depicted the range of depressions as extending from natural grief at death or separation to depressive disorders.

A wider recognition of specific psychiatric disorders, as well as a tendency toward humane and enlightened treatments, unfolded in the 18th and early 19th centuries. In the late 19th and early 20th centuries, European clinicians focused their attention on both descriptive diagnosis (diagnosis based on the recognition of specific signs and symptoms) and on unconscious factors.
Emil Kraepelin (1856-1926) distinguished manic-depressive insanity, an episodic nondeteriorating disorder, from dementia praecox - later called "Schizophrenia" - a more progressive deteriorating disorder. Eugen Bleuler (1857-1939), a Swiss neurologist, further differentiated the concept of manic-depressive insanity. He coined the term "affective disorders", in which he included manic-depressive insanity, psychoneurotic depressive reactions, and involutional melancholia. He was, however, unable to delineate clearly the specific subtypes of affective disorder, a problem of separation that persists even today.

In more recent times, the concept of depression has been broadened to include milder forms. Clinicians and researchers have debated whether the concept of depression refers to a single disease that varies from mild to severe along a continuum or whether it consists of a set of discrete subtypes that differ in phenomenology, pathophysiology, and ultimately etiology (Everitt, 1981; Kendell, 1968, 1976; Eysenck, 1970; Hamilton & White, 1959; & Lewis, 1928). This debate has yielded a number of different methods for subtyping depressive disorders, such as endogenous vs reactive, psychotic vs neurotic, and primary vs secondary (Nelson & Charney, 1980; Akiskal, Rosenthal, Rosenthal, Kashgarian, Khani, & Puzantian, 1979; Andreasen & Winokur, 1979a; Bhrolchain, 1979; Bhrolchain, Brown, & Harris, 1979; Akiskal, Bitar, Puzantian, Rosenthal, & Walker, 1978; Winokur, Behar, Van Valkenburg, & Lowry, 1978; Lewis, 1971; Kendell & Gourlay, 1970; McConaghy, Joffe, & Murphy, 1967; Rosenthal & Klerman, 1966; Kiloh & Garside, 1963).
In spite of considerable agreement on the phenomenology of the clinical syndrome of depression, no completely satisfactory explanation has yet been offered to account for the mechanisms underlying the wide variations in symptomatology and course. The identification of psychosocial factors that may cause depression has proven to be an arduous task. The difficulty of demonstrating causal relationships in naturalistic research has been compounded by an overreliance on cross-sectional methodology. Cross-sectional research has been successful in demonstrating differences between depressed and nondepressed individuals; that is, it has identified abnormalities in the functioning of depressed individuals that are present during depressive episodes. Many of these abnormalities, such as dysfunctional cognitions, distressed relationships, anaclitic personality types, and deficits in social behaviors, have been implicated in the etiology of depression by theorists of various orientations (e.g., Abramson, Seligman, & Teasdale, 1978; Brown & Harris, 1978; Beck, 1976; Hirschfeld, Klerman, Chodoff, Korchin, & Barrett, 1976; Lewinsohn, 1976). However, some of these problems in functioning may be symptoms, or concomitants, of depression that appear with the onset of a depressive episode and disappear with remission.

The number of competing viewpoints and nosological systems (Wing, 1976; Akiskal & McKinney, 1973, 1975; Rush, 1975; Becker, 1974; Klein, 1974; Secunda et al. 1973; Klerman, 1971; Beck, 1967) clearly mirrors the incomplete knowledge of etiological and contributory factors in the depressive disorders. Nevertheless,
as Akiskal & McKinney's (1973) "pluralistic" view of depression suggests, most explanatory models, including psychological and biological models, provide a unique perspective that can contribute to a fuller understanding of these clinical syndromes. Furthermore, although recent reviews have discussed the relationships of individual psychosocial variables with depression or related psychological disorders (e.g., Coyne, Kahn, & Gotlib, 1987; Gotlib & Colby, 1987; Sweeney, Anderson, & Bailey, 1986; Cohen & Wills, 1985; Akiskal, Hirschfeld, & Yerevanian, 1983), much less consideration has been given to how these variables might interrelate and to how their interactions might affect the development or maintenance of depression.

(A) Cognitive Vulnerability and Depression

The cognitive view of behavior assigns primary importance to the self-evident fact that people think. It assumes that the nature and characteristics of thinking and resultant conclusions determine what people feel and do and how they act and react. This view of behavior and psychopathology has a long history that bridges the disciplines of clinical psychiatry, clinical and academic psychology, and philosophy (Wason, Johnson-Laird, 1972; Broadbent, 1971; Adler, 1969; Beck, 1967; Neisser, 1967; Kelly, 1955; Craik, 1952). The increasing emphasis on the role of cognition in behavior has been termed the "cognitive revolution" (Dember, 1974). It can be noted that cognition has played an increasingly important
role in recent theories of personality and psychopathology (e.g., Meichenbaum, 1977; Mahoney, 1974; Mischel, 1973; Kelly, 1955). Depression is one area of theory and research in which cognitive factors, that is, the manner of perceiving, construing, anticipating, and evaluating events, behaviours, and their consequences have been emphasized. In this context, much of the impetus has come from the theoretical and empirical work of Aaron Beck (1967, 1974), Martin Seligman (1974, 1975), and Peter Lewinsohn (1976). Indeed, the recent empirical literature on the psychology of depression is dominated by studies addressing Beck's cognitive theory, Seligman's learned helplessness model, or Lewinsohn's theory, which attributes depressive states to a low rate of response - contingent positive reinforcement.

The cognitive approach focuses on self-castigation, exaggeration of external problems, and hopelessness as the most salient symptoms. Beck (1967, 1976) has provided the most comprehensive exposition of the cognitive view of depression. Beck proposed that dysfunctional cognitions are at the core of depressive phenomena. He has posited a "cognitive triad" of negative constructions about the self, the environment, and the future. The depressed person is seen as having a negative view of himself, of the world, and of the future. The depressed affective state is secondary to these negative cognitions.
Aaron Beck discusses what he calls the vulnerability of the depression-prone person as "attributable to the constellation of enduring negative attitudes about himself, about the world, and about his future. Even though these attitudes (or concepts) may not be prominent or even discernible at a given time, they persist in a latent state like an explosive charge ready to be detonated by an appropriate set of conditions. Once activated, these concepts dominate the person's thinking and lead to the typical depressive symptomatology" (Beck, 1967). Thus, cognitive distortions are seen to develop from early life experiences and to be triggered by present environmental conditions or events, thus leading the person to view the self, the world, and the future in a negative way. Beck believes that the activation of these maladaptive thought patterns leads to the affective, motivational, and physical symptoms of depression.

In Beck's theory, depressogenic assumptions, or irrational beliefs, are schema that an individual uses to interpret his or her ongoing experience and that may produce clinical depression when they are activated by life events. For example, a person who believes "unless I am loved I am worthless" may become depressed if his or her spouse leaves. According to Beck, Rush, Shaw, & Emery (1979), the severity of the depressive episode is related to the number of irrational beliefs endorsed.
This model is in keeping with the work of Ellis (1962), which proposes that adherence to certain irrational beliefs is a primary cause of emotional disturbance.

Other, more behaviourally-oriented theorists have also stressed the importance of cognition in the understanding and treatment of depression. Seligman has focused on the perception of control of reinforcers in his learned helplessness model of depression (Seligman, Klein, & Miller, 1976), and Lazarus (1974) has identified lack of hope in receiving future rewards as a central feature in depression. Seligman's hypothesis is that reactive depression in humans is essentially a state of learned helplessness, characterized most notably by the perception of non-control. According to the reformulated learned-helplessness model (Abramson, Seligman, & Teasdale, 1978), depression can result from attributing the occurrence of negative or aversive events to internal, stable, and global causal factors. Although certain studies designed to test these specific predictions have provided support for this theory, other research has led to conflicting results (Coyne & Gotlib, 1983: Critical literature review). Weiner (1974, 1979) and Abramson, Seligman, & Teasdale (1978) in their reformulated learned helplessness model of depression, have applied the constructs of attribution theory in a manner consistent with Beck's observations. They have predicted that depressed persons, compared with non-depressed persons, are more likely to view personal negative events as uncontrollable and caused by personal qualities
that are stable and global in their effects. The reformulated learned helplessness model of depression states that depression results when an individual makes certain attributions about uncontrollable life events. Clinically depressed patients are hypothesized to make internal, stable, and global attributions for negative events. An example is the depressed student who attributes his or her failing grade on an examination to stupidity. This student attributes the cause of the failure to things about him or herself (internal) that are expected to persist over time (stable) and to affect other situations in his or her life (global). In an extension of the model, Seligman, Abramson, Semmel, & von Baeyer (1979) predicted that depressed subjects would make external, unstable, and specific attributions for the causes of positive events. For example, the depressed student who receives an A on an examination would attribute the good grade to external factors that are not expected to persist over time or to apply to other situations (e.g., "I did well because it was an easy exam").

Several recent studies have examined attributional patterns in depressed and non-depressed college students. A common finding is that depressed students attribute failure on experimental tasks to internal causes, whereas nondepressed students make external attributions for failure (Kuiper, 1978; Rizley, 1978; Klein, Fencil-Morse, & Seligman, 1976). In addition, Rizley (1978) reported that depressed students viewed external factors as causes for success more often
than did nondepressed students. Seligman, Abramson, Semmel, & von Baeyer (1979) expanded the examination of student's attributional styles to include globality and stability dimensions as well as locus of causality. They found that depressed students attributed bad outcomes in hypothetical situations to relatively internal, stable, and global causes, when compared to nondepressed students.

In summary, it can be stated that both the reformulated learned helplessness model (Abramson, Seligman, & Teasdale, 1978) and the cognitive theory of depression (Beck, 1967, 1976) hypothesize that specific maladaptive thinking patterns play important roles in the onset or in the maintenance of clinical depression. Each theory hypothesizes that certain maladaptive thinking patterns are latent in depression—prone individuals during asymptomatic periods; these patterns are activated by stressful events, and the result is clinical depression.

Cognitive theory postulates that stresses trigger the activation of specific schemata or dysfunctional attitudes in those individuals predisposed to depression (Rush & Beck, 1978). Once activated, these schemata, which are derived from early experiences, lead individuals to view themselves, their world, and their future in an unrealistically negative manner (the negative cognitive triad). These negative views or automatic thoughts are accompanied by certain systematic logical errors (e.g., personalization, overgeneralization). Thus, dysfunctional
attitudes explain vulnerability for developing depression (Rush & Beck, 1978). On the other hand, negative automatic thoughts would be a part of the clinical state of depression but should not be present in the remitted or asymptomatic state.

Empirical support for the cognitive approach has been accumulating. Some studies have demonstrated a positive relationship between cognitive distortions and depressive symptoms (Nelson, 1977; Hammond & Krantz, 1976; Weintraub, Segal, & Beck, 1974). Although these studies do not address the question of causality, they provide evidence that cognitive distortions are a primary feature of depression. Few more studies (Rush, Beck, Kovacs, & Hollon, 1977; Teasdale & Bancroft, 1977; Ludwig, 1975) provide strong support for the importance of cognitive factors in depression. More recently (Stake, Warren, & Roger's; Personal communication) found strong support for the relationship between cognitive distortions and depressive symptoms. Thus, descriptive, correlative, experimental and clinical treatment studies have supported the hypothesis of the centrality of specific types of cognitive distortions in depression (Hollon & Beck, 1979). More recently, Dobson & Shaw's (1986) investigation also found supportive evidence for the cognitive model of depression.

Subjects included three hospitalized samples, including psychiatric depressed (n = 35; 26 female, 9 male), psychiatric nondepressed (n = 16; 12 female, 4 male), and nonpsychiatric patients (n = 17; 6 female, 11 male). Subjects were accepted

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into the study only if they met a number of inclusion criteria and did not evidence any of a number of exclusion criteria. The inclusion criteria included age between 18 and 65, and minimum eighth-grade education or sufficient reading ability to complete the cognitive assessment measures unassisted; Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) for Probable or Definite Major Depressive Disorder. The exclusion criteria consisted of:

1. Research Diagnostic Criteria (RDC; Spitzer et al., 1978) current diagnosis of bipolar disorder, alcoholism, or drug use disorder.

2. RDC lifetime diagnosis of schizotypal features (four or more) or antisocial personality.

3. Organic brain syndrome or mental retardation.

4. Prior diagnosis of schizophrenia.

Five cognitive assessment measures, namely, the Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980); the Dysfunctional Attitude Scale (DAS; Weissman, 1978; Weissman & Beck, 1978); the Interpretation Inventory (II; Stake, Warren, & Rogers, 1979); the Cognitive Response Test (CRT; Watkins & Rush, 1983); and the Differential Anxiety and Depression Inventory (DADI; Dobson, 1980; Shaw & Dobson, 1981) were employed. The results strongly supported the existence of a correlated set of cognitions specific to depression.
The most widely used measure of cognitive vulnerability to depression is the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978). Research using the DAS with university students has demonstrated that mildly depressed subjects endorse significantly more dysfunctional attitudes than do non-depressed subjects (Gotlib, 1984; Dobson & Breiter, 1983; Weissman & Beck, 1978). Similar studies have reported that depressed psychiatric patients exhibit higher scores on the DAS than do normal controls, although they do not differ significantly from non-depressed psychiatric patients (Zimmerman, Coryell, Corenthal, & Wilson, 1986). The results of validation studies suggest that the schemata measured by the DAS are more stable than are self-rated symptoms of depression across both 6-week (Oliver & Baumgart, 1985) and 2-month (Weissman, 1980) time lags. Finally, the interaction of dysfunctional attitudes with negative life events has also been investigated (Olinger, Kuiper, & Shaw, 1987; Wise & Barnes, 1986), and the results of this research suggest that the depressogenic effect of negative events is more potent among cognitively vulnerable (i.e., high-DAS) subjects than among those subjects who endorse a low number of dysfunctional attitudes.

Thus, research has generally supported the hypotheses of Beck's cognitive model of depression concerning the relationship between schemata and current depression. The model also predicts, at least implicitly, that dysfunctional attitudes are predictive of future depression, particularly through their interaction with stressful life events, that they are relatively stable, and that they are elevated in depressive probands who are asymptomatic.
Dobson & Breiter (1983) made an attempt to determine psychometric properties of three cognitive assessment scales. The subjects were 234 male and 222 female first-year undergraduate students at the University of Western Ontario participating for credit in an introductory psychology course. All of the subjects completed all of the measures, in random order, during a single testing period. A comparison of the Automatic Thought Questionnaire (ATQ), the Dysfunctional Attitude Scale (DAS), and the Interpretation Inventory (Int I) in terms of their internal reliability and concurrent validity showed that the ATQ was a more satisfactory instrument. The question of whether cognitive aspects of depression constitute only one of several components of depression (cf. Coyne, 1982) or are truly casual (cf. Beck, 1967) can only be approached from a research perspective once researchers can reliably and validly conduct cognitive assessment.

Barnett & Gotlib (1988) on the basis of critical review of the literature concluded: "It appears from research that a main effect for the DAS in predicting future depression is not a robust finding. Additional research may be required to clarify the role of dysfunctional attitudes in mediating the effects of stress on depression". (p. 106). "Overall, then, there is little empirical support for the contentions
of the cognitive theorists that dysfunctional attitudes represent a stable vulnerability to depression". (p. 107).

Although dysfunctional attitudes are identified by Beck et al. (1979) as being the primary link in the causal chain that leads to the onset of a depressive episode, the stability and predictive power of diverse cognitions postulated to be associated with depression have been investigated in a number of studies that have controlled for the effects of concurrent symptoms. These cognitions include thoughts of hopelessness (Rholes, Riskind, & Neville, 1985; Blackburn & Bishop, 1983; Hamilton & Abramson, 1983; Wilkinson & Blackburn, 1981), thoughts of loss (Rholes et al. 1985), negative self-schemata (Dobson & Shaw, 1987; Hammen, Miklowitz, & Dyck, 1986; Hammen, Marks, deMayo, & Mayol, 1985), negative construct accessibility (Gotlib & Cane, 1987), the cognitive triad (i.e., negative view of self, future, and world; Blackburn & Bishop, 1983), perfectionistic attitudes (Hewitt & Dyck, 1986), irrational beliefs (Lewinsohn et al. 1981), cognitive distortions (Dobson & Shaw, 1986; Miller & Norman, 1986; Blackburn & Smyth, 1985; Simons et al. 1984), and negative automatic thoughts (Dobson & Shaw, 1986; Hollon et al. 1986; Blackburn & Smyth, 1985; Eaves & Rush, 1984; Simons et al. 1984).
With two exceptions (Dobson & Shaw, 1986; Rholes et al. 1985), the results of this research support the hypothesis that abnormal cognitive activity is a concomitant or symptom of depression. Dobson & Shaw (1986) obtained data indicating that negative automatic thoughts were more frequent among remitted depressives than among normal controls. This finding is somewhat contrary to recent formulations of cognitive theory in which negative automatic thoughts are seen as relatively unstable, symptomatic cognitions (cf. Beck & Epstein, 1982). Furthermore, it should also be noted that this finding was not replicated in the studies cited earlier that also examined negative automatic thoughts. In the second study, Rholes et al. found that hopelessness cognitions significantly predicted subsequent depression among initially nondepressed subjects, although no information was given regarding subjects' level of depression at T2. Future research should be directed to an exploration of the predictive relationship between hopelessness cognitions and more serious depression.
(B) Depression in Relation to Stressful Life Events

The idea that stress can precipitate illness is part of our common folk wisdom. The relationships between social, psychological, and other environmental factors and illness have been of research interest to medical and social scientists for a long time. This interest has accelerated in recent decades as investigators from a wide range of disciplines have attempted to identify the processes by which stressors act as precursors to physical and/or mental disorders. Although there have been almost as many definitions of stress as there have been researchers, there is a common theme in them. Stress is generally conceptualized as the altered state of an organism produced by agents in the psychological, social, cultural, and/or physical environments. It is assumed that this altered state, when unmitigated, produces deleterious effects on the physical and/or mental well-being of affected individuals.

Among medical scientists, the early work of Cannon (1928) was very influential. His pioneering efforts to detail the relationships between emotional states such as fear, anger, pain, and anxiety and changes in body function provided a model for early scientific inquiry. In psychiatry, Adolf Meyer (1951) emphasized the role of life events in the development of physical and mental disorders, and Selye's work (1950, 1956) has made very important theoretical contributions to our understanding of the physiological adaptations to stress.
Hinkle & Wolff (1957); Hinkle (1974); and Wolff & Wolf (1950) working in the area of psychosomatic medicine also made early contribution as they investigated the links between stressors and illness. Recently, many researchers have attempted to establish the qualitative and quantitative relationships between particular classes of life events and illness behaviour. Stressful life events consistently have been found to be related to psychological problems in both normal individuals and identified patients.

Stressful events and ongoing strains are seen to influence depression directly, as well as indirectly, through their impact on coping responses and family support. Similarly, coping responses are seen to influence severity of depression directly, as well as indirectly, via their impact on family support (Cf. Mitchell, Cronkite, & Moos, 1983). Life events have been shown to be associated with the onset of depression. In both cross-sectional and longitudinal studies of patient and community groups, people who experience more negative life events are likely to display greater levels of depressive symptoms (Dohrenwend & Dohrenwend, 1981; Henderson, 1981; Paykel, 1979).

The research findings dealing with stress and illness are voluminous, comprehensive, and broadly published. The efforts of Henderson (1981); Dean, Lin, & Ensel (1981); Lloyd (1980); Paykel (1979); Warheit (1979); Brown & Harris (1978);
Pearlin & Schooler (1978); Ilfeld (1977); Lazarus & Cohen (1977); Brown Ni Bhrolcháin & Harris (1975); Dohrenwend & Dohrenwend (1974); Brown, Harris, & Peto (1973); Paykel, Prusoff, & Uhlenhuth (1971); Myers, Lindenthal, & Pepper et al. (1972); Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper (1969); Brown & Birley (1968); Rahe (1968); and Holmes & Rahe (1967) are particularly well known.

Over the past decade, an abundance of research has focused on the extent to which stressful life events affect depression. Life events have been shown to be associated with the onset of depression (Paykel et al. 1969; Brown & Harris, 1978).

Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper (1969) found that depressed patients reported three times as many life events as a control group in the six months before the onset of a depressive episode; in particular, there were significant increases in life events categorized as exits from the immediate social field of the subject and in events categorized as undesirable. Brown & Harris (1978) also reported a significant increase in life events in depressed women, suggesting that the social environment plays a crucial role in the etiology of depression.

Depressive disorder in a first-degree relative, early parental loss, unemployment and lack of a good marital
relationship before onset are thought to be risk factors for the development of reactive depression, and it has been suggested that living alone, low self-esteem, and personality factors may also be risk factors for depression (Roy, 1980, 1981a, b). While, Tennant, Bebbington, & Hurry (1981) have criticized the evidence for a substantial causal relation between life events and depressive disorder, Lloyd (1980) concluded that "life events play a precipitating role in the development of depressive disorder."

Ilfeld (1977) explored the relationship of current social stressors (circumstances of daily social roles that are generally considered problematic or undesirable) to depressive symptoms. Subjects were 2,299 adults aged 18-65 in the Chicago area. Over a fourth of the variance in depressive symptoms is accounted for by five social stressors. Depression is most closely related to the social stressors of marriage and parenting, and symptoms increase proportionately to the total number of stress areas. These data suggest that a focus on intervention and prevention in areas of family and marital life is desirable.

Warheit (1979) examined the relationships between life events, coping resources, and depressive symptomatology and analyzed these same variables within the context of longitudinal data that permit comparisons of depressive symptomatology before and after the occurrence of 23 loss-related life events. A probability sample (N=517) was
interviewed three years apart. Respondents with high life-event scores had significantly more depressive symptomatology than those with low scores. Those with personal, familial, and interpersonal resources had significantly less depressive symptomatology than those without such resources in both the low- and high-life-event groups. The best predictor of Time 2 depressive symptom scores was Time 1 symptom scores; losses and resources were also statistically significant factors. These findings demonstrate the complex interrelatedness of life events, coping resources, and depressive symptomatology.

Roy, Thompson, & Kennedy (1983) conducted a study to test the hypothesis that chronic schizophrenic out-patients who developed a depressive episode would have more risk factors for depressive disorder than such out-patients who were not depressed and would have experienced more life events in the six months before the onset of depression. Eighteen depressed chronic schizophrenic out-patients were matched with non-depressed schizophrenic out-patients. They found that the depressed schizophrenics had had significantly more psychiatric admissions, past depression, past treatment for depression, significantly more had attempted suicide, lived alone, had low self-esteem, had early parental loss and had had more life events in the six months before the onset of depression. Depressive disorder in schizophrenic out-patients well controlled by neuroleptics may occur in those who are at
risk for depression and experience an excess of life events.
In conclusion, this study points to the need to look more closely at the importance of predisposing and precipitating factors in the aetiology of depression in schizophrenic patients. In particular, it suggests that the chronic schizophrenic out-patient whose schizophrenic illness is well controlled by neuroleptics may be at risk for depression if he had several admissions, has been depressed and treated for depressive disorder in the past, has attempted suicide, is living alone, has low self-esteem, had early parental loss, and had recently experienced undesirable life events.

Kennedy, Thompson, Stancer, Roy, & Persad (1983) studied life events precipitating mania. A consecutive series of 20 manic patients admitted to the Affective Disorders unit, Clarke Institute of Psychiatry, Toronto, between July 1, 1979 and December 31, 1980 were studied. A study of 20 manic patients, with patient and matched control comparisons, showed a two fold increase in life events during the 4 month period before admission to hospital. Life events, independent of affective illness and having significant objective negative impact (i.e., traumatic) were significantly more common. In conclusion, this study suggests that life events may act as precipitants for manic episodes, particularly in the absence of an adequate confiding relationship in some patients with bipolar affective disorder.

Mitchell, Cronkite, & Moos (1983) conducted an investigation to study stress, coping, and depression among
married couples. Community couples (N=157) and couples in which one of the partners was clinically depressed (N=157) were studied within the framework of an expanded stress-illness paradigm that encompassed life events, ongoing strains, coping responses, family support and depression. Depressed patients were found to be at a disadvantage relative to control subjects at each point in the stress process; they experienced more stress and possessed fewer of the personal and social resources that might moderate its impact. Spouses of patients fell between their depressed partners and the control subjects in their levels of stress, coping and family support. The overall pattern of effects involved in the stress process was similar across patient and non-patient populations. Negative life events, coping, and family support were primarily directly related to depression, whereas strains exhibited some indirect effects through their relationship with lack of family support.

Billings, Cronkite, & Moos (1983) emphasized that there is a need to examine the role of a wider range of social-environmental factors in depression since there is only a moderate association between stressful life events and depression. They examined the role of stress and coping factors in depression by comparing a group of 409 men and women entering psychiatric treatment for unipolar depression with a sociodemographically matched group of 409 nondepressed men and women. In addition to reporting significantly more stressful events than controls, depressed persons also experienced more severe life strains.
associated with their own and their family members' physical illness, their family relationships, and their home and work situations. Depressed persons were less likely to use problem-solving and more likely to use emotion focused coping responses and had fewer and less supportive relationship with friends, family members, and co-workers. These group differences were consistent for both depressed women and men.

Roy-Byrne, Geraci, & Uhde (1986) examined the number, type, and effect of life events during the year before the onset of panic attacks in 44 patients with a Research Diagnostic Criteria diagnosis of panic disorder and 44 healthy control subjects matched for age, sex, and time of retrospection. The patients had significantly more life events, and these events had a more adverse impact on them. Furthermore, the types of events experienced by the patients were more typically distressing than those experienced by the control subjects. The patients reported events involving moves to other neighbourhoods and/or cities far more frequently than did the control subjects.

Although such events have been consistently linked to depression, they have played only a modest role in predicting the onset and severity of depressive symptoms (Billings & Moos, 1982; Tausig, 1982).

(C) Depression in Relation to Life Events & Cognitive Vulnerability

Although both the Beck (1972), and the Abramson, Seligman, & Teasdale (1978) models propose that cognitions interact
with life events to produce depression, only few studies (Parry & Brewin, 1988; Persons & Rao, 1985; Metalsky, Abramson, Seligman, Sammel, & Peterson, 1982) explicitly models this interaction. Persons & Rao (1985) conducted a longitudinal study of cognitions, life events, and depression in psychiatric inpatients. They argued that Beck (1972) and Abramson, Seligman, & Teasdale (1978) models of depression predict that stressful life events interact with certain types of cognitions (irrational beliefs for Beck's model, attributions for the Abramson et al. model) to produce clinical depression. Life events, irrational beliefs, attributions, and depression were measured in psychiatric inpatients when they were admitted to the hospital (N=49), when they were discharged (N=22), and seven months later (N=20). Results of a multiple regression analysis showed that severity of depression was related to irrational beliefs, attributions, the interaction of Attributions X Life Events, and the interaction of Attributions X Session. There was no relationship between depression and the interaction of Irrational Beliefs X Life Events. The Attributions X Session interaction indicates that the relationship between attributions and depression changed over the period of time studied; the relationship between irrational beliefs and depression was stable over time. Attributions and irrational beliefs changed over the period of time studied, indicating that they are not stable, unchanging aspects of personality.

In another study by Parry & Brewin (1988) three models of the relation of negative cognitive style to depression
were outlined: (1) a symptom model, where negative cognitions are a symptom of depression, (2) a vulnerability model, where a negative life-event in combination with cognitive vulnerability leads to depression and (3) an alternative aetiologies model, where depression can be precipitated either by stressful life-events or by a negative cognitive style. Differential predictions from the three models were examined in data from a general population survey of 193 mothers where a reliable case identification procedure and life-events interview were used together with measures of attributional style and self-esteem. Results were mostly consistent with the alternative aetiologies model, but also gave some support for the symptom model. In some cases, negative cognitive style may act to increase the risk of depression onset in the absence of life-event stress.

Another study "life events, vulnerability and onset of depression" (Brown, Bifulco, & Harris, 1987) examined 400 working-class women with a child at home and living in an inner-city area (Islington, North London). These subjects were selected since research had suggested that they are particularly likely to develop depressive disorders (Brown & Harris, 1978). As a whole, the findings of course underline the importance of social environment and cognitive factors in the aetiology of depression. They also offer some support for the conclusion of the earlier research in Camberwell that it is the meaning of particular events that tends to be crucial for depression and that, in so far as generalised hopelessness plays a role in the aetiology, it often stems from a highly particular set of circumstances.
(D) Anxiety and Depression

The recent increase in psychological research on depression owes its productive outcome to the widespread use of self-report measures of depression for identifying depressed students among college students. Numerous studies that used mildly depressed college students on the basis of their scores on self-report instruments of depression reported their findings as being specific to depression. In fact, two major cognitive models of depression— that of Beck (1967, 1976) and Abramson, Seligman, & Teasdale (1978) derived their empirical support largely by using the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) with college students serving as research subjects. Recent studies, however, have critically questioned the facility with which clinical researchers have relied on self-report inventories, such as the BDI, to select "mildly depressed" college students. One important issue that has emerged clearly is the difficulty in differentiating depression from other negative psychological states, such as anxiety, as measured by self-report questionnaires.

The nature of the relationship between anxiety and depression has been much debated in the context of three conceptual models: (a) anxiety and depression differ quantitatively; (b) anxiety and depression differ qualitatively; and (c) combined anxiety and depression syndromes (anxious depressions) differ both quantitatively and qualitatively from either pure anxiety or pure depression. These focus on anxiety and depression as;
variants of the same disorder differing quantitatively: unitary model (Fawcett & Kravitz, 1983; Lesses, 1982; Dealy et al., 1981; Roth et al., 1972; Kelly & Walter, 1969);

(b) distinct disorders differing qualitatively: pluralistic model (Mountjoy & Roth, 1982b; Zitrin et al., 1980; Kerr et al., 1970, 1972; Roth et al., 1972; Gurney et al., 1972; Schapira et al., 1972), and

(c) a mixture of the two syndromes, phenomenologically different from either primary anxiety or primary depression: anxious depressive position (Van Valkenburg et al., 1984; Paykel, 1971).

Mendels, Weinstein, & Cochrane (1972) discuss the difficulties in empirically separating depression and anxiety in psychiatric patients and suggest that self-report measures of anxiety and depression do not measure independent constructs but rather appear to assess general psychiatric disturbance.

Hollon & Kendall (1980) found a strong correlation between the measures of depression and anxiety, and concluded that, "it was not possible to meaningfully discriminate between self-reported depression and self-reported anxiety in the sample" (p. 391). Likewise, Blumberg & Hokanson (1983) discussed the overlap, between depression and anxiety by stating that "the confound in selecting our depressed sample
between depression scores and anxious rumination... indicates the possibility that the results may be accounted for by an anxiety variable" (p. 208). Reminiscent of Blumberg & Hokanson's (1983) observation, Strack, Blaney, Ganellen, & Coyne (1983) noted that "this of course reflects the high association between the EDI and test anxiety. The point is that although test-anxiety played no role in subject selection or assignment, the differences between groups on a measure of test anxiety were so great that it appears certain that the results would have been similar if it, rather than depression, had been the sorting variable" (p. 15).

According to Gotlib's (1984) data, there are large correlations between the EDI and a number of self-report measures of other forms of maladaptive functioning in a student population. It has been argued that these self-ratings tap "general emotionality" (Meites, Lovallo, & Pishkin, 1980, p. 430), or "anxious, unassertive, attitudinally dysfunctional" (Gotlib, 1984, p. 25) conditions rather than specific constructs of depression or anxiety among college students. Depue & Monroe (1973b) cautioned that an elevated EDI score in college students may represent a "nonspecific indicator of a variety of personal problems that result in a feeling of sadness and helplessness" (p. 13). Thus, these problems may limit our ability to claim that research findings are specific to depression if subject screening is based solely on self-report depression inventories (Coyne & Gotlib, 1983).
Tanaka-Matsumi & Kameoka (1986) examined whether popular self-report measures of depression could be distinguished from self-report measures of anxiety and social desirability response style. Subjects were 391 college students (135 males and 256 females). The scales included the Zung Self-Rating Depression Scale; the Beck Depression Inventory; the Lubin Depression Adjective Checklist; the State and Trait forms of the Spielberger Anxiety Inventory; the Taylor Manifest Anxiety Scale; Endler, Hunt, and Rosenstein's S-R Inventory of Anxiousness; the Crowne-Marlowe Social Desirability Scale; and the Edwards Social Desirability Scale. Reliability estimates indicated that all these measures were internally consistent. Pearson correlation coefficients indicated strong relationships between measures of depression and between measures of anxiety. However, pairs of anxiety and depression measures correlated almost as strongly. All depression and anxiety measures were significantly associated with the Edwards Social Desirability Scale. These findings call into question the use of a self-report measure of depression to select "depressed" subjects among college students.

The results of this study (Tanaka-Matsumi & Kameoka, 1986) provide further support for the findings of previous researchers (e.g., Gotlib, 1984; Blumberg & Hokanson, 1983; Meites, Loyalo, & Pishkin, 1980; Hollon & Kendall, 1980) that "the differentiation of depression from other forms of maladaptive functioning such as anxiety on the basis of
self-report instruments is problematical in nonclinical student samples" (p. 332).

From a measurement perspective, the finding of the strong relationships between the depression and anxiety measures calls for an empirical investigation of the nomological network (Cronbach & Meehl, 1955) of the construct of depression.

More recently, Stavrakaki & Vargo (1986) made a review of the literature concerning the relationship of anxiety and depression. The authors concluded that several issues are in need of clarification and resolution, including replication of research findings, cross-validation of discriminant function coefficients, assessments of biochemical markers as a means of separating the two groups, relationships within the subcategories of each major disorder (e.g., endogenous depression and generalised anxiety disorder), and the relationship between anxiety and depression in children. Based on the assumption that childhood and adult psychopathology are continuous, an examination of the nature of this in children might help to clarify the relationship in adults.

There is a need for further research on the measurement properties of self-report measures of depression, anxiety, and social desirability. Such an investigation should help clarify the large amount of overlap obtained among the three groups of scales used in normal and subclinical student
populations. At the present time, researches that have been reviewed call into question the discriminant validity of self-report instruments of depression when used in screening mildly depressed subjects.

(2) Depression in Relation to Hostility and Locus of Control

Ever since Abramowitz (1969) reported a relation between scores on the Rotter Internal-External Scale (I-E) and the Guilford Depression Scales (externals scoring significantly higher than internals), researchers and theorists have shown much interest in clarifying the relationship (Becker & Leslak, 1977; Fogg, Kohaut, & Gayton, 1977; Naditch, Gargan, & Michael, 1975; Calhoun, Cheney, & Dawes, 1974; Goss & Morosko, 1970). Several studies have yielded significant positive correlations between external control scores and depression scores although Fogg et al. (1977) points out that the relation appears to hold for males but not females. Reviews of this literature can be found in Lefcourt (1966, 1972) and Joe (1971). Thus, some evidence exists for Abramowitz's interpretation that depression is associated with external control. Also, the external control-depression interpretation is in line with Seligman's theory of learned helplessness (Miller & Seligman, 1975; Seligman, 1975), which postulates depression as a function of the person's inability to control reinforcement outcomes.
The significant correlations between external locus of control and depression are not consistent with the general psychoanalytic view of the depressed person as highly self-critical, accepting of responsibility for the effects of his actions, and overly sensitive to approval by others (Cameron, 1963). Likewise, Schwartz (1964) has suggested that the depressed person experiences a strong sense of power and responsibility. Some recent research also suggests that the setting of high standards for self-approval is associated with depression. Colin & Terrell (1977) found mildly depressed college students set high standards of success and had higher levels of aspiration than the non-depressed samples. And, another study on self-reinforcement (Rozensky, Rehm, Fry, & Roth, 1977) indicates that the depressed individual sets higher standards for self-reinforcement and is more self-punishing for failure.

Naditch, Gargan, & Michael (1975) studied denial, anxiety, locus of control, and the discrepancy between aspirations and achievements as components of depression. The subjects were 547 men in their second week of Army basic training at Forts Monmouth and Dix in New Jersey. Depression was negatively correlated with denial and positively correlated with anxiety, locus of control, and the discrepancy between aspirations and achievements (discontent). Locus of control was positively correlated with discontent and anxiety, and negatively correlated with denial. There were interaction effects between locus of control and discontent, between
locus of control and anxiety, and between anxiety and denial when these terms were regressed on depression. The importance of denial and anxiety, and the interaction effect of locus of control and discontent were discussed as important components of depression.

Peterson, Sushinsky, & Demask (1978) administered the Rotter's Locus of Control Scale and the MMPI to 39 inpatients at a private psychiatric hospital. The results do not show consistent differences in external locus of control scores between depressed subjects and non-depressed subjects across the varying methods of defining depression. The correlations between locus of control and the MMPI scales, and a review of the literature suggest types or degree of depression may have different dynamics and some types may be related to locus of control while other types of depression are not related to locus of control.

The studies which report a simple relation between external scores and depression have generally limited psychopathology to depression and have studied college student populations (Fogg, Kohaut, & Gayton, 1977; Prociuk, Breen, & Lassier, 1976; Calhoun, Cheney, & Dawes, 1974). There are also some inconsistencies in the findings of an external-depression relation for college students as Golin & Terrell (1977) failed to find a significant correlation between locus of control and depression in their college sample.
Further, there is the issue of the comparability of mildly depressed college students with depressed psychiatric patients. This literature and present results suggest that the relation between depression and external control is not a simple one to one relation; a great deal more information is needed to understand the relation. It might help to adopt the view that multiple causes and types of depression may exist and to assess varying definitions and populations. It may well be that both general interpretations of depression, i.e., lack of internal locus of control and presence of internal locus of control with high standards for self-approval, are correct but for different groups of depressed people. Until additional research is carried out the relation between locus of control and depression will remain unclear, just as will the status of the differing theoretical interpretations of depression.

Many formulations of psychopathology maintain that underlying hostility is a central component of depression. Psychodynamic theorists (Rubinfine, 1968; Alexander, 1948) have described the role of introjected hostility in depression, while behavioural theorists (Ferster, 1972) have noted the suppression of anger and aggressive acts by depressed individuals.

Empirical investigations have confirmed the association between hostility and depression, although there has been disagreement regarding the exact nature of this association. As reviewed by Akiskal & McKinney (1975) the Abraham-Freud
model viewed depression as the turning of one's aggression inside rather than directing it at the appropriate object. This hypothesis was supported by Becker & Lesiak's study (1977) which showed that depression, measured on the Beck Depression Inventory, was correlated positively with both covert hostility and external control. Overt forms of hostility were unrelated to depression. Gershon, Cromer, & Klarman (1968) found inwardly directed hostility called "hostility-in" (p. 224) was positively correlated with depression as expected by Abraham and Freud; they also found another pattern of hostility. This pattern was marked by outwardly directed hostility called "hostility-out" (p. 225), in patients with hysterical symptoms. Patients so characterized tended to show an increase in outward hostility with deepening depression. Such findings may support Bibring's (1952) idea that underlying process in depression does not necessarily involve the aggressive impulses but the vicissitudes of ego functioning.

Most studies (Kendell, 1970; Gershon, Cromer, & Klarman, 1968; Mayo, 1967; Foulds, Caine, & Creasey, 1960) have concluded that hostility is directed inwardly by depressed individuals. However, other studies have indicated either that hostility is directed outwardly by depressed individuals (Foulds, 1965; Wessman, Ricks, & Tyl, 1960) or that both inwardly and outwardly directed hostility occur in depression (Friedman, 1970; Grinker, Miller, Sabshin, Nunn, & Nunnally, 1961).
Moore & Paolillo (1984) examined the relationships of the criterion variable, depression, to seven predictor variables, hopelessness, external locus of control, personal responsibility of external locus of control, general hostility, overt hostility, covert hostility, and length of treatment. The data were measures of depression, hopelessness, locus of control, personal responsibility of locus of control, general hostility, overt hostility, and covert hostility from 317 outpatients of a rural mental health center in southeastern Wyoming. Length of treatment and descriptive data were also collected. The descriptive data included date of birth, gender, diagnosis according to the Diagnostic Statistical Manual II of the American Psychiatric Association. The Beck Depression Inventory was used to measure the criterion variable, depression (Beck, 1967). The Hopelessness Scale was used to measure the predictor variable, hopelessness (Beck, 1973). The Rotter Internal-External Locus of Control Scale was used to measure the external locus of control and the personal responsibility of external locus of control predictor variables (Rotter, 1966). The general hostility, overt hostility, and covert hostility predictor variables were measured using the Buss-Durkee Hostility Inventory (Buss & Durkee, 1957). Over 50% of the variance of depression was explained by hopelessness, 7% of the remaining variance was explained by covert hostility and approximately 1% was explained by length of treatment. These findings support the views of depression in which hopelessness and covert hostility are regarded as important correlates of
depression. No relationship between depression and overt hostility was noted, suggesting that advocating outward expression of hostility will not alleviate depression.

Contradictory findings regarding the relationship of hostility and depression may reflect a failure to consider the dynamic relationship between hostility and depression.

(F) Gender Differences in Depression

Gender differences in depression are widely acknowledged. Individual's responses to a depression rating scale are likely to be influenced by factors additional to the presence of a depressive state. There is evidence (Phillips & Segal, 1969) to suggest that one important source of variation in this respect is the sex of the subject. Hammen & Padesky (1977) emphasised that "sex differences in depression are widely acknowledged." Certainly sex differences in depressive states have become apparent in terms of incidence (Frank, Carpenter, & Kupfer, 1988; Grantham, 1982; Penfold, 1981; Rosenfield, 1980; Byrne, Boyle, & Pritchard, 1977; Weissman & Klerman, 1977; Lehmann, 1971; Taylor & Chave, 1964; Sorensen & Strongen, 1961); presentation (Mowbray, 1972; Hamilton, 1960, 1967); and reported severity (Blumenthal, 1975).

Although the reasons are not entirely clear depression in Canada and the western world is consistently found to be more common in women than in men, with ratios centering
around 2:1 (Grantham, 1982; Penfold, 1981; Rosenfield, 1980; Weissman & Klerman, 1977). In a report on the epidemiology of depression, Lehmann (1971) asserts, "it is well known that the female-to-male ratio is about 2:1 for depressive illness in Europe and North America" (p. 24).

Both, Byrne, Boyle, & Fritchard (1977) and Phillips & Segal (1969) have argued that women differ from men in their perceptions of, and so responses to, the presence of psychiatric symptoms. Weissman & Klerman (1977) thoroughly document sex differences in primary affective disorders, and in her monograph on the epidemiology of depression, Silverman (1968) concludes: "There appear to be no exceptions to the generalization that depression is more common in females than males, whether it is the feeling of depression, neurotic depression or depressive psychosis" (p. 74). Weissman & Klerman carefully examined a variety of explanations for the preponderance of women in both clinical and nonclinical samples and concluded that the different rates are real: the higher prevalence of primary affective disorders among women is not an artifact of reporting or care-seeking behaviour. More recently, Frank, Carpenter, & Kupfer (1988) reported sex differences in a group of 230 patients with recurrent depression. Male and female patients were similar in clinical characteristics and baseline measures of severity. Some sex differences in depressive symptoms were apparent, especially as reflected by self-report instruments. The women reported
more appetite and weight increase, more somatization, and expressed anger and hostility. The men demonstrated a more rapid response to treatment.

A consideration of this issue is vital for the further understanding of the various forms of depression, their treatment, and prevention.

Among the provocative and competing explanations for the preponderance of female depression, several have elicited considerable recent interest. Historical - sociological approaches emphasize the influence of strains and limitations in the roles for women that eventuate in depression (Weissman & Klerman, 1977; Radloff, 1975; Bart, 1974; Chesler, 1972) or, indeed, certain forms of mental illness in general (Gove & Tudor, 1972). Other approaches identify psychological mechanisms that might favor the occurrence of depression in women as a result of traditional feminine socialization: anger turned inward (Freud, 1917/1957), learned helplessness (Seligman, 1974), reinforcement of depressive behaviors such as passivity and futility (Ferster, 1974), and self-deprecating and negativistic cognitions (Beck, 1967).

From a different perspective, other researchers have suggested that differences in rates of male and female depression are "artifactual" consequences of various sex role socialization experiences and stereotypes. Sex differences in depression are viewed as sex differences in the experience and expression of depression that make women more likely to identify it in themselves, seek help for it, overtly express
affective complaints, or become psychiatrically labeled and/or treated as depressed. Men may be equally depressed but do not admit depression, do not seek help for it, or fail to be labeled by professionals as depressed. Research evidence bearing on these assertions has thus far been limited, and the results are somewhat equivocal (Weissman & Klerman, 1977; Clancy & Gove, 1974; Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Phillips, 1964; Zigler & Phillips, 1960).

One theory states that the difference is artificially created by a sex-bias that overestimates the number of female depressives and causes over diagnosis on the part of the health care professionals. This theory has not been supported by the available research data (Barnes & Prosan, 1982; Leichner & Harper, 1982; Davidson & Abramowitz, 1980; Smith, 1980). A second type of theory proposes that women have a unique biological vulnerability to depression (Abramowitz, Baker, & Fleischer, 1982).

Another explanation for the sex difference argues that women are more likely to suffer from depression due to their societal and marital roles (Amenson & Lewinsohn, 1981; Gove, 1972). This last theory is supported by a large body of literature which proposes that depression is the only coping mechanism that women in our society have in response to oppressive traditional sex-role stereotyping that views competence, independence, competition, and intellectual achievement as qualities inconsistent with femininity (Maracek, 1979; Brown, 1977; Gove, 1973; Horner, 1972). Given this role
that lacks power and freedom to act independently, women learn extreme helplessness, a sign of depression (Baruch & Barnett, 1975). Other writers (Baucom & Danker-Brown, 1979; Chevron et al. 1978) suggest that depression in our society is often due to the conflict created by compliance on the part of both sexes to traditional sex-roles. Thus, in studies of depression sex can be an important moderating variable and deserves attention.

Here, it is worth mentioning that although it is not scientific to compare the results of different investigations in this specific area of research using different operations and methodology, because the differences in 'methodology' and "operationalisation" of any phenomenon may be the source of discrepancy in results, yet the studies have been compared with a view to assess the trend revealed by earlier investigators.

The research in this specific area of depression reveals several important aspects. These aspects provided the rationale for the formulation of the present study. Moreover, they provided the guidelines for incorporating possible refinements into the methodology of the present investigation.

1. There is a considerable agreement regarding depression as a common problem for the general population and the client in psychotherapy in particular.

2. The literature regarding possible symptoms and correlates of depression is extensive and sometimes conflicting. The identification of psychosocial factors that may cause depression has proven to be an arduous task. The investigation of the correlates of depression, however, has been obscured by four factors:
Firstly, there is overwhelming evidence that affective disorders represent a diagnostically heterogeneous group of disorders (Hirschfeld, Klerman, Clayton, & Keller, 1983; Klerman & Barrett, 1973). The problem is that diagnostic terms, such as neurotic depression, have a variety of definitions and therefore include different patient samples (Akiskal et al., 1979; Klerman et al., 1979). Similarly, dependency, melancholia, and other personality attributes mean different things to different clinicians. As a result, different qualities have been assessed in varying populations and described using the same terms, obviously leading to inconsistent conclusions. Psychological and sociological attributes associated with one type of depression may differ from those associated with another type.

In the present study the diagnostic heterogeneity was reduced by restricting the sample to married women (employed vs non-employed) suffering from mild depression* which may befall almost anybody (presence of depressive symptoms rather than depression as a psychiatric disorder).

Secondly, a host of other variables, such as sex and age, can affect personality features. Therefore, studies may find considerable diversity in personality if the study samples differ in sex ratios and other features.

* Community sample of married women not receiving psychiatric treatment.
Thus, in studies of depression sex can be an important moderating variable and deserves attention.

To account for this methodological issue, the present study restricted itself to married women (employed and non-employed). The reasons for selecting employed and non-employed were:

(a) since depression is consistently found to be more common in women than in men, women were selected to control the variable of sex;

(b) Shainess (1980) emphasized that the women's liberation movement has been a force promoting rapid change in feminine self-image and concepts of gender roles and possibilities. The sense of a woman's obligation in marriage to please the husband, is lessening. The sense of priority of children, and devotion to them, seems dulled. The desire to have children is weaker. The need for personal accomplishment seems greater. The choice of career over relationship with a man is growing in frequency. First the extended family, and now the nuclear family is fragmenting. Intense affectional ties to husband and children are diminishing. Women are becoming more group oriented through work in the corporate structure. Clearly, women have a changing self image..." (p. 384). There are many social forces creating change in both men and women. Above all, women's consciousness has been raised, in terms of expectations and the sense of entitlement. New life styles,
changes in the family, and above all, dual-career families have been appearing in greater numbers. Studies of dual-career couples and families, although suggesting a degree of change in the woman's role, nonetheless indicate that the changes are not yet very significant, and are reduced whenever there is stress.

The new women is trying to emerge. As a result all aspects of women's roles are currently under scrutiny. The present study emphasising the examination of correlates of depression among married women is a step in this direction.

(c) the last decade has brought forth a proliferation of research examining psychological aspects of depression. This growth in research productivity, however, has been accompanied by a change in subject samples. Prior to the 1970s, the majority of relevant research in this field used psychiatric patients in testing models and theories of depression (e.g., Friedman, 1964; Beck & Ward, 1961). Since that time, however, most of the studies in this area have used mildly depressed university students as subjects, selected typically on the basis of their scores on the Beck Depression Inventory (BDI: Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The working assumption of most of these investigations - albeit often implicit - is that mild depression in university students serves as a useful analogue to clinical depression in psychiatric patients. An article by Depue & Monroe (1978b) is representative
of the growing concern by clinical researchers over this widespread use of students in psychological studies of depression. At the heart of the unease is, of course, the question of generalizability.

As a result of these concerns, the present investigation aims to contribute to this research area by examining the correlates of depressive symptomatology in a precisely defined group of married women.


Warr & Parry (1982), however, pointed out that the effect of paid employment on women's psychological well-being has often been discussed in terms of women in 'general'. The failure to differentiate between, for example, working-class
and middle-class women, mothers and non-mothers, or married and single women is regrettable, as the pattern of findings differs between these categories. For example, although a positive association between paid employment and mental health has been clearly established for single women, studies of married women with children at home have generally failed to record such an association. Moreover, papers in this field have often used simple distinctions between non-employed and employed mothers without specifying whether full- or part-time employment is involved (Warr & Parry, 1982a). In addition, part-time employment could vary between two or three hours to 20 hours per week. The respondents who have recently changed their employment status are typically included, so that mothers who have stopped working outside the home only weeks before would be designated non-employed and vice-versa (Parry, 1987). These definitional confusions point to the need for more precise specification of the employment status variable.

Thus, the present study included in its purview a sample of employed (full-time employees) and non-employed women who had children under 16 at home, were living with their husbands, and were members of working-class families. Here it is worth mentioning that the main aim of the present study was to examine the correlates of depressive symptomatology separately among employed and non-employed married women,
which is different from comparing employed and non-employed women on psychological well being.

Thirdly, replicability of results and comparability across studies has been limited by lack of explicit criteria both for defining affective disorders and for measuring personality traits (Hirschfeld, Klerman, Clayton, & Keller, 1983). The development of rating scales for depression, notably by Hamilton (1960, 1967), Beck, Ward, Mendelson, Mock, & Erbaugh (1961), Zung (1965), and Pilowsky & Spalding (1972), has facilitated the production of a wealth of material relevant to their clinical utility (Byrne, 1975; Davies, Burrows & Poynton, 1975; Becker, 1974; Carroll, Fielding, & Blashki, 1972; Williams, Barlow, & Agras, 1972).

Reviews of the literature pertaining to depression measurement have been undertaken by Hughes, O'Hara, & Rehm (1982), Kazdin & Petti (1982); Mayer (1977); Levitt & Lubin (1975); and Becker (1974). Some of the important self-report measures are the Hamilton Depression Scale (Hamilton, 1967), Minnesota Multiphasic Inventory D Scale (Dempsey, 1964), the Beck Depression Inventory (Beck & Beamesderfer, 1974; Beck, 1972), the Zung Self-Rating Depression Scale (Zung, 1965, 1971), the Multiple Affect Adjective Check List (Zuckerman & Lubin, 1980), the Depression Adjective Check List (Lubin, 1967), the Institute for Personality and Ability Testing Depression Scale (Krug & Laughlin, 1976), the Center of Epidemiological studies Depression Scale (Radloff & Locke, 1984), and an inventory to diagnose
depression (Zimmerman, Coryell, Corenthal, & Wilson, 1986).

The Minnesota Multiphasic Personality Inventory D-Scale, the Beck Depression Inventory and the Zung Self-Rating Depression Scale are among the frequently employed self-report measures of depression. It is equally interesting to emphasize that studies have mostly employed only one of the large number of depression scales available.

The present study includes in its purview three self-report measures of depression:
1. the Beck Depression Inventory,
2. the MMPI Depression Scale, and
3. the Zung Self-Rating Depression Scale.

There are several reasons for the use of multiple self-report measures of depression in a single study. First, past research has extensively used these measures of depression; second, researchers have reported similarity as well as dissimilarity among these measures of depression; third, the different construction of these scales, and their individual characteristics of item array, cause serious difficulties in comparing one study using one scale with another using a different scale. Given some contentual differences among the scales; there may be distinctive patterns of correlation of these scales with several other factors.
Fourthly, the present study included in its purview several variables which have been of particular significance in the study of depression. The variables included are:

1. Dysfunctional attitude,
2. Negative automatic thoughts,
3. Sex-role orientation,
4. Stressful life events,
5. Locus of control,
6. Hopelessness,
7. Psychoticism, neuroticism, social desirability, extraversion, anxiety, and
8. Age, education and income.

These variables have been included keeping in view the following three important aspects:

1. Different factors, for example, locus of control, hopelessness, dysfunctional attitude, automatic thoughts, stressful life events, psychoticism, neuroticism, anxiety etc., have received empirical support in univariate studies of depression. To understand depression, the investigation must take into its purview personal factors, behavioural factors, as well as environmental factors;

2. An assessment of the relative importance of psychosocial versus demographic susceptibility factors is needed to fill gaps in current models of female depression. These gaps arise from the fact that most prior research has employed univariate analyses in which demographically constituted groups, such as
employed versus nonemployed wives or younger versus older women, have been compared on level of current depression. Such designs provide no information on whether depression correlates are primarily demographic, primarily learned trait or state factors, or some combination of these or other classes of variables. Given the overwhelming likelihood that depression in married women involves multiple, interacting, and intercorrelated precipitating and predispositional factors, the use of multivariate designs seems imperative. In the present study, multivariate technique e.g., factor analysis has been employed.

3. The three demographic variables (age, education, income) have been included since most research to date has failed to control for additional socio-structural factors which also have been found to affect psychological well-being, among them age (Roberts et al. 1981; Finlay-Jones & Burvill, 1977; Comstock & Helsing, 1976; Dupuy et al. 1970), income (Roberts et al. 1981; Blazer & Williams, 1980; Weissman & Myers, 1978; Pearlin & Johnson, 1977; Comstock & Helsing, 1976; Radloff, 1975; Harvey & Bahr, 1974; Dupuy et al. 1970), and education (Roberts et al. 1981; Weissman & Myers, 1978; Comstock & Helsing, 1976; Meile et al. 1976; Radloff, 1975; Dohrenwend & Dohrenwend, 1974; Dupuy et al. 1970).

Standardized procedures using operational and objective criteria have been used to assess these variables.
**Formulation of Hypotheses**

On the basis of the review of related literature the following hypotheses have been formulated:

1. Different measures of depression derived from different depression scales are structurally unrelated.
2. Different measures of depression will correlate differentially with dysfunctional attitudes, negative automatic thoughts, stressful life events, locus of control, hopelessness, psychoticism, neuroticism, social desirability, extraversion, anxiety, sex-role orientation and demographic variables.

These hypotheses derived their rationale from the following two important observations:

(a) Researchers have reported similarity as well as dissimilarity among different measures of depression.
(b) Contentual differences among the scales used in the present study.

3. There will be significant differences in employed and non-employed married women on different measures of psychological well-being.
4. The correlates of depression will be different for employed and non-employed married women.

These hypotheses 3 and 4 derived their rationale from few studies (Krause, 1984; Roberts, Roberts, & Stevenson, 1982; Warr & Parry, 1982) which have found association between psychological well-being and employment status for mothers with children at home.
The present study which is in line with the recent trends in this specific area of research, however, aspires to be unique because several potentially important refinements have been incorporated into the methodology.