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**Predicting Negative Partner Attitudes Toward Depressed Persons:
An Empirical Evaluation of Three Theories**

© Nili Benazon

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School of Graduate Studies and Research
In partial fulfillment of the requirements for the degree of
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in
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**This thesis is dedicated to Michael and Ophra Benazon --
my life long mentors.**

**And to Jim --
my inspiration, guiding light, and sweetest friend.**

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ABSTRACT

Interpersonal theories of depression have been proposed to explain the negativity that characterizes the relationships of depressed persons. However, past tests of these theories have been limited by their focus on brief contacts between strangers, and the operationalization of negativity on the part of others in terms of interpersonal rejection. The present study examined Coyne's (1976a) interactional model and that of Swann and his colleagues (Swann, Wenzlaff, Krull, & Pelham, 1992). Whereas Coyne postulates that depressed persons are rejected by their partners because they engage in excessive reassurance seeking, Swann et al. argue that depressed persons elicit rejection because they attempt to bring their partner's appraisal of them into congruence with their own self-view. Yet neither of these two perspectives emphasizes the characteristics of the partner that may influence their attitude toward the depressed patient. The work of Nolen-Hoeksema can be seen as a way of understanding how partners' efforts to manage the effect of the patient's depression on them may contribute to their overall negative attitude. Namely, partners who ruminate rather than distract themselves from the patient's depression may develop a more negative attitude toward them. The present study examined the utility of these three theories in predicting the negative attitudes of partners toward depressed patients. Subjects were drawn from outpatient clinics that specialized in mood disorders. Ninety patients ($n = 32$ male patients, $n = 58$ female patients) and their partners participated in the study and were administered the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1995) to assess for major depressive disorder and dysthymic disorder. Gender differences were explored for both patient and partner variables, but few differences were found. Each model was tested in a conventional manner against the null hypothesis of no relations between the predictors specified by these theories and two measures of partner attitudes: Support and tolerance, and expressed emotion. Next, in a series of exploratory analyses, the models were subjected to a more stringent test by examining whether the effects of these theoretical variables persisted after partner marital adjustment was taken into account. Consistent with Coyne's interactional model, patient and partner mood were correlated, and patient reassurance seeking and partner depressed mood contributed to negative partner attitudes. Contradicting Swann et al.'s theory of self-verification, patient-partner discrepancy in evaluation of the patient did not predict a negative partner attitude. Partial support was found for a formulation based on Nolen-Hoeksema's theory of coping in that ruminative, but not distractive coping was related to negative attitudes toward patients. Overall, each model obtained some support, but the strength of that support depended on the dependent variable examined, and support for the models decreased after controlling for marital adjustment. The consistently strong relation between partner marital adjustment and partner attitudes toward the depressed patient underscores the importance of taking overall marital adjustment into account in efforts to explain the interpersonal dynamics associated with depression among married persons. Results are discussed in terms of the difficulties moving from theories grounded in the study of fleeting contacts between strangers to interpersonal processes occurring in enduring close relationships.

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Overview

Why do depressed people elicit negative responses from their partners? The answer to this question is particularly important because a negative attitude on the part of partners has been shown to highly predict patient outcomes (Hooley, Orley, & Teasdale, 1986). Coyne (1976a) and Swann and his colleagues (Swann, et al. 1992) have each proposed theories about interpersonal processes that characterize depressed persons' relationships with others. However, these theories have been tested on distressed college students in the context of brief laboratory contacts, as opposed to clinically depressed persons engaged in enduring relationships. The two theories differ in how they explain the role of the depressed person in eliciting a negative response from others. Coyne asserts that depressed people engage in excessive reassurance seeking to test the security of their relationships. This behaviour poses a burden to the nondepressed partner, evokes negative affect, and culminates in rejection. In contrast, Swann et al. assert that depressed persons seek information which confirms their negative self-concept, and leads to their rejection. Neither of these theories gives adequate attention to the contribution of the partner. The work of Susan Nolen-Hoeksema (1987) can be used to develop a theoretical explanation of how partners' efforts to manage the depression of patients can contribute to negative attitudes toward the latter. Namely, partners who ruminate rather than distract themselves from the patient's depression may develop a more negative attitude toward them.

A study was designed to test the theories of Coyne, Swann et al. and Nolen-Hoeksema in a conventional manner against the null hypothesis of no relations between the predictors specified by the theories, and two measures of partner attitude: Support/tolerance and expressed emotion. Both husband- and wife-depressed couples were included in the present study in an effort to compare how men and women differ in their attitudes toward their depressed partners. There has been some suggestion in the literature that negative affect in men is less tolerated by others than negative affect in women (Hammen & Peters, 1977; Joiner, Alfano, & Metalsky, 1992).

It may be that the negative attitudes of partners toward patients can be more simply explained as a result of the general marital distress characterized in these couples. Thus, a second set of analyses provided a more stringent test of the three theories by examining whether the predicted relations between patient and partner variables to partner attitudes persisted when a measure of partner marital adjustment was taken into account.

The thesis is divided into three broad sections. The introduction provides a detailed description of each theoretical perspective, followed by a discussion of the problems associated with the study of distressed college students. The section ends with a discussion of measurement difficulties inherent in moving from theories grounded in the study of brief contacts between strangers, to interpersonal processes occurring in enduring close relationships. In reviewing each theory, those theoretical concepts most relevant to the present research are highlighted. Next, the methods section describes a study design involving semi-structured diagnostic interviews of depressed patients and their partners, and collection of self-report data from those couples meeting criteria for

inclusion in the study. The results section presents formal tests of the theoretical hypotheses first without and then with a consideration of partner marital adjustment. In the final section, the findings are interpreted, the limitations of the study are discussed, and the implications for theory, research, and clinical practice are delineated.

INTRODUCTION

Depression and the Quality of the Marital Relationship and Marital Interactions

The link between depressive symptoms and marital adjustment has been demonstrated in community samples of married couples (e.g., Coleman & Miller, 1975; Olin & Fenell, 1989), and confirmed in clinical samples (e.g., Weissman & Paykel, 1974; Weissman, 1987). Given the relation between depressive symptoms and marital adjustment, a number of researchers have studied depression in the context of marriage. In general, the marital quality and interactions of depressed persons are emphasized as important risk factors for depression. Moreover, negative responses by partners, such as hostile criticism are associated with relapse. The link between depression and negative responses by partners will be reviewed in the following paragraphs.

Marital Quality and Marital Interactions as Risk Factors for Depression

In their seminal study, Brown and Harris (1978) showed that whether a woman had a confiding relationship with her partner was a powerful moderator of the relation between life events and depression. Women who lacked a confiding relationship with an intimate were three times more likely to become depressed in the face of a life event. Moreover, having a satisfying relationship buffered the effects of other risk factors associated with depression (e.g., having three small children under the age of 12). Subsequent findings have concurred with those reported by Brown and Harris (1978): Women reporting a "bad marriage" are consistently found to be at greater risk for depression (Campbell, Cope, & Teasdale, 1983; Costello, 1982; Roy, 1978, 1981). These

studies, conducted on both inpatients and outpatients, indicate that the life event most frequently reported by women to precede an episode of depression is marital strife (Bouras, Vanger, & Bridges, 1986; Coleman & Miller, 1975; Crowther, 1985; Dobson, 1987; Paykel et al. 1969; Weiss & Aved, 1978; Weissman & Paykel, 1974). In fact, the link between marital distress and depression is important enough for the quality of the marital relationship to be considered a meaningful gauge of clinical status (Weissman & Paykel, 1974).

Similar results were reported in one study of depressed men (Roy, 1981). It is premature, however, to conclude that men and women are equally sensitive to the effects of a bad marriage on the basis of one study. It appears that women may be more adversely affected by problems in a relationship than men. For example, in a study examining intimacy among couples with or without a depressed patient, strong relationships between depression and a lack of intimacy were found for women, but not for men (Waring & Patton, 1984). Tennant, Bebbington, and Hurry (1982) examined the association between marital intimacy and symptoms of depression, anxiety, and obsessions in a general population. They reported that equal proportions of men and women reported low intimacy, but only among women was it a risk factor for disturbance. Finally, Barnett and Nietzel (1979) showed that women's self-esteem was more highly related to the couple's rated marital adjustment than was men's self-esteem. Thus, at least for women, there appears to be a relatively strong association between problems with intimate relationships and depression. Based on current research, this association either does not hold or is substantially weaker in the case of men. Before conclusions can be drawn about how gender either strengthens or attenuates the link

between depression and marriage, additional studies of men are required.

As a result of the strong association between depression and marital quality, researchers examined the interactions of these couples in order to observe how the depression-marital distress relation is manifested. A host of interaction studies have been conducted and there appears to be a consensus among researchers. The marriages of depressed persons are characterized by poor communication, with a predominance of negative affect (e.g., Gotlib & Hooley, 1988; Heim & Snyder, 1991; Sher, Baucom, & Larus, 1990). The conversations of depressed persons with their partners are marked by greater conflict, tension, and negative expressiveness than their interactions with strangers (Hinchliffe, Hopper, & Roberts, 1978). Typically, the nondepressed partner responds with what he or she considers to be constructive criticism, but what observers identify as hostility (Hinchliffe et al. 1978; McLean, Ogsten, & Grauer, 1973).

Negativity between depressed persons and their partners has been found to be highly prevalent and predictive of relapse. Studies of familial criticism were inspired by earlier work that showed how the attitudes of close relatives -- termed "expressed emotion" -- was predictive of whether schizophrenic patients were able to be maintained in the community (Brown, Monck, Carstairs, & Wing, 1962). These findings were replicated and extended to include depressed persons (Vaughn & Leff, 1976a). The construct of expressed emotion (EE) consists of two components: Hostile criticism and overprotectiveness. One important underlying assumption in all EE research is that the attitudes expressed by a relative during an interview with a researcher or clinician is representative of that relative's behaviour when actually with the patient. Hooley (1986) investigated the interactional correlates of expressed emotion with a sample of clinically

depressed patients and their partners. She reported that partners rated as high in expressed emotion during the interview were found to be more critical during face-to-face interactions with their depressed patients than were low-EE partners. Moreover, studies of depressed patients have demonstrated that discharged psychiatric hospital patients living with relatives classified as high in levels of expressed emotion (EE) suffered significantly higher relapse rates than those living with relatives classified as low in expressed emotion (Brown, Birley, & Wing, 1972; Hooley, 1986; Hooley & Teasdale, 1989; Vaughn & Leff, 1976b; Vaughn, Snyder, Jones, Freeman, & Falloon, 1984).

Despite consistent findings that elevated levels of expressed emotion are related to a poorer outcome, it remains unclear what is meant by expressed emotion. Hooley referred to EE as an “extremely poorly named variable” (Hooley, 1990). As she and others have noted (e.g., Hooley, 1985; Jenkins & Karno, 1992), the nature and origins of EE and the means by which it influences patient outcomes remain unspecified. Moreover, only one component of expressed emotion, hostile criticism, has been shown to be associated with relapse in depression (Hooley, 1985; Leff & Vaughn, 1985). Other research supports equating high EE with negative attitudes rather than warmth or overprotectiveness. High EE is related to family members negative affective styles in dealing with patients (Strachan, Leff, Goldstein, Doane, & Burt, 1987; Miklowitz, Goldstein, Falloon, & Doane, 1984), and high EE relatives engender a more negative emotional climate, a conflict-prone structure, and more rigid patterns of interaction (Hubschmid & Zemp, 1989). Also, high EE has been found to be associated with fears and anxieties on the part of relatives, particularly when they do not attribute the patient's behaviour to illness (Greenley, 1986). For example, critical and hostile relatives tended

to attribute negative outcomes to causes that were more identified with and controllable by the patient (Brewin, MacCarthy, Duda, & Vaughn, 1991; Harrison & Dadds, 1992; Weissman, Lopez, Karno, & Jenkins, 1993). High EE is associated with less effective coping responses (e.g., avoidance and denial), whereas low EE was found to be associated with problem solving and seeking social support (Kuipers, 1983). It appears that ineffective coping in relatives has similar effects to high levels of expressed emotion (Birchwood & Smith, 1987). Given the ambiguity of just what interpersonal processes contribute to expressed emotion or determine its association to patient outcomes, it may be that global marital adjustment will predict patient outcomes equally well. Consistent with this hypothesis, Hooley and Teasdale (1989) found that patient marital distress was as effective as a more complex measure of expressed emotion in predicting relapse.

The EE literature focuses on the prediction of the subsequent relapse of depressed persons from factors that are assessed during the index episode of depression namely, expressed emotion. Other than this limited literature, interpersonal theories of depression and the research they have generated have focused on processes occurring during an acute episode of depression. This is consistent with a once dominant view of depression as a disorder occurring in relatively discrete episodes followed by wellness or euthymia. However, there have been earlier suggestions that the interpersonal difficulties of depressed persons are not confined to the acute episode (Paykel, et al. 1995; Weissman & Paykel, 1974). Moreover, an accumulation of natural history data have led to a reconceptualization of depression as a chronic recurring condition (e.g., Keller, Lavori, Lewis, & Klerman, 1983; Keller, Lavori, Rice, Coryell, & Hirschfeld, 1986; Keller, Shapiro, Lavori, & Wolfe, 1982). There is a high rate of relapse immediately after

recovery from an episode, and persons who have been depressed have a higher lifetime risk of subsequent depression. The best predictor of future depression is past depression and on average, once a depressed person has entered treatment in a mental health setting, they will spend 20% of their life depressed (Keller et al. 1986). This reconceptualization of the nature of depression has led to revised standards for the treatment of depression. There is a greater emphasis on continued maintenance treatment following a patient's recovery from an acute episode, and it is even recommended that patients who have had three or more episodes receive antidepressant medication indefinitely (Depression Guideline Panel, 1993; Greden, 1993). Thus interpersonal theories must keep up with recent changes in the conceptualization of depression, by taking into account the residual difficulties of recovered depressed persons as well as the likelihood that many depressed persons found in mental health settings will be in varying states of partial recovery.

Having argued that the interactions in couples with a depressed partner are negative, specifically in terms of negative attitudes and responses directed by the non depressed partner toward the depressed partner, I will now examine the theories that attempt to explain how this negative interaction style contributes to depression. The theories of Coyne (1976a), and Swann, Wenzlaff, et al. (1992) deal directly with the question of why depressed persons are rejected by their partners. Yet both theories attribute partner rejection to factors related to the patient and neither one of these two perspectives clarifies the psychological processes in the partner that may determine their reactions to the depressed patient. I will argue that Nolen-Hoeksema's (1987) theory of coping, though not intended to be an interpersonal theory, offers an explanation that may be useful in explicating the contribution of the partner to the interpersonal process. In the

following section, these three theories of depression will be reviewed.

Interpersonal Theories of Depression

Coyne's interactional model

Coyne (1976a) delineated an interactional theory of depression and posited that a negative response by others plays a key role in the maintenance if not the etiology of depression. The behaviour of depressed persons is both aversive and inhibiting to others. Their complaints and support seeking are depressing (see also Joiner, 1994; Joiner, et al. 1992) and make others feel responsible for their well being. At the same time, depressed persons succeed in eliciting guilt and inhibiting any direct negative response. In an effort to reduce their aversive behaviour, others may provide what seemingly is being asked of them, while at the same time leaking their impatience, hostility, and rejection (Coyne, 1976a). As a result, depressed persons feel their sense of insecurity is justified, which leads to further expression of distress. In this sense, others may respond to depressed persons in ways that unwittingly perpetuate their problems. As reflected in the title of Coyne's (1976a) paper "Toward an Interactional Description of Depression", his formulation was intended as a preliminary, and not a definitive, statement about the complex processes by which depressed people and those around them are influencing each other.

In an empirical investigation of his ideas, Coyne (1976b) had female college students engage in brief telephone conversations with three groups of women: Depressed patients, nondepressed patients, and normal controls. Coyne reported that nondepressed

subjects who interacted by telephone with depressed patients were more depressed, anxious, and hostile than those who interacted with nondepressed patients or normal controls. Using a questionnaire on which subjects indicated how willing they would be to interact with the target individual in the future, Coyne found that subjects were more rejecting of depressed patients than nondepressed patients or controls. Thus, Coyne concluded that depressed patients induced negative affect in those with whom they interacted and that they were rejected by these individuals.

Coyne's initial findings regarding the rejection of depressed persons have been replicated in a number of studies employing a similar methodology (e.g., Boswell & Murray, 1981; Hammen & Peters, 1978; Howes & Hokanson, 1979; Strack & Coyne, 1983; Winer, Bonner, Blaney, & Murray, 1981). However, two groups of researchers reported findings that do not concur with those of Coyne (Gotlib & Robinson, 1982; King & Heller, 1984). Interestingly, in both these studies the responses of others to depressed persons were also assessed through behavioural observations. The results indicated that respondents gave fewer total responses, fewer positive responses, and more negative responses when interacting with depressed people. This suggests that respondents were providing cues for rejection, even if they were reluctant to label it as such on self-report measures. These findings concur with Coyne's hypothesis that "a person is less likely to respond in an overtly hostile manner to the behavior of another person when the second person is depressed." (Coyne, 1976a, p.35).

The phenomenon of "contagious depression" has also generally been supported in the literature. A recent meta-analytic study by Joiner and Katz (1997) yielded greater support for contagious depression than an earlier meta-analysis by Segrin and Dillard

(1992) where only modest support was found. Joiner and Katz reviewed thirteen studies not included by Segrin and Dillard. Furthermore, Segrin and Dillard limited their review to negative mood induction, whereas Joiner and Katz included and emphasized studies of contagion of the depressive syndrome (e.g., symptoms of anhedonia, sleep/appetite disturbance, anergia).

Yet Coyne's interactional theory of depression is not without its problems. One problem was raised by Coyne (1976b) himself. His initial study failed to identify exactly what in the behaviour of the depressed person led to mood induction in the subjects. Coyne offered a post hoc hypothesis that it was the nonreciprocal high-disclosure of intimate problems by depressed persons that induced the negative affect in others. However, he did not pursue this question further, and those who did reported mixed findings (Jacobson & Anderson, 1982; Lynn & Bates, 1985), indicating that high-disclosure was not solely responsible for provoking negative affect and rejection in others. In recent years, Joiner and his colleagues have emphasized that reassurance seeking is responsible for provoking negative affect and rejection in others. They tested Coyne's (1976a) initial hypothesis that depressed persons engage in support seeking which leads to their rejection (Joiner, 1994; Joiner et al. 1992). Based on their research, the authors concluded that reassurance seeking is a discernible feature of the depression-related interpersonal behaviour, and that excessive reassurance seeking characterizes, at least to a degree, depressed people.

A second difficulty with Coyne's theory is that although it is often discussed in terms of its implications for enduring relationships, as critics have noted, the bulk of the research, including Coyne's original study (1976b) examines fleeting contacts between

strangers as opposed to enduring relationships (Doerfler & Chaplin, 1985). Coyne (1985) justified the study of strangers by arguing that “such studies hold the possibility of capturing the emergence of a depressive interaction pattern in the absence of participants having a confounding history of negative experiences with each other” (Coyne, 1985, p.231). Although this may be true, the almost exclusive emphasis on fleeting relationships is accompanied by its own set of drawbacks. First, some of the processes involved in strangers getting to know each other may not have direct parallels in interactions between people who are already familiar with one another. Second, what is observable in interactions between people who have a history together may not necessarily reflect the processes from which these patterns emerged. Thus, extrapolation from studies of laboratory interactions between strangers to interpersonal processes occurring in close relationships is less straightforward than it first appears.

Third, Coyne’s model has given little attention to gender differences in depression. He tested his theory on female patients and women’s reactions to these patients, such that gender differences were not explored (Coyne, 1976b). Tests of Coyne’s theory have generally used same-sex target individuals and respondents. Studies that examined dyads in which one gender was designated as target and the other as respondent (Given et al. 1993; Hammen & Peters, 1978; Stephens, Hokanson, & Welker, 1987) did not include romantic relationships.

Coyne’s theory is finding wide application in explaining the phenomenon of depression in close relationships, and as a rationale for interventions focused on marital and family relationships. However, when one considers that the many studies upon which Coyne’s model has built a reputation have been examinations of interactions

between strangers, the grounds for re-evaluating this body of literature become evident. If the findings with enduring relationships differ markedly from those obtained with strangers, a rethinking of the way these processes are measured may be in order. Further, a test of Coyne's model comparing husband-depressed to wife-depressed couples is due, if only to rule out concerns that our knowledge of wife-depressed couples may not be generalizable to husband-depressed couples and vice versa.

Having considered Coyne's interactional model, I now turn to a competing theoretical perspective on why depressed persons are rejected by their partners, a theory that emphasizes people's investment in a stable self-concept.

Swann's Self-Verification Theory

In line with the symbolic interactionists (e.g., Cooley, 1902; Mead, 1934), Swann (1983, 1987, 1990) asserted that when children interact with their social environment, they begin to anticipate how others will respond to them. They imagine how they will appear in the eyes of others, and with time, these images become internalized and culminate in a series of self-conceptions. As people mature, they accumulate evidence upon which to base their self-concept, and they become invested in keeping this sense of self, stable.

Why do people wish to keep their self-concepts stable? The basic premise of self-verification theory is that people strive to maintain a stable self-concept out of an inherent need for things to remain predictable and familiar (Swann, 1983). In the absence of a stable self-concept, Swann argued that people suffer from a lack of direction, and a sense of feeling lost. Research provides support for the notion that people prefer outcomes that are consistent with their expectations. For example, studies of judgmental processes

indicate that participants are more likely to seek evidence that confirms their hypotheses and beliefs because they find such evidence to be particularly reliable (e.g., Bruner, Goodnow, & Austin, 1956; Klayman & Ha, 1987; Snyder & Swann, 1978). An additional reason for preferring self-confirming information is that it makes people feel that they learned more about themselves than when they examine information that disconfirms their self-conceptions (Swann & Read, 1981a). Moreover, self-confirmatory information allows people to feel a sense of existential security in an ever-changing world, while also instilling a sense of confidence that they are able to predict future events and to interact effectively with their social environment. Thus, when people encounter events that confirm their self-conceptions, their sense of security is enhanced. However, when they are faced with disconfirming information, they are likely to become alarmed by the fact that they do not know themselves as well as they had initially thought.

Swann asserted that people also have pragmatic reasons for maintaining a stable sense of self. Research on social interactions has shown that an implicit agreement exists between interaction partners whereby each person can expect that the other will behave in accordance with the identities they have already negotiated with one another (e.g., Athay & Darley, 1981; Carson, 1969; Goffman, 1959; Swann, 1984). According to Swann, people are invested in maintaining a stable self-concept because it is likely to result in harmonious interactions with others. Swann, Wenzlaff, et al. (1992) proposed that people work to ensure that others do not form appraisals of them that are overly negative which may, for example, lead others to behave in a patronizing way toward them. Conversely, people do not wish to be perceived overly positively because it may lead others to place

extravagant demands on them. Thus, in contrast to self-enhancement theory, Swann is asserting that people seek consistency, not improvement, in their view of themselves when interacting with others.

Research evidence suggests that people employ a host of cognitive and behavioural strategies to protect the stability of their self-views. For example, Swann and Read (1981b) reported that people tend to focus on information that is consistent with their self-concept, and they ignore information that is inconsistent with their self-view. Furthermore, not only do people preferentially attend to self-confirmatory feedback, but they also appear to encode and recall it preferentially. In their study, Swann and Read showed that subjects who viewed themselves as likable or unlikable, listened to a series of positive and negative statements about themselves. Some subjects developed the expectation that the statements would be generally positive, whereas others developed the expectation that the statements would be generally negative. After imposing a delay, subjects were requested to recall as many of the statements as possible. The results indicated that subjects who perceived themselves to be likable, recalled more positive statements. Those who perceived themselves to be dislikable, however, recalled more negative statements.

In terms of behavioural strategies, Swann claims that people organize their environment in such a way as to provide themselves with access to self-confirmatory feedback. One strategy is the utilization of what Swann has termed "identity cues" which are signs that convey to others who a person is (i.e., one's clothing). By displaying such cues, people are assured that others have some preliminary information about them particularly with regard to how they expect to be perceived. Perhaps the most effective

strategy is to choose interaction partners who can verify their self-conceptions. In a series of studies, Swann and colleagues have referred to the notion of selective interaction and have shown that people prefer the company of those who view them similarly to how they view themselves (e.g., Swann & Pelham, 1988). For example, in a study of college roommates, Swann and Pelham (1988) reported that when students were paired with roommates who appraised them in a manner that was incongruent with their own self-view, they were more inclined to change roommates. Moreover, the tendency to choose self-verifying interaction partners over self-discrepant ones appears to manifest itself in the realm of intimate relationships as well. For example, in a study of friendship and dating relationships, Swann and his colleagues (Swann, Hixon, & De La Ronde, 1992), observed that persons who were dysphoric preferred to establish dating relationships or friendships with those who viewed them unfavourably, whereas nondysphoric persons preferred to pursue relationships with people who evaluated them positively.

Moreover, research indicates that marriages that are self-verifying to the individual are characterized by greater marital adjustment (Swann, Hixon, et al. 1992). In their study, Swann, Hixon, et al. showed that individuals who were able to self-verify in the marital relationship reported higher levels of marital adjustment, commitment, and intimacy than persons who were not in relationships where their self-views could be verified. Furthermore, this finding held regardless of whether the individual had a positive or negative self-view. In other words, higher levels of marital adjustment were associated with less discrepancy between the way people evaluated themselves, and the way in which their partners appraised them, even if both the target and the partner held a negative view of the target.

Taken together, in an impressive line of empirical work, Swann and colleagues have demonstrated that people preferentially solicit, attend to, and believe self-verifying feedback. Moreover, they are more satisfied when there is little discrepancy between the way they see themselves and the way in which others perceive them. Counterintuitively, the theory asserts no difference in self-verification needs between those with positive and negative self-concepts; That is, people with negative self-concepts also desire self-confirmation, even at the expense of receiving unpleasant feedback.

What are the implications of self-verification processes for depressed persons? In a recent application of self-verification theory to dysphoria, Swann, Wenzlaff, et al. (1992) reported that dysphoric students requested more negative feedback from their same-sex roommates and were more rejected, as compared to their nondysphoric counterparts. The implication is that by requesting self-verifying feedback, persons with negative self-concepts (e.g., dysphoric or depressed persons) place themselves at risk for maintaining and aggravating their depression as well as for rejection. Joiner (1995) recently replicated Swann, Wenzlaff, et al.'s (1992) findings in a study of dysphoric college students and their same-sex roommates. He reported that consistent with Swann's hypothesis, participants who reported an interest in their roommates' negative feedback, and who lived with a roommate who viewed them negatively were at heightened risk for increases in depressed symptoms over the course of the 3-week study.

Most recently, Giesler, Josephs, and Swann (1996) replicated the finding that depressed persons are motivated to seek unfavourable appraisals and that their tendency to acquire such evaluations may result in rejection and other adverse outcomes. Unlike previous tests of Swann and colleagues' self-verification theory, Giesler et al. conducted

semi-structured interviews in order to include clinically depressed persons. Although clinical diagnoses were conducted using the Structured Clinical Interview for DSM-III-R, it is not clear the diagnoses were valid. The authors did not report inter-rater reliability coefficients (Kappas) because they claimed the SCID has previously been found to be reliable. What the authors failed to acknowledge is that the issue is not the instrument, but the adequate use of it in the study. Furthermore, Giesler and colleagues did not study enduring relationships.

Swann, Wenzlaff, et al. (1992) argue that the evidence is compelling that people with negative self-concepts actively seek and often receive self-verifying information (i.e., negative feedback that confirms their self-concepts) in an effort to close the gap between self and other perception and maintain a stable self-concept. However, this choice is costly because people with low self-concepts are likely to find themselves with relationship partners who strengthen their already negative self-views. Swann and colleagues have typically operationalized self-verification in terms of a congruency between self-appraisal and the appraisal by others. Thus, degree of disagreement, or high discrepancy between self and other represents a lack of self-verification in a particular interpersonal relationship. Consistency between self and other is even more important than the depressed person using their involvement with others to improve their view of themselves.

Self-verification theory allows for the possibility that even if partners have a more positive view of depressed persons than depressed persons have of themselves, rejection may still occur because depressed persons will seek negative feedback in an effort to close the gap between self and other appraisal. This is a provocative view, and the

question remains if it is more plausible than the rival self-enhancement hypothesis that people, and even more so depressed people, want to feel better and having a partner who views them more positively is a means of achieving that.

None of the studies conducted by Swann or others have examined whether or not the discrepancy between self and other appraisal -- termed self-verification, actually predicts partner attitudes. Although their work suggests that dysphoric and depressed persons tend to seek self-verifying feedback, it has yet to be demonstrated that the gap between self and other perception is a reliable predictor of negative attitudes by partners. As others have noted, Swann and his colleagues invoke and argue for processes that are not always represented in the data (Hooley & Richters, 1992). For example, in their study of college students and their roommates, Swann, Wenzlaff, et al. (1992) characterized the dysphoric subjects as tending to "alienate" their roommates who, in turn, "derogated" them. Yet, the scant descriptions of the measures do not allow for such far-reaching interpretations (Hooley & Richters, 1992).

In a recent critique of Swann et al.'s interpretation of their findings, Tuson (1995), noted that the strongest evidence for a consistency effect emerged in the case of subjects possessing a positive self-view. These subjects demonstrated a clear tendency to prefer feedback or interactions with others who viewed them favourably and to avoid feedback or interactions with those who viewed them unfavourably. However, in the case of subjects possessing negative self-views, the consistency effect was much less evident. The general tendency for subjects possessing negative self-views was to indicate a liking for feedback or interactions with those who viewed them moderately favourably as well as unfavourably. Similarly, in their study of couples, Swann, Hixon, et al. (1992)

concluded that marital commitment was higher when persons with negative self-views were paired with partners who appraised them unfavourably. However, it was also found that commitment was equally elevated when persons with negative self-views were paired with a partner who appraised them moderately favourably.

Self-verification theory has yet to be tested on clinically depressed persons engaged in enduring relationships. This is critical in order to determine if a discrepancy between self and other perceptions is indeed responsible for negative partner attitudes. Furthermore, the strength of the data that have been cited in support of Swann's theory may be due to the effects obtained with persons who view themselves positively. If depression is characterized in terms of a tendency to view the self negatively, then self-verification theory may prove to be a less viable explanation for the interpersonal processes associated with depression. Finally, self-verification theory, like Coyne's interactional theory does not accord particular attention to gender differences in depression. In fact, most of the studies conducted by Swann and his colleagues were studies of same-sex roommates, with the exception of their two studies of couples that did not include dysphoric or depressed persons. Given the striking gender differences that have been reported in the depression literature (Nolen-Hoeksema, 1987), interpersonal theories that do not account for these gender differences are found wanting. In the following section, I will explain how Nolen-Hoeksema's intrapersonal theory of coping can potentially be viewed as an interpersonal explanation for depression, one that takes into account the gender differences that have been observed.

Nolen-Hoeksema's Theory of Coping with Depression

Nolen-Hoeksema's (1987) theory of coping, though not intended as an

interpersonal theory of depression, potentially offers an explanation of the contribution of the partner to the interpersonal process. She proposed that a person's coping style either attenuates or perpetuates a depressed mood. In order to include her model in a discussion of interpersonal theories of depression, the following assumptions must be made:

Depressed persons are distressing to live with, and their depression poses a coping task for partners. The question of how partners manage the depressed mood of patients is the central issue and may determine the extent to which they are negative in their attitude toward patients. Namely, partners who ruminate rather than distract from the patient's symptoms may accentuate their negative attitudes toward depressed persons.

Nolen-Hoeksema (1987, 1991a) and colleagues (Nolen-Hoeksema, Morrow, & Fredrickson, 1993) have proposed two styles of coping that either exacerbate or attenuate a depressive reaction. One response style, rumination, refers to the focusing on one's negative emotions (specifically the symptoms associated with depression) and this type of ruminative style has been linked to the tendency to have more severe episodes of depressive symptoms (Nolen-Hoeksema, 1990, 1991a). More specifically, ruminative responses to depression are behaviours and thoughts that passively focus attention on depressive symptoms and on the implications of these symptoms. Examples can include sitting alone thinking about how tired and unmotivated one feels, worrying that one's depression will interfere with work, and passively reviewing all the things wrong in one's life that might be contributing to the depression. In other words, people engaging in ruminative responses may worry about the causes and consequences of their depression, but they do not take action to change their situation, and they spend much of their time thinking about how badly they feel (Nolen-Hoeksema, 1995). According to Nolen-

Hoeksema (1987), women are more likely to engage in ruminative activity than men which explains the greater rate of depression commonly observed among women.

Ruminative responses to depression can be most clearly contrasted with distracting responses, defined as the purposeful turning of one's attention away from one's symptoms of depression onto pleasant or neutral activities (Nolen-Hoeksema, 1987). It is argued that effective distracting responses have a high probability of positive reinforcement to the person (Lewinsohn, 1974). Examples of distracting responses include engaging in an activity with friends, working on a hobby, or concentrating on work. Distractive coping is not to be confused with the avoidance of problems (Nolen-Hoeksema, 1995). Researchers have found that people who use pleasant activities to lift their moods are more likely to engage in active problem-solving once their mood has lifted than those with a more ruminative response style (Nolen-Hoeksema et al. 1993; Nolen-Hoeksema, 1995). According to Nolen-Hoeksema (1987), men are more inclined to engage in distractive coping and as a result, they are more likely to attenuate their depressed mood before it becomes severe and impairing. Evidence from both laboratory investigations (Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema & Morrow, 1991) and correlational studies (e.g., Nolen-Hoeksema & Morrow, 1991; Nolen-Hoeksema et al. 1993) have supported the idea that ruminative responses to depressed mood exacerbate and prolong depression, whereas distracting responses shorten the depressed mood. In addition, this body of research has shown that women are more likely to ruminate and men are more inclined to distract (e.g., Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema & Morrow, 1991).

Nolen-Hoeksema's theory of coping with depression becomes relevant when one

considers that partners typically try to manage or control the aversiveness of depressed persons. When partners try to exert more control than is possible, they become frustrated and are more likely to respond negatively. This view has been incorporated in psychoeducational approaches to depression. Specifically, Carol Anderson and colleagues (1986) note the need to acknowledge the family member's difficulty living with a depressed patient, and stress "the importance of not over-helping and, thus, either infantilizing the patient or 'burning out', and becoming critical, withdrawn, or hypocritical" (Anderson et al. 1986, p.188).

The preponderance of studies cited in support of each of the three models reviewed has been conducted primarily with college students. In the next section, I will review the implications of studying college students instead of depressed patients to test interpersonal theories of depression.

Limitations of Current Research on Interpersonal Processes in Depression

It has been argued that the field of psychology has relied excessively on distressed college students to test ideas about depression. In studying interpersonal processes in depression, there are two difficulties associated with the utilization of distressed college students as subjects: 1) diagnosable depression, whether found in clinical or nonclinical populations, is conceptually and empirically distinct from what is measured by self-report questionnaires, and 2) the romantic relationships of college students are typically not enduring relationships to the extent that marriage is (Coyne, 1994, Coyne & Gotlib, 1983).

Distress Versus Depression

Diagnosable depression whether found in clinical or nonclinical populations, has been said to be conceptually and empirically distinct from what is measured by self-report questionnaires (Coyne, 1994; Tennen, Affleck, & Hall, 1995; for an alternative view see Weary, Edwards, & Jacobson, 1995; Vredenburg, Flett, & Krames, 1993). Typically, researchers employ the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) as a measure of depressive symptomatology. The utilization of the BDI for this purpose has been the object of considerable criticism. First, although the BDI has been frequently used to study depression in college students, it was not designed for this purpose, and the conventional cut points that are employed have never been validated for use in a student population (Beck, Steer, & Garbin, 1988). Second, the inventory does not adequately assess the lack of mood reactivity or distinct quality of mood by which many depressed patients meet criteria for major depressive disorders. Rather, the BDI is sensitive to an emotional reaction to a minor event. Third, the temporal stability of high scores has proven to be inadequate. Thus, scores obtained on the BDI may not reflect enduring mood disturbance or depression at all (Coyne, 1994). The implications of this are important when it comes to evaluating the appropriateness of accepting studies of mild distress as a substitute for research with clinically depressed persons.

How do distressed college students differ from clinically depressed persons?

College students are a select group, and they differ from persons at risk for depression in the community in a number of key ways: They tend to be intelligent and highly verbal; they are more likely to come from advantaged socioeconomic backgrounds and face

better prospects for the future. Furthermore, students are younger than the age of the first episode of depression in many depressed persons. Other conditions proven to be vulnerability factors in depression -- such as having young children at home, or a nonconfiding relationship with a partner -- are likely to be absent in a student population (cf. Coyne, 1994). Moreover, despite the robustness of the 2:1 gender difference in clinical depression, gender differences in BDI scores are not always found among college students (Funabiki, Bologna, Pepping, & Fitzgerald, 1980; Hammen & Padesky, 1977; Oliver & Burkham, 1979). The failure to replicate such a robust relationship between depression and gender is a serious problem, and it casts doubt on the use of self-reported distress in college students as a basis for generalizing about depression.

Brief Contacts Versus Enduring Relationships

A typical depressed outpatient is a woman with marital problems (Weissman, 1987), and as noted in a previous section, marital difficulties are strongly associated with the course and outcome of depression. The fact that college students are not likely to be engaged in long-term relationships makes them an inappropriate population for studying how relationship processes and depression are related. Even when dating relationships among college students are studied, these relationships are not likely to be enduring. Thus, the interpersonal problems students experience in their romantic relationships may sometimes precipitate depression, but breakups typically lack the contextual factors which give marital dissolution its high threat value. These include issues of custody, access to children and financial loss (e.g., costs associated with legal proceedings). In other words, it is seldom as devastating for a college student to break up with her boyfriend as it is for a woman to divorce from her husband. College students who

separate from their partners, remain in a large pool of eligible singles, and activities within the university environment are set up to encourage students to meet each other. On the contrary, divorced persons are more likely to find themselves cut off from social opportunities oriented to couples and two-parent families.

It appears, thus, that there are important limitations associated with the study of distressed college students when examining interpersonal processes in depression. Given that depression and distress represent different phenomena and that college student relationships are more likely to be fleeting than enduring, studies of college students are unlikely to be conclusive in testing the predictive utility of interpersonal theories of depression.

Lack of Relevant Measures

An additional problem posed by using brief contacts between strangers to test interpersonal processes in depression is that the measures employed may not lend themselves to generalizations about enduring relationships. These problems are illustrated in the assessments that have been employed in standard laboratory studies where researchers have examined the tendency of persons who have not previously met a depressed person to reject the opportunity for future interaction based on a brief encounter. Thus Coyne (1976b) asked respondents about their willingness to engage in future interactions such as sitting next to a depressed person on a long bus ride, or working with a depressed person on a job. Interpersonal rejection is likely to be manifested differently in an ongoing relationship. Indeed, that the relationship has even endured to be studied suggests that rejection has not been complete. Moreover, careful examination of the actual rating scales used by researchers such as Coyne (1976) and

Strack and Coyne (1983) indicates that both depressed and nondepressed persons are rated closer to the acceptance side of the anchored rating scales than to the rejection side. It appears that depressed persons are significantly less accepted, but it would be inaccurate to say that they are outright rejected on the basis of a brief encounter. Thus, measures of a negative attitude or the lack of a positive attitude toward depressed persons (i.e., acceptance, support and tolerance) may be more relevant to the study of enduring relationships than measures of outright rejection and behavioural avoidance. An additional problem in studying the interpersonal processes identified by Coyne is that some of the identified processes (e.g., reassurance seeking) may be obscured as withdrawal and avoidance become more salient features in the context of an enduring relationship.

Similar problems arise in testing Swann, Wenzlaff, et al.'s hypotheses that a discrepancy between self and other perception will predict negative partner attitudes. The utilization of difference scores has a checkered history, one that Swann and colleagues avoid commenting on. It is difficult to circumvent this problem given that self-verification theory is so strongly identified with such a discrepancy. Furthermore, given that self-verification theory has been tested primarily in fleeting relationships, it remains unknown what the behavioural correlates of a high or low discrepancy between self and other appraisal would be like in an enduring relationship. In other words, it is unclear what this means in terms of partner attitudes toward depressed patients.

Finally, in testing the interpersonal implications of Nolen-Hoeksema's theory of coping, an examination of how partners cope with the depressive symptoms displayed by patients, as opposed to their own negative affect, becomes relevant. However, Nolen-

Hoeksema's measure of ruminative and distractive coping was not constructed for this purpose, and it therefore must be modified accordingly.

In sum, researchers who wish to test interpersonal processes in depression using enduring relationships must confront this measurement problem by constructing entirely new measures, or adapting existing ones which have been developed in the context of brief laboratory contacts between strangers. Regardless of which option is selected, the investigator will have to face challenging issues pertaining to the validity of these newly developed scales.

Rationale and Research Strategy

This thesis was designed to test and extend some hypotheses derived from interpersonal theories of depression. Specifically, the role of the partner was of interest, and the importance of negative attitudes by partners was highlighted in the review of the literature. Partner attitudes were identified as the focus because of the emphasis given to negative responses by interpersonal theorists. However, as noted in the preceding section, much of the existing literature is focused on brief contacts between strangers, and many of the measures of rejection that have been employed are not applicable to the study of enduring relationships (e.g., Coyne, 1976b). One measure of attitude toward depressed persons, The Reaction to Dependent Others Scale (RDOS; Joiner, Alfano, & Metalsky, 1991), was modified and employed in the present study. The RDOS is a measure of support and tolerance and has previously been used in the theoretically driven laboratory interaction studies. Because the RDOS was modified in this study, it was

supplemented by a second measure, the Level of Expressed Emotion (LEE; Cole & Kazarian, 1988), taken from the study of enduring relationships. By including two measures of partner attitude, it was possible to compare the utility of a measure modified from the study of brief contacts between strangers with one designed to capture the interpersonal processes that occur in enduring relationships.

The second goal was to examine if the gender of the patient significantly predicted partner attitudes toward depressed patients. In all cases, it was thought that patient gender would be a significant predictor, and thus it was the first variable entered in all regression equations.

Hypotheses

The following hypotheses were tested on a group of clinically depressed men and women and their partners. Because there were two dependent variables, the models were first tested with partner support/tolerance as the dependent variable, and then re-tested with partner expressed emotion scale as the dependent variable. The hypotheses were the same for both dependent variables. However, it was expected that the theoretical variables specified by the three theories would prove to be better predictors of partner expressed emotion than of partner support and tolerance because the expressed emotion measure was constructed for the purpose of studying enduring relationships. Multiple regression analyses were conducted to test the hypotheses.

Hypothesis 1: As a test of Coyne's interactional model, it was hypothesized that 1) there would be a significant correlation between patient reassurance seeking and partner depression, and 2) partner attitudes should be predicted by patient reassurance seeking and partner depression. Coyne's (1976a) model suggests that excessive

reassurance seeking by patients induces negative affect in partners which culminates in negative partner attitudes. Thus, patient reassurance seeking was entered first, followed by partner mood. Previous research shows that women are more adversely affected by problems in a relationship than men (Waring & Patton, 1984), and that women are more rejecting of distressed male roommates than vice versa (Hammen & Peters, 1977; Joiner, et al. 1992). Thus, it was hypothesized that female partners of depressed patients would display a more negative attitude than male partners of depressed patients.

Hypothesis 2: It was hypothesized that if Swann, Wenzlaff, et al.'s (1992) theory of self-verification explains partner attitudes then 1) partners' appraisals of patients should be more positive than patients' appraisal of themselves, and 2) a discrepancy between patients' self-concept and partners' appraisal should predict partner attitudes. This should hold even after controlling for the negativity of the partner (partner's appraisal of the patient). Because a test of this model has not been previously conducted, no predictions were made regarding gender.

Hypothesis 3: Using Nolen-Hoeksema's theory of coping to further explicate the role of the partner, it was hypothesized that partner attitudes would be predicted by patient depression and partner use of ruminative and distractive coping. The testing of Nolen-Hoeksema's theory was built on the assumption that partners who engaged in ruminative coping in managing the depressive symptoms of patients would be more negative in their attitude toward patients. Thus, patient mood was entered first, followed by partner coping entered as a block (ruminative and distractive coping). Based on previous findings regarding sex differences in coping (Nolen-Hoeksema, 1987), it was also hypothesized that wives of depressed patients would be more likely to engage in

ruminative coping and consequently, more likely to reject their depressed partner.

The additional question remains as to whether or not the theoretically specified results will hold once partner marital adjustment was taken into account. One possibility is that negative partner attitudes can more simply be understood as an aspect of a dysfunctional marital relationship. A finding that the predicted variables contributed to negative partner attitudes even after considering partner marital adjustment would represent a powerful support for the models. Namely, that the specific processes postulated by the models remained important even when global marital adjustment was taken into account. However, if the contribution of the theoretically important variables was eliminated once marital adjustment was taken into account, it would present a more ambiguous situation. It could be that the marital maladjustment accounted for partner attitudes and no consideration of these hypothesized specific processes was needed. Alternatively, such a finding might simply indicate that marital quality as well as partner attitudes deteriorate when a person is depressed. Clearly, if the effects of the theoretical variables persisted despite having entered partner marital adjustment into the equations, it would give us even greater confidence in existing interpersonal theories of depression. If not, it would indicate a need for future theoretical and empirical work to tackle what could be a difficult problem in disentangling marital maladjustment from the factors postulated by these theorists in understanding the attitudes of partners toward depressed persons. Further, it would suggest that the burden is on theorists and researchers to demonstrate that their explanations of partner attitudes needs to have such fine-grained detail when marital adjustment would seem to be a more parsimonious explanation of partner attitudes.

Thus, in a second set of analyses, partner marital adjustment was entered into the regression equations at step 1. No hypotheses were formulated due to the exploratory nature of this question.

METHOD

Subjects

Subjects were drawn from two outpatient clinics -- The Clarke Institute of Psychiatry and the University of Michigan Medical Center -- that specialized in the treatment of mood disorders. Names of potential subjects were obtained from clinic staff. Potential subjects were screened in a telephone interview and were retained for study only if they met the following criteria:

- 1) the patient has been married to or living with a member of the opposite sex for a period of at least one year;
- 2) both members of the dyad agree to participate in the study;
- 3) both patient and partner have completed a minimum of an eighth-grade level of education;
- 4) both patient and partner are English speaking

One hundred and twenty patients and their partners agreed to participate in the study and were administered a diagnostic interview to assess for current and past history of depression. Nine patients (8%) were eliminated because they met criteria for either Bipolar I (4%) or Bipolar II Disorder (5%). Thirty-nine patients (36%) did not meet criteria for either Major Depressive or Dysthymic Disorder, but they had a past history of Major Depressive Disorder. These patients and their partners comprised the out-of-episode group (OEG). Of these, seven (18%) did not return the questionnaires leaving 32 couples in the OEG. Seventy-two patients were currently in a major depressive episode ($n = 54$), or met criteria for dysthymia ($n = 18$). Dysthymia is a mood disturbance of at least two years duration. Although involving fewer or more mild symptoms of depression, dysthymia may be associated with as much impairment and interpersonal problems as major depressive disorder. Klein and colleagues found that patients

with early onset dysthymia actually had more impairment and less social support than patients with major depressive disorder (Klein, Taylor, Dickstein, & Harding, 1988). Currently depressed patients and their partners formed the in-episode group (IEG). Nine subjects (12%) from this group did not return the questionnaires leaving 63 couples in the IEG. The analyses presented below became the basis for a decision to combine the two groups of patients into a single group, and to treat depression as a continuum. With the in- and out-of-episode patients combined into a single group, 60 were wife-depressed and 35 were husband-depressed couples.

Sample Size

In conducting a power analysis, the initial concern was to determine the number of subjects needed to detect group differences between the in- and out-of-episode groups. For a medium effect size of $d = .5$, a power of .5 was obtained with an n of 32, the size of the smaller of the two groups (Cohen & Cohen, 1969, Table 2.4.1). However, as was previously discussed in the introduction, there were substantive reasons for focusing on mood as a continuous variable in the combined in- and out-of-episode groups. Basically, the interest was how these interpersonal processes occurred over the full range of mood disturbance as a continuum from the acute episode to the full or partial recovery of patients who remained in treatment, but no longer met criteria for clinical depression. This entailed correlational and regression analyses with the full sample.

Aside from these substantive reasons there were also statistical and methodological reasons for choosing to analyze the data in terms of a combined in-and out-of-episode group. First, in a clinical sample, the range of key variables such as partner support/tolerance and expressed emotion may be more restricted than what would be found in a community sample or a comparison between a clinical sample and a normal control comparison group. Second, this was

an exploratory study with a clinical sample rather than a contrast between a clinical sample and a normal control group. Partner support/tolerance and expressed emotion may be stable interpersonal conditions that persist even as the patient experiences full or partial recovery. Furthermore, it may be that negative partner attitudes motivated patients to seek treatment. This would restrict the range of this variable in a clinical sample particularly if partner reactions to the patient did not improve immediately upon improvement in the clinical status of the patient. Simply put, a comparison between currently depressed patients and patients in full or partial recovery, but still in treatment, is a much stricter test of these theoretical models than would be a comparison between a clinical and a nonclinical comparison control sample. Finally, it should be pointed out that many of these measures have been developed and validated in studies involving mildly distressed college students and fleeting relationships. There may be floor and ceiling effects in a clinical sample. All of these factors argue for the need to maximize statistical power by treating patient mood as a continuous variable rather than relying on the binary in- and out-of-episode distinction.

With a combined sample of $N = 95$, a power of .90 is obtained for relationships of at least $r = .30$ with alpha set at .05, one tailed. This assumes that the researcher is highly confident of the directionality of any relationship that would be found. With a two-tailed test, and an effect size of at least $r = .30$ a power of .83 is obtained (Cohen & Cohen, 1969, Table 3.3.5). If it is assumed that any partial regression coefficients are obtained in equations including 5 other predictor variables, a corresponding number of degrees of freedom are lost. Nonetheless, for relationships with a partial regression coefficient of at least .30, a power of .89 would be obtained for a test in which the directionality of the relationship could be assumed, and a power of .83 for those in which the directionality of the relationships could not be assumed (Cohen &

Cohen, 1969, Tables 3.3.5 and 3.3.6).

Procedure

Patients who expressed interest in the study were contacted by the principal investigator who explained the study, and asked that the patient discuss the possibility of participation with their partner. If both persons agreed to be in the study, each member of the dyad was interviewed separately using the Depression Module of the Structured Clinical Interview for DSM-IV (SCID; First et al. 1995). All interviews were conducted by telephone at a prearranged interview time. Participants' verbal consent to the interview was obtained before the audiotape was turned on to record the interview. Partners were also screened for depression in order to identify the prevalence rates of clinical depression in the partners of depressed patients. In 7 of the 95 couples (7%), both partners were depressed¹. It was arbitrarily decided that the person in treatment at the recruitment setting would be designated the "patient". If patients were either currently depressed, or had a recent history of depression, the couple was mailed a package of self-report questionnaires to complete at home. Questionnaire packages included two packets of questionnaires (one for patients and one for partners), instructions for completing the questionnaires, consent forms, and a stamped self-addressed return envelope. Participants were asked to complete the questionnaires independently and to return them within a period of one month. The questionnaire packages for patients included a demographic information sheet, the Multiple Affect Adjective Check List-Revised (MAACL-R; Zuckerman & Lubin, 1985), the Reassurance Seeking subscale of the Depressive Interpersonal Relationships Inventory (DIRI; Metalsky et al. 1991), the Succorance subscale of the Personality Research Form (PRF-SU; Jackson & Guthrie, 1967), the Self-Attribute Questionnaire (SAQ; Pelham & Swann, 1989), and the Dyadic Adjustment Scale (DAS; Spanier, 1976). Questionnaire packages for partners

included a demographic information sheet, the Multiple Affect Adjective Check List-Revised (MAACL-R; Zuckerman & Lubin, 1985), the Level of Expressed Emotion (LEE; Cole & Kazarian, 1988), the Reaction to Dependent Others Scale (RDOS; Joiner, et al. 1991), the Rumination and Distraction subscales of the Response Styles Questionnaire (RSQ; Nolen-Hoeksema, 1991b), the Dyadic Adjustment Scale (DAS; Spanier, 1976), and the Principle for Partner Appraisal scale (PPA; Pelham & Swann, 1989). An average of 45 minutes was required to complete the diagnostic interview and 35 minutes to complete the questionnaire packages. Participants were assured that they would receive a summary of the findings once the study was completed.

Measures

Independent sources of data were collected from each member of the couple in order to circumvent potential response biases inherent in studies with single informants. The semistructured interview and self-report measures used in the present study assessed both intrapersonal symptomatology and interpersonal difficulties. Copies of all measures are presented in Appendix.

The Structured Clinical Interview for DSM-IV. (SCID for DSM-IV; First, et al.1995). The SCID is a semi-structured interview for assessing major Axis I DSM-IV diagnoses. Because of its modular construction, the SCID can be adapted for use in studies in which a single diagnosis is of interest. Past studies have suggested that the combination of semi-structured interview questions with the possibility of probes and the use of trained clinical interviewers can ensure the reliability of the diagnoses that are obtained. For instance, in one study, the inter-rater reliability was examined using audiotaped interviews. Inter-rater agreement of 0.93 and 0.88 was obtained for major depression and dysthymia, respectively (Skre, Onstad, Torgersen, &

Kringlen, 1991). In a more recent multisite test of reliability, most of the major categories, κ s of 0.61 for current and 0.68 for lifetime diagnoses for the combined samples were reported (Williams et al. 1992).

Yet, reliability is highly dependent on the base rate of the disorder in the population that is being studied as well as on the training and skills of the interviewer. Base rate problems were not likely to be problematic because depression is highly prevalent in the outpatient settings where the subjects were recruited. The interviewer was the principal investigator who had been trained to use semi-structured interviews to assess for depression in two previous studies. Concurrent validity of the investigator's SCID based diagnoses was established in comparison with diagnoses provided by the referring psychiatrists. The coefficient κ s ranged from 0.79 to 0.90 between the SCID based diagnoses from the investigator and the diagnoses provided by particular psychiatrists, with an overall κ of 0.83.

Patients and partners were administered the Mood Disorders module of the SCID and were assessed for current and past history of depression. Time for completion is about 45 minutes.

The Multiple Affect Adjective Check List-Revised (MAACL-R; Zuckerman & Lubin, 1985). The MAACL-R consists of 132 affective adjectives and was developed to provide a brief measure of self-reported mood. It is norm-referenced and has separate state "feel today" and trait "generally feel" instructions. The MAACL-R is composed of five subscales: Anxiety, Depression, Hostility, Positive Affect, and Sensation Seeking. Participants were asked to rapidly examine the words which describe different kinds of moods and feelings and mark an "X" in the boxes beside the words which describe how they generally feel. Higher scores correspond to greater levels of depression, positive affect and hostility. MAACL-R scores are typically

expressed as T scores with a score of 80 considered to be within the clinical range, and a score of 50 considered to be within the normal range. The subscales of the MAACL-R trait form have been found to have satisfactory levels of internal consistency (alpha coefficients of .74 to .95). Test-retest reliability measured over intervals ranging from two to eight weeks are modest (.10 to .84). The MAACL-R subscales have good discriminant (Zuckerman & Lubin, 1985) and convergent validity, particularly in a patient population (Zuckerman et al. 1986). In the case of patients, the coefficient alphas for the Depression, Positive Affect, and Hostility subscales with this sample were .91, .92, and .82 respectively. In the case of partner, the coefficient alphas for the Depression, Positive Affect, and Hostility subscales with this sample were .93, .94, and .84 respectively.

The trait form of the Depression, Positive Affect, and Hostility subscales were used in this study to examine this dimension in both patients and partners. The purpose of including this measure was twofold: Scores on the Depression, Positive Affect, and Hostility subscales would serve as a validation of the diagnoses made by structured interview. Valid diagnoses should be associated with higher scores on depression and lower scores on positive affect. Depression is not only associated with high negative affect, but it is also associated with low positive affect (Watson & Clark, 1988). Consistent with past emphasis on depressed mood in the partners of depressed people (Coyne, et al. 1987), the depression scale of the MAACL-R provided a measure of partner distress. The Depression, Positive Affect, and Hostility subscales were used to supplement clinical diagnoses, and the Depression subscale provided an index of partner distress that would be used as a predictor variable for one of the hypotheses being tested (hypothesis 1). A measure of partner distress was considered appropriate because it is not assumed that depressed persons induce a clinical disorder in those with whom they live, only

depressed mood. Time for completion is about 5 minutes.

The Dyadic Adjustment Scale (DAS; Spanier, 1976). The DAS is the most frequently used self-report instrument of adjustment in relationships (Spanier, 1988). The scale contains 32 items and is multidimensional in that it includes four subscales (dyadic adjustment, dyadic cohesion, dyadic consensus, and affectional expression). A cut-off score of 100 has been established for the DAS, scores below this figure indicate marital distress. The psychometric properties of the DAS have been investigated in both clinical (e.g., Crane, Allgood, Larson, & Griffin, 1990; Kazak, Jarmas, & Snitzer, 1988) and nonclinical samples (e.g., Sabatelli, 1988; Sharpley & Cross, 1982). Internal consistency scores in the range of .96 have been reported (Spanier, 1976). The validity of the DAS has been supported in a number of studies and the measure has been found to distinguish reliably between distressed and nondistressed samples (e.g., Carey, Spector, Lantinga, & Krauss, 1993; Crane et al. 1990; Spanier, 1976). The DAS has good construct validity and is correlated with the Locke-Wallace Marital Adjustment Scale ($r = .86$). The coefficient alpha for the DAS in this study was .94. The DAS was administered to patients and partners, and time for completion is about 5 minutes.

The Depressive Interpersonal Relationships Inventory--Reassurance-Seeking Subscale. (DIRI; Metalsky et al. 1991). The DIRI is a self-report measure of reassurance seeking, defined as a tendency to excessively seek reassurance from others as to whether they “truly” care. The items were modified in this study to refer specifically to the respondent’s tendency to seek reassurance from a partner (e.g., “Do you find yourself often asking your partner how she/he truly feels about you?”). Thus, the scale was rendered specific to reassurance seeking with a partner and moved away from a more general trait. The reassurance seeking scale includes 4 items, each rated on a 7-point scale (items range from 1 to 7), and is averaged across items.

Thus, scale scores can range from 1 to 7 with higher scores corresponding to increasing reassurance seeking. Scores on the total scale range from 1 to 28. The average score obtained with dysphoric college students is 2.5 per item, for a total of 10 on the entire scale (Joiner et al. 1992). Joiner et al. (1992) reported a coefficient alpha of .88 for the DIRI. The coefficient alpha for the DIRI in this study was .85. The criterion and construct validity of the DIRI has been supported by past work. For example, in several studies, the DIRI moderated the depression-rejection link (Joiner et al. 1992; Joiner & Metalsky, 1995; Katz, Beach, & Anderson, 1996). It has been reported that the DIRI predicts actual reassurance seeking behaviour in the laboratory, and it is highly correlated with a self-report reassurance seeking measure that is specific to particular relationships. Only patients completed the DIRI. Time for completion is about 1 minute.

The DIRI has not been previously adapted to the study of enduring relationships, and therefore, the measure has not been validated for this purpose. However, the modified scale is based on a measure which has been widely used in the laboratory studies (Joiner et al. 1992; Joiner & Metalsky, 1995; Katz, et al. 1996), and it has thereby accumulated considerable validity data. The utilization of a modified measure allows for a direct comparison between results of the present study and the larger body of existing research. Having said this, the DIRI was supplemented in this study by an additional measure of support-seeking behaviour, namely, the Personality Research Form (PRF-SU; Jackson & Guthrie, 1967).

The Personality Research Form -- Succorance Subscale. (PRF-SU; Jackson & Guthrie, 1967). The PRF-SU is a 16-item self-report measure designed to assess an individual's tendency to seek reassurance, love, advice, sympathy, and protection from others (e.g., "I like to be with people who take a protective attitude toward me"). The total number of items checked as "true"

are summed with higher scores corresponding to greater levels of succorant behaviour. Scores range from 0 to 16. Empirical evaluation of the PRF reveals that the PRF-SU is reliable (alpha coefficient of .92) and stable (.77 to .90). In a series of studies the subscale demonstrated good convergent and discriminant validity (Jackson & Guthrie, 1976). The internal consistency for the PRF-SU in this study was .80.

The PRF-SU was included as an additional measure of support seeking because of concerns about the validity of the Reassurance Seeking scale of the DIRI which has not been previously used with clinically depressed persons engaged in enduring relationships. A failure to obtain hypothesized results with the DIRI could be indicative of either a faulty measure, or an incorrect hypothesis. Thus, convergent validity data for the DIRI would render the results more interpretable. Hence, a trait measure of succorance was selected, in an effort to evaluate the construct validity of the reassurance seeking measure. It was assumed that the DIRI would be positively correlated with succorance. The possibility would remain, however, that the Succorance subscale and the DIRI would not be significantly correlated. Only patients completed the PRF-SU, and time for completion is about 5 minutes.

The Reaction to Dependent Others Scale. (RDOS; Joiner, et al. 1991). The RDOS comprises items based on the Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). The items selected for this scale were intended to capture individual differences in the reactions that a person would have to the depressive interpersonal style depicted by Coyne (1976b). The RDOS is made up of two subscales: Supportiveness of Dependent Others, and Tolerance of Dependent Others. The Supportiveness subscale consists of seven statements pertaining to the supportiveness of others who are needy or dependent. In the present study, items were modified to refer specifically to partners' reactions to requests for

support made by in-episode or out-of-episode patient-partners (e.g., "It's hard for me to be supportive of my partner when she/he is needy"). Items are rated on a 7-point scale and the scale is averaged across items. Therefore, the scores vary from 7 to 49 with higher scores indicating greater supportiveness. The Tolerance subscale consists of five statements pertaining to the readiness to tolerate dependent behaviour in others. In the present study, items were modified to refer specifically to partners' tolerance of needy behaviours exhibited by either their in-episode or out-of-episode patient-partners (e.g., "I am tolerant of my partner when she/he seeks reassurance from me as to whether I truly like her/him"). Items are rated on a 7-point scale, and the scale is averaged across items. The scores range from 5 to 35, with higher scores representing greater tolerance. Internal consistency for both the Supportiveness subscale (alpha coefficient of .82) as well as for the Tolerance subscale (alpha coefficient of .77) has been established (Joiner et al. 1991). The two subscales were added to obtain a total rejection score. The coefficient alpha for the combined scale in this study was .85. The modified version of the RDOS used in this study has not been previously validated, and the original RDOS has not previously been validated on a clinical sample. Thus, the RDOS was supplemented in this study by an additional measure of attitude toward patients namely, the Level of Expressed Emotion scale (LEE; Cole & Kazarian, 1988). Only partners completed the RDOS, and time for completion was about 3 minutes.

The Level of Expressed Emotion. (LEE; Cole & Kazarian, 1988). The LEE was developed to provide an index of the perceived emotional climate in a person's influential relationships. The 60 items for the scale and its subscales were generated to reflect the four behavioural and attitudinal correlates of the expressed emotion construct (Vaughn & Leff, 1981): Intrusiveness, emotional response, attitude toward illness, and tolerance and expectations. The

scale has two versions, one developed for patients and one for relatives. Scores can range from 0 to 60, with higher scores indicating greater levels of expressed emotion. A score of 9 on the LEE has been used for high-low splitting of LEE scores. The LEE has been found to have high levels of internal consistency (Cole & Kazarian, 1988). The concurrent validity (Kazarian, Malla, Cole, & Baker, 1990; Kazarian, Mazmanian, McDermott, & Olinger, 1991), and the predictive validity (Kazarian & Cole, 1993) have been supported in a number of studies. The coefficient alpha for the LEE scale obtained in the present study was .85. Time for completion was 5 minutes.

The Self-Attribute Questionnaire. (SAQ; Pelham & Swann, 1989). The SAQ is a 10-item questionnaire that measures 10 self-views central to self worth (e.g., intellectual capability, physical attractiveness, leadership ability, emotional stability). For each of the 10 attributes, patients rate themselves relative to other people their own age and gender on graduated-interval scales that range from 1 (bottom 5%) to 10 (top 5%). Thus, scores range from 10 to 100, higher scores indicate a more positive self-concept. The scale has been shown to be internally consistent, with a coefficient alpha of 0.76 (Pelham & Swann, 1989), and stable over a period of four months (test-retest $r(50) = .77$). The coefficient alpha for this study was .75. Patients' responses to this scale can be added to form a composite measure of their specific self-views. Only patients filled out the SAQ, and the scale takes approximately 1-3 minutes to complete.

The partners of the depressed persons filled out the Principal Index of Partner Appraisal (PPA): The sum of their ratings of their depressed partners on the 10 SAQ attributes. Like the SAQ, scores range from 10 to 100, and higher scores indicate a more positive appraisal of the patient-partner. The coefficient alpha for this study was .79. In order to arrive at a patient self-verification score, partner appraisal scores (PPA) were subtracted from patient self-concept

scores (SAQ), to obtain difference scores. Scores closer to zero indicated that patients and partners were in agreement in their ratings of the patient. Scores further away from zero indicated that patients and partners were not in agreement in their ratings of the patient. Agreement meant that the patient could self-verify in the marital relationship, and disagreement meant that the patient could not self-verify in the marital relationship. Difference scores were used in multiple regression analyses.

Although it has been standard practice in tests of Swann's model to examine the difference between self-concept and appraisal by others (e.g., Swann, Wenzlaff, et al. 1992; Swann, Hixon, et al. 1992), there is considerable controversy in other areas of psychology concerning the advisability of using difference scores. In a classic paper, Cronbach and Furby (1970) argued that difference scores are intrinsically unreliable. More recently, Gottman and Krokoff (1990) and Gottman and Rushe (1993) proposed a number of statistics for dealing with difference scores. The solution adopted in the present study is one that has been recommended by Gottman and Krokoff (1990): One of the individual components of the discrepancy score -- partner appraisal -- was entered, and only then the difference score. Consequently, it is not the raw difference score that is being examined, but the residual difference score, controlling for partner appraisal. This strategy has the added advantage of circumventing criticism that the difference scores are highly related to partner perceptions which in turn is one facet of the dependent variable, namely partner attitudes.

Response Styles Questionnaire. (RSQ; Nolen-Hoeksema, 1991b). The RSQ is composed of 71 items that measure how individuals respond to their own symptoms of depression. The items are grouped, a priori, into the Ruminative Responses scale, Distracting Responses scale, Problem-Solving scale, and Dangerous Activities scale. Only the Ruminative

Responses scale and the Distracting Responses scale were used in the present study and administered to the partners of depressed persons.

The scale was adapted to assess partners' style of coping with patient depression rather than their own depressed mood. A list of aversive symptoms typically displayed by depressed persons was generated by asking three clinical psychologists to list symptoms of depression. Five other clinical psychologists were then asked to rate the extent to which they considered the items relevant to depression. A final list was presented to participants who were instructed to select the most aversive symptom typically displayed by their depressed partner, and to indicate how they cope with this symptom using the RSQ.

The Ruminative Responses scale includes 21 items describing responses to depressed mood that are focused on the self, focused on the symptoms, or focused on the possible consequences and causes of their mood. Scores range from 21 to 84, with higher scores indicating a greater propensity to engage in ruminative coping. Subjects' responses to this scale have been shown to correlate significantly ($r = .62$) with their use of ruminative responses to depressed mood in a 30-day diary study (Nolen-Hoeksema, & Morrow, 1991). The Distracting Responses scale includes 11 items describing active, distracting responses to depression that are not dangerous or reckless. Scores range from 11 to 44, higher scores indicate a tendency to engage in distractive coping. The coefficient alpha for this study was .79 and .76 for the Rumination and Distraction subscales respectively. Scores on this scale correlated significantly ($r = .61$) with subjects' use of distracting responses to depressed mood in a 30-day diary study (Nolen-Hoeksema & Morrow, 1990). Time for completion was about 5 minutes.

Ethical Considerations

The study protocol was reviewed and approved by the Institution Review Boards (IRB)

of three institutions: The University of Ottawa, The University of Michigan Medical Center, and The Clarke Institute of Psychiatry. Participants were advised on the Information and Consent form that all information gathered during the investigation would be kept in the strictest confidence. Their identity as participants would be protected, and any published data would appear only in group form. Participants were also advised that completing the diagnostic interviews and questionnaires could provoke emotional reactions. They were asked to alert the investigator if this occurred. Patients and partners were reminded that they were free to withdraw their participation from the study at any time, but none chose to do so.

Data Analytic Strategy

Data analysis was organized into two sections: Preliminary analyses and the testing of hypotheses. In the preliminary analyses, missing data were substituted with mean scores for the sample. Internal consistency reliability (Cronbach's alpha) checks were conducted for all patient and partner measures. Next, an exploration of the validity of the in-episode/out-of-episode distinction using Hotelling's T^2 tests and t -tests was carried out. Further, t -tests were conducted to explore gender differences on all predictor and criterion variables. Finally, simple bivariate relations were examined before building more complex statistical models. In most instances, the multivariate analyses make assumptions about bivariate relations that may not hold.

In testing the hypotheses, hierarchical multiple regression analyses were carried out to test each of the three models. Because there were two dependent variables in this study, the models were tested separately for each criterion variable (support and tolerance, and expressed emotion). Next, an additional set of hierarchical regression analyses were carried out to test the models after having controlled for partner marital adjustment.

RESULTS

Preliminary Analyses

Missing Data

Of the 95 couples who participated in the study, five returned packets in which at least one entire instrument was not completed. These subjects were eliminated and 90 couples remained in the study. In cases where respondents omitted items on particular instruments, mean item scores from the remaining sample were substituted, provided the missing data were random and represented no more than 5% of the total items in the questionnaire. In the instructions, participants were asked to review their questionnaire package before sending them back and to complete sections they may have overlooked. As a result, very few items needed to be replaced with mean scores.

Reliability of Patient and Partner Measures

Cronbach's alpha coefficient (Cronbach, 1951), an estimate of internal consistency, was calculated for all patient and partner measures in order to insure acceptable reliability. As can be seen from Table 1, estimates of internal consistency for all measures are within acceptable limits and are similar to those reported in the literature.

Exploration of the Validity of the In-Episode/Out-of-Episode Distinction

Preceding all analyses, the distribution of patient mood measures as well as patient demographic variables from both the in-episode and out-of-episode groups were examined through SPSS Frequencies (SPSS Inc., 1990) for accuracy of data entry,

Table 1

Coefficients of Internal Consistency (Cronbach's alpha) for Measures used in the Study

Measures	Coefficient alpha
1. DEP-P	.91
2. POS-P	.92
3. HOS-P	.82
4. DIRI	.85
5. SU	.80
6. SAQ	.75
7. DEP-PA	.93
8. POS-PA	.94
9. HOS-PA	.84
10. DAS-PA	.94
11. PPA	.79
12. RSQ-R	.79
13. RSQ-D	.76
14. RDOS	.85
15. LEE	.85

Note. 1. DEP-P = self-reported patient depressed mood. 2. POS-P = patient positive affect. 3. HOS-P = patient hostility. 4. DIRI = patient reassurance seeking. 5. SU = patient succorance. 6. SAQ = patient self-concept. 7. DEP-PA = self-reported partner depressed mood. 8. POS-PA = partner positive affect. 9. HOS-PA = partner hostility. 10. DAS-PA = partner marital adjustment. 11. PPA = partner appraisal. 12. RSQ-R = partner ruminative coping. 13. RSQ-D = partner distractive coping. 14. RDOS = partner support/tolerance. 15. LEE = partner expressed emotion.

missing values, and to determine whether assumptions were met for multivariate analysis of variance (Hotelling's T^2 test). Two subjects in the IEG and one subject in the OEG were identified as having a raw score more than three standard deviations from the sample mean on at least one continuous variable. Because the three outliers were sampled from the target population, they remained in the analyses, but steps were taken to reduce their influence -- extreme scores were reduced to three standard deviations from the mean. All variables were within the normal range for skewness and kurtosis. Further inspection of the data indicated that there were no multivariate outliers using a criterion of $p < .001$ for the Mahalanobis distance.

The validity of the distinction between in- and out-of-episode was examined in terms of patient mood variables. As previously noted in the Measures section, there was concurrent validity to the in- and out-of-episode distinction, as assessed by semi-structured diagnostic interview. However, two issues remained: 1) the validity of a reliable distinction between in- and out-of-episode patients and, 2) the distinction of the two groups from the population norms. If a difference were obtained between the two groups and the population norms, it would suggest that interpersonal problems, including negative partner attitudes, persist in the period immediately following recovery when the patient is still in treatment. It further suggests that any comparisons between the two groups may be too stringent and even an unfair test of the theoretical hypotheses given that the interpersonal processes are continuing. Hence, if differences were found between the two groups, but some differences were also found between the recovered group and the normative data, it might become useful to combine the two groups and treat patient mood as a continuum. Interpersonal processes associated with depression would then be

examined, but the examination would not be confined to the acute episode.

First, a Hotelling's \mathbb{T}^2 test was conducted with group (in-episode, out-of-episode) as the predictor variable, and the patient mood measures as the dependent variables. The dependent variables included patient depression, positive affect, and hostility. Hunsley (1990) proposes to use the Dysphoria summary score that combines the Depression, Anxiety, and Hostility subscales as a measure of negative affect, as opposed to using the three separate scores. Thus, two sets of analyses were carried out: A Hotelling's \mathbb{T}^2 comparing the two groups with the individual Depression, Positive Affect and Hostility subscale scores, and a t -test comparing the two groups on the Dysphoria subscale. Because the analyses yielded similar findings, only the three individual scales were reported.

An overall Hotelling's \mathbb{T}^2 (3,86) = 3.94, $p < .05$ revealed a significant group difference in patient mood, suggesting that patients in the in-episode group differed from patients in the out-of-episode group on self-report measures of mood. An examination of univariate F statistics indicated that both patient depression, (F [3, 85] = 4.63, $p < .05$), and positive affect, (F [3, 85] = 11.74, $p < .05$), were significant: Patients in the in-episode group were significantly more depressed and had significantly less positive affect than patients in the out-of-episode group. However, the two groups of patients did not differ on the Hostility subscale, (F [3, 85] = .98, $p < .05$). As an aid in interpreting the mood scores of patients who were out-of-episode, t -tests were conducted to compare the mean scores obtained in this sample with published normative data. The results revealed that the out-of-episode patients continued to have problems with low positive affect, t (90) = -2.92, $p < .05$, as well as depressed mood, t (90) = 3.39, $p < .05$. It would appear

from these findings that the two groups differed as expected in diagnosis as well as on measures of self-reported mood. Thus, relative to general population norms, the out-of-episode patients were only relatively, not absolutely different.

Next, as a further exploration of the differences between the two groups, a Hotelling's T^2 test was conducted on patient demographic variables (e.g., occupation, income, number of children, duration of the relationship). An overall Hotelling's T^2 test revealed a significant group difference on demographic variables, Hotelling's $T^2(4,85) = 2.69, p < .05$. An examination of univariate F statistics indicated that of all the demographic variables, only income was significant, ($F[4, 84] = 7.22, p < .05$). Patients in the out-of-episode group had an average income that was significantly greater than patients in the in-episode group. This may well reflect the effects of depression on employment (Mintz, Mintz, Arruda, & Hwang, 1992).

Comparisons were then made between the mean mood scores of partners in either the in- or out-of-episode groups with published normative data. Preceding all analyses, the distribution of partner mood measures from both the in-episode and out-of-episode groups were examined through SPSS Frequencies (SPSS Inc., 1990) for accuracy of data entry, and missing values. Three subjects in the IEG were identified as having a raw score more than three standard deviations from the sample mean on at least one continuous variable. Because the three outliers were sampled from the target population, they remained in the analyses, but steps were taken to reduce their influence -- extreme scores were reduced to three standard deviations from the mean. All variables were within the normal range for skewness and kurtosis. Next, t -tests were conducted and it was revealed that partners married to in-episode patients were significantly more

distressed than the norms on measures of positive affect, $t(90) = 3.60, p < .05$, and depressed mood, $t(90) = 2.87, p < .05$. This was not the case for partners married to out-of-episode patients: They did not differ significantly from the norms. These findings are congruent with those previously reported in the literature, suggesting that relatives of in-episode patients are significantly more distressed than relatives of out-of-episode patients (Coyne et al. 1987).

As a final comparison between the in- and out-of-episode groups, t -tests were conducted comparing the in- and out-of-episode groups on all remaining theoretical variables specified by the models being tested in this study². Preceding these analyses, the distribution of predictor and dependent measures from both groups were examined through SPSS Frequencies (SPSS Inc., 1990) for accuracy of data entry and missing values. One subject from the IEG and one subject from the OEG was identified as having a raw score more than three standard deviations from the sample mean on at least one continuous variable. Because the two outliers were sampled from the target population, they remained in the analyses, but steps were taken to reduce their influence - extreme scores were reduced to three standard deviations from the mean. All variables were within the normal range for skewness and kurtosis. The results are presented in Table 2. None of the t -tests were significant, indicating that there were no significant differences between the in- and out-of-episode groups on theoretical variables of interest in this study. The first five variables presented in the table are patient variables: Reassurance seeking, succorance, self-concept, self-verification, and marital adjustment. The last seven are partner variables: Self-reported depressed mood, marital adjustment, partner appraisal of patient, ruminative coping, distractive coping, support/tolerance, and

Table 2

T-Tests Comparing the In-Episode and the Out-of-Episode Groups on Predictor and Criterion Variables

Measures	In-Episode Group	Out-of-Episode Group	t
	<u>M</u>	<u>M</u>	
1. DIRI	11.12 (6.50)	9.39 (5.07)	1.40
2. SU	7.47 (4.13)	7.49 (3.48)	-.03
3. SAQ	50.22 (12.30)	51.13 (9.47)	-.36
4. SV	-3.99 (10.99)	-2.03 (10.85)	-.81
5. DAS-P	100.70 (20.76)	109.03 (17.40)	-1.91
6. DEP-PA	57.44 (17.97)	54.09 (17.08)	.86
7. DAS-PA	105.54 (17.43)	102.70 (19.77)	.71
8. PPA	54.36 (12.14)	52.72 (10.04)	.65
9. RSQ-R	39.95 (7.73)	36.87 (7.21)	1.85
10. RSQ-D	21.50 (4.97)	21.53 (4.01)	-.03
11. RDOS	65.11 (10.53)	64.84 (12.11)	.11
12. LEE	10.28 (7.08)	9.14 (6.27)	.76

Note.

* $p < .05$

Standard deviations are indicated in brackets.

1. DIRI = patient reassurance seeking. 2. SU = patient succorance. 3. SAQ = patient self-concept. 4. SV = patient self-verification. 5. DAS-P = patient marital adjustment. 6. DEP-PA = self-reported partner depressed mood. 7. DAS-PA = partner marital adjustment. 8. PPA = partner appraisal. 9. RSQ-R = partner ruminative coping. 10. RSQ-D = partner distractive coping. 11. RDOS = partner support/tolerance. 12. LEE = partner expressed emotion.

expressed emotion.

Taken together, comparisons between the in- and out-of-episode groups revealed that in-episode patients reported more depressed mood, less positive affect, and a lower income than patients in the out-of-episode group. However, out-of-episode patients reported significantly more distress and less positive affect than the established population norms. Moreover, patients and partners in the in-episode group were not significantly different from patients and partners in the out-of-episode group on any of the theoretical variables of interest in this study³. Hence, the groups could be combined without influencing interpretation of the overall analyses. What these two groups have in common is their continued treatment for depression and failure to return to the established norms on measures of mood.

Gender Differences in Key Variables

In an effort to explore differences between male and female patients and male and female partners on the theoretical variables of interest in this study, *t*-tests were conducted with the following variables: Patient self-reported depressed mood (DEP-P), patient positive affect (POS-P), patient hostility (HOS-P), patient reassurance seeking (DIRI), patient succorance (SU), patient self-concept (SAQ), patient self-verification (SV), partner self-reported depressed mood (DEP-PA), partner positive affect (POS-PA), partner hostility (HOS-PA), partner appraisal (PPA), partner ruminative coping (RSQ-R), partner distractive coping (RSQ-D), partner support/tolerance (RDOS), and partner expressed emotion (LEE). The only differences that were found was that male patients reported higher levels of distress than female patients, $t(90) = 3.80, p < .05$, and male partners reported greater levels of distress than female partners, $t(90) = 2.69, p < .05$.

Furthermore, male partners reported significantly greater levels of distractive coping than female partners, $t(90) = 2.00, p < .05$.

Demographic Characteristics of the Combined Sample

Demographic data are presented in Table 3. In general, the average level of education and income was elevated in this sample. Moreover, patients and partners were similar to one another, but partners were better educated and more likely to be employed.

Education and income represent selective filters affecting the transition from being in the large group of depressed people in the community to the smaller group who get treated in specialty settings (Goldberg & Huxley, 1992). Persons with higher income and greater education are more likely to know how to obtain access to such services and pay for them. Other studies have found that depressed persons drawn from research oriented specialty clinics are more educated and have higher incomes than depressed persons found in other settings (Schwenk, Coyne, & Fechner-Bates, 1996). In the present study, both education and income were unrelated to the theoretical variables of interest.

Means and Correlations Among Patient Variables

All patient measures were examined through SPSS Frequencies (SPSS Inc., 1990) for accuracy of data entry, and missing values. Three subjects were identified as having a raw score more than three standard deviations from the sample mean on at least one continuous variable. Because the three outliers were sampled from the target population, they remained in the analyses, but steps were taken to reduce their influence -- extreme scores were reduced to three standard deviations from the mean. All variables were within the normal range for skewness and kurtosis.

Means, standard deviations, and zero-order correlations for self-report measures

Table 3

Sociodemographic characteristics of participants (n = 90)

Variable	Patients	Partners
Age (years)		
<u>M</u>	43.0	44.0
<u>SD</u>	10.4	10.0
Sex		
Male	32	32
Female	58	58
Race		
Caucasian	(99)	(98)
Other	(1)	(2)
Religion		
Christian	78 (85)	80 (87)
Other	14 (15)	12 (13)
Relationship Status		
Married		89 (97)
Common Law		3 (3)
Education		
College Educated	53 (58)	58 (63)
Less than College Educated	39 (42)	42 (37)
Employed		
Yes	64 (70)	78 (85)
No	28 (30)	14 (15)
Family Income		
<u>M</u>		\$56,902.00
<u>SD</u>		\$25,601.00
Children		
Yes	67 (73)	68 (74)
No	25 (27)	24 (26)
Length of Relationship (years)		
<u>M</u>		16.0
<u>SD</u>		11.5

Note.

Percentages are indicated in brackets.

of depressed mood (DEP-P), positive affect (POS-P), hostility (HOS-P), reassurance seeking (DIRI), succorance (SU), self-verification (SV), and self-concept (SAQ) are presented in Table 4. As previously mentioned, a comparison of the mean scores obtained by patients in the present study with normative data available for the mood scales revealed that patients scored in the distressed range. Normative data were unavailable for the reassurance seeking, succorance, self-verification, and self-concept scales.

Only the most theoretically relevant correlations will be discussed. Recall that the succorance subscale (SU) was included because it was hypothesized that it would be correlated with the reassurance seeking scale (DIRI), and would therefore provide validation of the reassurance seeking scale. Second, the succorance subscale could serve as an alternative measure in tests of key hypotheses if the DIRI proved to be unrelated to the criterion variables. However, because the reassurance seeking and succorance were unrelated, $r(90) = -.02$, ns, the succorance subscale could not provide evidence for the validity of the reassurance seeking scale. Moreover, the succorance subscale was unrelated to all other patient variables.

The reassurance seeking scale was correlated with positive affect, $r(90) = -.29$, $p < .05$, suggesting that higher levels of positive affect were associated with lower levels of reassurance seeking. It was not, however, related to self-reported depressed mood, $r(90) = .08$, ns. Patient self-concept was correlated with depressed mood, $r(90) = -.29$, $p < .05$, and positive affect, $r(90) = .37$, $p < .05$, suggesting that negative affect was associated with a more negative self-concept. Self-verification was positively correlated with reassurance seeking, $r(90) = .25$, $p < .05$, but not with depressed mood, positive affect or

Table 4
Intercorrelation Matrix for Predictor and Criterion Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. DEP-P	1.00															
2. POS-P	-.62**	1.00														
3. HOS-P	.50**	-.43**	1.00													
4. DIRI	.08	-.29**	.09	1.00												
5. SU	-.20	.18	-.05	-.02	1.00											
6. SAQ	-.29**	.37**	-.26*	-.14	.00	1.00										
7. SV	.00	.09	.05	.25*	-.07	.48**	1.00									
8. DEP-PA	.46**	-.17	.32**	.10	-.09	-.13	.23*	1.00								
9. POS-PA	-.12	.21*	-.00	-.14	-.02	.01	-.15	-.41**	1.00							
10. HOS-S	.28**	-.10	.23*	.02	-.07	-.14	.18	.65**	-.40**	1.00						
11. DAS-PA	-.31**	.24*	-.31**	-.33**	.12	.13	-.43**	-.44**	.28**	-.17	1.00					
12. PPA	-.29**	.28**	-.30**	-.39**	.09	.54**	-.48**	-.37**	.16	-.31**	.55**	1.00				
13. RSQ-R	.33**	-.31**	.24*	.12	-.19	-.09	.15	.41**	-.30**	.33**	-.36**	-.24*	1.00			
14. RSQ-D	.12	-.02	-.04	-.02	-.12	.06	.03	-.06	.05	-.03	-.05	.02	.25*	1.00		
15. RDOS	-.07	.10	-.19	-.23*	.20	.06	-.31**	-.31**	.33**	-.20	.49**	.38**	-.21*	.03	1.00	
16. LEE	.13	-.12	.02	.30**	-.12	-.15	.19	.34**	-.38**	.28**	-.43**	-.35**	.39**	.06	-.56**	1.00
<u>M</u>	76.63	38.54	63.94	10.53	7.48	50.53	-3.32	56.26	47.80	54.48	104.55	53.78	38.87	21.51	65.02	9.88
<u>SD</u>	27.00	17.22	19.50	6.07	3.90	11.37	10.93	17.64	16.00	13.24	18.22	11.41	7.65	4.63	11.04	6.79

Note.

* $p < .05$ ** $p < .01$

1. DEP-P = self-reported patient depressed mood. 2. POS-P = patient positive affect. 3. HOS-P = patient hostility. 4. DIRI = patient reassurance-seeking. 5. SU = patient sucourance. 6. SAQ = patient self-concept. 7. SV = patient self-verification. 8. DEP-PA = self-reported partner depressed mood. 9. POS-PA = partner positive affect. 10. HOS-PA = partner hostility. 11. DAS-PA = partner marital adjustment. 12. PPA = partner appraisal. 13. RSQ-R = partner rumination. 14. RSQ-D = partner distraction. 15. RDOS = partner support/tolerance. 16. LEE = partner expressed emotion. M = mean. SD = standard deviation.

hostility, $r(90) = .00$, ns, $r(90) = .09$, ns, $r(90) = .05$, ns, respectively.

In summary, the means obtained for patient measures reflect that they are indeed in the clinically depressed range, and they are reporting a number of interpersonal difficulties. The finding that reassurance seeking and succorance were unrelated to each other suggests that they are tapping distinct constructs and cannot be used interchangeably in tests of theoretical hypotheses.

Means and Correlations Among Partner Variables

All partner measures were examined through SPSS Frequencies (SPSS Inc., 1990) for accuracy of data entry, and missing values. Two subjects were identified as having a raw score more than three standard deviations from the sample mean on at least one continuous variable. Because the two outliers were sampled from the target population, they remained in the analyses, but steps were taken to reduce their influence -- extreme scores were reduced to three standard deviations from the mean. All variables were within the normal range for skewness and kurtosis.

Means, standard deviations, and zero-order correlations for self-report measures of depressed mood (DEP-PA), positive affect (POS-PA), hostility (HOS-PA), reaction to dependent other scale (RDOS), level of expressed emotion (LEE), dyadic adjustment scale (DAS), response styles questionnaire (RSQ-R and RSQ-D), and partner appraisal (PPA) are presented in Table 4. As previously mentioned, the levels of self-reported distress were more elevated than the established norms, indicating that partners were distressed. The mean of partner expressed emotion was above the cut-off of 9, indicating that partners exhibited a negative attitude toward patients. Normative data were unavailable for the reaction to dependent others scale (RDOS) as well as for the coping

scales (RSQ-R and RSQ-D).

Pearson bivariate correlation analyses were conducted to examine specific associations amongst partner measures. Only the most theoretically relevant correlations will be discussed. In considering the relation between the two dependent variables -- support/tolerance and expressed emotion, conceptually, one would expect these measures to be moderately correlated given their conceptual similarity. As elsewhere in the study of psychopathology, there has been a proliferation of theories with associated measures with little exploration of the extent to which the same phenomena are being studied with differently named, but highly similar variables. Indeed, some of the measures developed by other investigators may work better in testing particular models than the measures that were developed by the proponents of the model. In the present study support/tolerance and expressed emotion were moderately correlated in the expected direction, $r(90) = -.56$, $p < .05$, but not excessively as to be redundant with each other. As shown in Table 4, both partner expressed emotion and support/tolerance were significantly correlated with partner depression and positive affect, indicating that higher levels of negative affect were associated with a more negative attitude toward patients. Further, both support/tolerance and expressed emotion were significantly correlated with partner appraisal of patient, marital adjustment, and rumination. It is important to note, however, that the correlations ranged between $-.20$ and $.49$, indicating only moderate correlations. Finally, rumination and distraction were moderately correlated with each other, $r(90) = .25$, $p < .05$, suggesting that it is possible to be elevated on one subscale and still endorse some items on the other subscale.

In summary, the means and standard deviations obtained for partner measures

indicate that partners report some distress as well as negativity toward patients. Overall, there were moderate intercorrelations amongst most of the partner variables with the notable exception of Nolen-Hoeksema's distractive coping subscale. This pattern of results is consistent with the idea that there is some consistency across measures in the negativity of partners toward depressed patients. The lack of a relation for Nolen-Hoeksema's subscale is not necessarily troubling. It is an intrapersonal variable that may not be strongly related to interpersonal processes. Nonetheless, as a reflection of how a partner tends to manage his/her depressed partner's mood, it may still have a contribution to make in understanding how partners cope with living with a depressed person.

Correlations Among The Key Variables

Correlations among the criterion variables (partner support/tolerance and expressed emotion) and the predictor variables for each of the three models tested in this study are presented in Table 4. A brief summary of the correlations that were most relevant to each of the three models is provided.

With respect to Swann, Wenzlaff, et al.'s self-verification theory, the variables of interest were patient self-concept, partner appraisal of patient, and patient self-verification, and their relation to partner support/tolerance and expressed emotion. There was a significant correlation between patients' ratings of themselves and partner appraisals of patients on a measure of self-concept, $r(90) = .54, p < .05$, indicating that patients and partners share similar perceptions of the patient. In terms of how these variables were related to the dependent variables, patient self-concept was not correlated with either support/tolerance, $r(90) = .06, ns$, or expressed emotion, $r(90) = -.15, ns$. Partner appraisal of patient was positively correlated with support/tolerance, $r(90) = .38$,

$p < .05$, and negatively correlated with expressed emotion, $r(90) = -.35$, $p < .05$. Patient self-verification scores were negatively correlated with support/tolerance, $r(90) = -.31$, $p < .05$, but unrelated to expressed emotion, $r(90) = .19$, ns. The findings suggest that partner appraisal of patient is more strongly associated with partner attitudes than the two other variables specified by self-verification theory.

With respect to Coyne's interactional theory, the variables of interest were patient reassurance seeking, patient succorance, and partner depressed mood, in relation to each of the dependent variables. Reassurance seeking was negatively correlated with partner support/tolerance, $r(90) = -.23$, $p < .05$, and positively correlated with partner expressed emotion, $r(90) = .30$, $p < .05$. These findings suggest that greater levels of reassurance seeking are associated with negative partner attitudes. Contrary to the predictions made by Coyne's theory, reassurance seeking and self-reported partner depressed mood were unrelated, $r(90) = .10$, ns, suggesting that other aspects of the patient's behaviour may be more directly related to partner distress. Succorance was unrelated to partner attitudes, suggesting that it is not a suitable surrogate for the reassurance seeking scale in testing Coyne's theory.

With regard to Nolen-Hoeksema's theory of coping, the variables of interest were self-reported patient depressed mood, partner ruminative and distractive coping, and their relation to partner support/tolerance and expressed emotion. Patient depressed mood was unrelated to either support/tolerance, $r(90) = -.07$, ns, or expressed emotion, $r(90) = .13$, ns. These findings suggest that factors other than the patient's current mood may be affecting partner attitudes (e.g., a negative relationship history). Rumination was correlated with both partner support/tolerance, $r(90) = -.21$, $p < .05$, and expressed

emotion, $r(90) = .39$, $p < .05$, suggesting that a ruminative style of coping was associated with a more negative partner attitude. Distractive coping was not correlated with any of the variables of interest.

Taken together, the correlations between the predictor variables of each of the three models and the two dependent variables appear to be sufficiently strong to permit a test of the models by way of multiple regression analysis.

The Formal Testing of Hypotheses

Hierarchical regression was used to test the hypotheses (Cohen & Cohen, 1975). Each model was tested by adding the key predictor variables at distinct steps. Through this procedure, it was possible to determine the increase in R^2 accounted for by each variable at its point of entry in the equation. The order of entry was determined prior to the analysis, on the basis of theoretical considerations. All hypotheses were tested with gender of the patient entered at step 1. The models were tested with two different criterion variables -- partner support/tolerance and expressed emotion. The left-hand side of the tables shows the unstandardized regression coefficient Beta, the standardized regression coefficient β , the Multiple R , the R^2 , the Adjusted R^2 , and the t value. The right-hand side of the table displays the incremental change incurred by the entry of each predictor variable as illustrated by the semipartial correlations (sr^2), and the F statistic.

Because there were no differences in the findings as a result of having entered gender of patient into the equation, the analyses reported below did not include gender.

Hypothesis 1: Testing Coyne's Interactional Model

Multiple regression analyses were conducted to test Coyne's interactional theory which states that patient reassurance seeking and partner depressed mood are related to negative partner attitudes.

Predicting Partner Support/Tolerance

As shown in Table 5, the predictor variables were entered in the following order: Patient reassurance seeking at step 1, followed by partner depressed mood at step 2. Patient reassurance seeking was significant, ($F [1, 88] = 5.15, p < .05$), with an Adjusted R^2 value of .04, accounting for 4% of the variance. Partner depressed mood entered at step 2 was also significant, ($F [2, 87] = 5.95, p < .05$), with an Adjusted R^2 value of .09, accounting for an additional 5% of the variance explained. The Multiple R for the whole equation was .34, and the overall F was significant, ($F [2, 87] = 5.69, p < .05$).

Recall that patient succorance was included in the present study as an additional measure of reassurance seeking. Multiple regression analyses were therefore carried out with succorance as the predictor variable, as opposed to reassurance seeking. The results indicated that succorance was not a significant predictor of partner support/tolerance.

Predicting Expressed Emotion

Next, the predictive utility of Coyne's model was tested using partner expressed emotion as the criterion variable. The predictor variables were entered in the following order: Patient reassurance seeking at step 1, followed by partner depressed mood at step 2.

As shown in Table 6, patient reassurance seeking was significant, ($F [1, 88] = 8.92, p < .05$), with an Adjusted R^2 value of .08, accounting for 8% of the variance

Table 5

Hierarchical Regression for Hypothesis 1: Prediction of Partner Support/Tolerance from Coyne's Interactional Theory

Hierarchical Multiple Regression Analysis

Step Predictor	Overall Model					Incremental Change		
	<u>B</u>	<u>β</u>	Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>sr</u> ²	<u>F</u>
1. DIRI	-.38	-.21	.23	.05	.04	-2.27*	.05	5.15*
2. DEP-PA	.16	-.25	.34	.12	.09	-2.44*	.06	5.95*

Note.

*p < .05 **p < .01 (two-tailed tests)

1. DIRI = patient reassurance seeking. 2. DEP-PA = self-reported partner depressed mood.

Table 6

Hierarchical Regression for Hypothesis 1: Prediction of Partner Expressed Emotion from Coyne's Interactional Theory

Hierarchical Multiple Regression Analysis

Step Predictor	Overall Model					Incremental Change		
	<u>B</u>	<u>β</u>	Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>sr</u> ²	<u>F</u>
1. DIRI	.30	.27	.30	.09	.08	2.99**	.09	8.92**
2. DEP-PA	.11	.27	.41	.17	.15	2.77**	.07	7.69**

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. DIRI = patient reassurance seeking. 2. DEP-PA = self-reported partner depressed mood.

explained. Partner depressed mood, entered at step 2, was also significant, ($F [2, 87] = 7.69, p < .05$), and contributed to an Adjusted R^2 value of .15, indicating that partner depressed mood contributed an additional 7% to the overall variance explained. The Multiple R for the whole equation was .41, and the overall F was significant, ($F [2, 87] = 8.64, p < .05$).

Additional multiple regression analyses were carried out with succorance as the predictor variable, as opposed to reassurance seeking. The results indicated that the succorance subscale was not a significant predictor of expressed emotion.

Taken together, the results suggest that the theoretical variables specified by Coyne's theory were significant predictors of both partner support/tolerance and expressed emotion. Tests of Coyne's model with succorance, as opposed to reassurance seeking, resulted in only partner depressed mood being significant.

Hypothesis 2: Testing Swann, Wenzlaff, et al.'s Self-Verification Theory

Multiple regression analyses were conducted to test Swann, Wenzlaff, et al.'s theory of self-verification which states that a discrepancy between patients' self-concepts and their partners' appraisal of them will predict negative responses by partners. In order to control for the negativity of the partner (partner appraisal), partner appraisal was entered first at step 1, followed by the discrepancy score entered at step 2.

The hypothesis for Swann, Wenzlaff, et al.'s theory is built on the assumption that on average partners will appraise patients more positively than patients will appraise themselves. Thus, prior to undertaking multiple regression analyses, a paired sample t -test was conducted comparing patients' self-concept with partner appraisal. The results of the t -test revealed that partners did indeed appraise patients more positively than

patients appraised themselves, $t(90) = 2.88, p < .05$.

Predicting Partner Support/Tolerance

As can be seen from Table 7, the first variable entered into the equation was partner appraisal. It was significant, ($F [1, 88] = 13.32, p < .05$), and resulted in an Adjusted R^2 value of .12, accounting for 12% of the variance explained. Next, patient self-verification was entered at step 2, but it did not make a unique contribution to the variance. Thus, partner appraisal predicted support/tolerance, but the crucial relation between patient self-verification and partner support/tolerance did not hold. The Multiple R for the whole equation was .40, and the overall F was significant, ($F [2, 87] = 8.09, p < .05$).

Predicting Partner Expressed Emotion

Next, the predictive utility of Swann, Wenzlaff, et al.'s model was tested using partner expressed emotion as the criterion variable. The predictor variables were entered in the following order: Partner appraisal at step 1, followed by the discrepancy score (self-verification) at step 2.

As shown in Table 8, partner appraisal was significant, ($F [1, 88] = 11.14, p < .05$), with an Adjusted R^2 value of .10, accounting for 10% of the variance. Patient self-verification entered at step 2 was not a significant predictor. Thus, partner appraisal predicted expressed emotion, but the crucial relation between patient self-verification and partner expressed emotion did not hold. The Multiple R for the whole equation was .34, and the overall F was significant, ($F [2, 87] = 5.55, p < .05$).

Taken together, the results suggest that in the case of both partner support/tolerance and expressed emotion, the only significant variable amongst the

Table 7

Hierarchical Regression for Hypothesis 2: Prediction of Partner Support/Tolerance from Swann, Wenzlaff, et al.'s Theory of Self-Verification

Hierarchical Multiple Regression Analysis

Step Predictor	\underline{B}	$\underline{\beta}$	Overall Model			t	Incremental Change	
			Multiple R	R^2	Adj. R^2		sE^2	F
1. PPA	.35	.36	.36	.13	.12	3.65**	.13	13.32**
2. SV	-.18	-.18	.40	.16	.14	3.97 -1.62	.02	2.61

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. PPA = partner appraisal. 2. SV = patient self-verification.

Table 8

Hierarchical Regression for Hypothesis 2: Prediction of Partner Expressed Emotion from Swann, Wenzlaff, et al.'s Theory of Self-Verification

Hierarchical Multiple Regression Analysis

Step Predictor	B	β	Overall Model			t	Incremental Change	
			Multiple R	R ²	Adj. R ²		sr ²	F
1. PPA	-.20	-.33	.33	.11	.10	-3.34	.11	11.14**
2. SV	.02	.03	.34	.11	.10	.30	.00	.09

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. PPA = partner appraisal. 2. SV = patient self-verification.

variables proposed by self-verification theory was partner appraisal. Partner appraisal, however, is less crucial to the model compared to the discrepancy between patient and partner appraisal and was not a significant predictor.

Hypothesis 3: Testing Nolen-Hoeksema's Theory of Coping

Multiple regression analyses were conducted to test Nolen-Hoeksema's theory of coping. It was hypothesized that patient depressed mood and partner coping would predict partner attitudes.

Predicting Partner Support/Tolerance

The predictor variables were entered in the following order: Patient depressed mood at step 1, followed by partner ruminative and distractive coping entered as a block at step 2. As shown in Table 9, patient depressed mood was not a significant predictor of partner support/tolerance, ($F [1, 88] = .40, p > .05$). Partner ruminative and distractive coping entered at step 2 resulted in an Adjusted R^2 value of .02, and was not significant, ($F [3, 86] = 2.33, p > .05$). The Multiple R for the whole equation was .24, and overall F was not significant, ($F [3, 86] = 1.69, p > .05$).

Predicting Partner Expressed Emotion

Next, Nolen-Hoeksema's theory of coping was tested with partner expressed emotion as the criterion variable. The predictor variables were entered in the following order: Patient depressed mood at step 1, followed by partner ruminative and distractive coping entered as a block at step 2.

As shown in Table 10, the first variable in the equation was patient depressed mood and it was not significant, ($F [1, 88] = 1.62, p > .05$). Rumination and distraction entered as a block at step 2 resulted in an Adjusted R^2 value of .13, ($F [3, 86] = 7.18, p <$

Table 9

Hierarchical Regression for Hypothesis 3: Prediction of Partner Support/Tolerance from Nolen-Hoeksema's Theory of Coping

Step Predictor	Overall Model						Incremental Change	
	<u>B</u>	<u>β</u>	<u>Multiple R</u>	<u>R^2</u>	<u>Adj. R^2</u>	<u>t</u>	<u>sr^2</u>	<u>F</u>
1. DEP-P	-3.05	-7.57	.07	.00	-.01	-.64	.00	.40
2. RSQ-R	.23	.10	.24	.06	.02	-2.11*	.05	2.33
RSQ-D	-.34	-.24				.92		

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. DEP-P = self-reported patient depressed mood. 2. RSQ-R = partner ruminative coping and RSQ-D = partner distractive coping.

Table 10

Hierarchical Regression for Hypothesis 3: Prediction of Partner Expressed Emotion from Nolen-Hoeksema's Theory of Coping

Hierarchical Multiple Regression Analysis

Step Predictor	<u>B</u>	<u>β</u>	Overall Model			Incremental Change		
			Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>Δ</u> ²	<u>F</u>
1. DEP-P	.00	.01	.13	.02	.01	1.27	.02	1.62
2. RSQ-R	.35	.40	.40	.16	.13	3.77**	.14	7.18**
RSQ-D	-.07	-.05				-.47		

Note.

*p < .05 **p < .01 (two-tailed tests)

1. DEP-P = self-reported patient depressed mood. 2. RSQ-R = patient ruminative coping and RSQ-D = partner distractive coping.

.05), indicating that 12% of the variance was explained by step 2. However, only rumination made a unique contribution to the variance, ($\beta = .40$, $SE = .09$, $p < .05$), whereas distraction did not, ($\beta = -.05$, $SE = .15$, ns). The Multiple R for the whole equation was .40 and the overall F was significant, ($F [3, 86] = 5.40$, $p < .05$).

In summary, the results differed depending on which variable served as the criterion. When support/tolerance was the criterion, none of the theoretical variables were significant. However, when expressed emotion was the criterion, rumination was a significant predictor variable.

Taking Partner Marital Adjustment into Consideration

A finding that the theoretical variables made an independent contribution after the entry of partner marital adjustment as a control variable would represent a powerful support for the models. However, as noted earlier, if the theoretical variables did not make a unique contribution to the variance once partner marital adjustment was taken into account, it would present a more ambiguous situation. Such a finding would indicate a need for future theoretical and empirical work to tackle what could be a difficult problem in disentangling marital maladjustment from the factors postulated by these theorists in understanding the attitudes of partners toward depressed persons.

Thus, the three models were re-tested using the same predictor and criterion variables, with partner marital adjustment entered into all regression equations at step 1. Indeed, an examination of zero-order correlations between partner marital adjustment and the dependent variables support/tolerance, $r(90) = .49$, $p < .05$, and expressed emotion, r

(90) = $-.43$, $p < .05$, indicates that compared with the theoretical variables of interest in this study, partner marital adjustment was more strongly related to partner attitudes⁴.

Taking Partner Marital Adjustment into Consideration: Testing Coyne's Interactional Model

Predicting Partner Support/Tolerance

As shown in Table 11, the predictor variables were entered in the following order: Partner marital adjustment at step 1, patient reassurance seeking at step 2, and partner depressed mood at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 23.17$, $p < .05$), with an Adjusted R^2 value of .20, accounting for 20% of the variance explained. Patient reassurance seeking entered at step 2 resulted in an Adjusted R^2 value of .20, ($F [2, 87] = .89$, $p > .05$), and therefore did not improve the predictive power of the equation. Next, partner depressed mood was entered into the equation and resulted in an Adjusted R^2 value of .20, indicating that it did not make a unique contribution to the variance explained, ($F [3, 86] = 1.35$, $p > .05$). The Multiple R for the whole equation was .48, and the overall F was significant, ($F [3, 86] = 8.49$, $p < .05$).

Predicting Partner Expressed Emotion

As shown in Table 12, the predictor variables were entered in the following order: Partner marital adjustment at step 1, patient reassurance seeking at step 2, and partner depressed mood at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 16.57$, $p < .05$), with an Adjusted R^2 value of .15, indicating that 15% of the variance was explained by this variable. Patient reassurance seeking entered at step 2 resulted in an Adjusted R^2 change of .17, suggesting that an additional 2% of the variance was explained by this variable. However, this increase in R^2 was not significant, ($F [2,$

Table 11

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Support/Tolerance from Coyne's Interactional Theory

Hierarchical Multiple Regression analysis

Step Predictor	B	β	Overall Model			t	Incremental Change	
			Multiple R	R^2	Adj. R^2		sr^2	F
1. DAS-PA	.24	.38	.46	.21	.20	4.81**	.21	23.17**
2. DIRI	-.17	-.10	.46	.22	.20	-.94	.00	.89
3. DEP-PA	-.08	-.12	.48	.23	.20	-1.16	.01	1.35

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. DAS-PA = partner marital adjustment 2. DIRI = patient reassurance seeking. 3. DEP-PA = self-reported partner depressed mood.

Table 12

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Expressed Emotion from Coyne's Interactional Theory

Hierarchical Regression Analysis								
Step Predictor	B	β	Overall Model			Incremental Change		
			Multiple R	R^2	Adj. R^2	t	sr^2	F
1. DAS-PA	-.10	-.27	.40	.16	.15	-4.07**	.16	16.57**
2. DIRI	.22	.20	.44	.19	.17	1.89	.03	3.57
3. DEP-PA	.07	.18	.47	.22	.19	1.79	.03	3.20

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. DAS-PA = partner marital adjustment. 2. DIRI = patient reassurance seeking. 3. DEP-PA = self-reported partner depressed mood.

87] = 3.57, $p > .05$). Next, partner depressed mood was entered at step 3 and resulted in an Adjusted R^2 value of .19, indicating that an additional 2% of the variance was explained by this variable. The increase in R^2 , however, was not significant, ($F [2, 87] = 3.20, p > .05$), and did not improve the predictive power of the equation. The Multiple R for the whole equation was .47, and the overall F was significant, ($F [3, 86] = 8.12, p < .05$).

Taken together the results suggest that the theoretical variables specified by Coyne's interactional model did not make an independent contribution to the explanation of partner attitudes beyond that which could be explained by partner marital adjustment.

Taking Partner Marital Adjustment into Consideration: Testing Swann, Wenzlaff, et al.'s Self-Verification Theory

Predicting Partner Support/Tolerance

As shown in Table 13, the predictor variables were entered in the following order: Partner marital adjustment at step 1, partner appraisal at step 2, followed by patient self-verification at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 23.17, p < .05$), with an Adjusted R^2 value of .20, indicating that 20% of the variance was explained by this variable. Partner appraisal entered at step 2 resulted in an Adjusted R^2 value of .21, which does not represent a significant increase in the variance explained, ($F [3, 86] = 2.10, p > .05$). Patient self-verification entered at step 3 resulted in an Adjusted R^2 value of .21 and does not correspond to a significant increase in the variance explained. The Multiple R for the whole equation was .48, and the overall F was significant, ($F [3, 86] = 8.81, p < .05$).

Table 13

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Support/Tolerance from Swann's, Wenzlaff, et al.'s Theory of Self-Verification

Hierarchical Multiple Regression Analysis

Step Predictor	<u>B</u>	<u>β</u>	Overall Model			Incremental Change		
			Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>sr</u> ²	<u>F</u>
1. DAS-PA	.29	.46	.46	.21	.20	4.81**	.21	23.17**
2. PPA	.16	.16	.48	.23	.21	1.45	.02	2.10
3. SV	-.10	-.10	.48	.23	.21	-.94	.00	.89

Note.

*p < .05 **p < .01 (two-tailed tests)

1. DAS-PA = partner marital adjustment. 2. PPA = partner appraisal. 3. SV = patient self-verification.

Predicting Partner Expressed Emotion

As shown in Table 14, the predictor variables were entered in the following order: Partner marital adjustment at step 1, partner appraisal at step 2, followed by patient self-verification at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 16.57, p < .05$), with an Adjusted R^2 value of .15, indicating that 15% of the variance was explained by this variable. Partner appraisal entered at step 2 resulted in an Adjusted R^2 value of .16 which does not represent a significant increase in the variance explained, ($F [3, 86] = 2.13, p > .05$). Patient self-verification entered at step 3 did not make a unique contribution to the variance explained, ($F [3, 86] = .75, p > .05$). The Multiple R for the whole equation was .42, and the overall F was significant, ($F [3, 86] = 6.27, p < .05$).

Taken together the results suggest that partner marital adjustment is a more reliable predictor of partner attitudes than any of the variables proposed by Swann and colleagues. This finding is not surprising given that the theoretical variables of interest were not significant predictors of partner attitude prior to being subject to a more stringent test.

Taking Partner Marital Adjustment into Consideration: Testing Nolen-Hoeksema's Theory of Coping

Predicting Partner Support/Tolerance

As shown in Table 15, the predictor variables were entered in the following order: Partner marital adjustment at step 1, patient depressed mood at step 2, and partner ruminative and distractive coping as a block at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 23.17, p < .05$), with an Adjusted R^2 value of .20,

Table 14

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Expressed Emotion from Swann, Wenzlaff, et al.'s Theory of Self-Verification

Hierarchical Multiple Regression Analysis

Step Predictor	<u>B</u>	<u>β</u>	Overall Model			Incremental Change		
			Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>sr</u> ²	<u>F</u>
1. DAS-PA	-.15	-.40	.40	.16	.15	-4.07**	.16	16.57**
2. PPA	-.10	.07	.42	.18	.16	-1.46	.02	2.13
3. SV	-.02	-.04	.42	.18	.15	-.32	.00	.75

Note.

*p < .05 **p < .01 (two-tailed tests)

1. DAS-PA = partner marital adjustment. 2. PPA = partner appraisal. 3. SV = patient self-verification.

Table 15

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Support/Tolerance from Nolen-Hoeksema's Theory of Coping

Hierarchical Multiple Regression Analysis

Step Predictor	<u>B</u>	<u>β</u>	Overall Model			<u>t</u>	Incremental Change	
			Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²		<u>sr</u> ²	<u>F</u>
1. DAS-PA	.29	.45	.46	.21	.20	4.81**	.21	23.17**
2. DEP-P	.04	.09	.46	.21	.20	.82	.00	.68
3. RSQ-R	-.13	-.09	.47	.22	.19	-.83	.00	.46
RSQ-D	.15	.06				.65		

Note.

* $p < .05$ ** $p < .01$ (two-tailed tests)

1. DAS-PA = partner marital adjustment. 2. DEP-P = self-reported patient depressed mood. 3. RSQ-R = partner ruminative coping and RSQ-D = partner distractive coping.

indicating that 20% of the variance was explained by this variable. Patient depressed mood entered at step 2 was not a significant predictor, ($F [2, 87] = .68, p > .05$).

Moreover, partner ruminative and distractive coping entered as a block at step 3 was not significant, ($F [2, 85] = .46, p > .05$), and did not increase the variance explained. The Multiple R for the whole equation was .47, and the overall F was significant, ($F [4, 85] = 6.09, p < .05$).

Predicting Partner Expressed Emotion

As shown in Table 16, the predictor variables were entered in the following order: Partner marital adjustment at step 1, patient depressed mood at step 2, and partner ruminative and distractive coping as a block at step 3. Partner marital adjustment entered at step 1 was significant, ($F [1, 88] = 16.57, p < .05$), with an Adjusted R^2 value of .15, indicating that 15% of the variance was explained by this variable. Patient depressed mood entered at step 2 was not a significant predictor, ($F [2, 87] = .01, p > .05$). However, partner ruminative and distractive coping entered as a block at step 3 resulted in an Adjusted R^2 value of .20, indicating that the step improved the predictive power of the equation by 6%, ($F [4, 85] = 4.04, p < .05$). However, only ruminative coping, ($\beta = .31, SE = .10, p < .05$), and not distractive coping, ($\beta = -.02, SE = .14, ns$), made a unique contribution to the variance explained. The Multiple R for the whole equation was .48, and the overall F was significant, ($F [4, 85] = 6.41, p < .05$).

In sum, the results differed depending on the criterion variable used to test the model. In the case of partner support/tolerance, none of the theoretical variables made an independent contribution after partner marital adjustment was taken into account. However, when expressed emotion was the criterion variable, partner ruminative coping

Table 16

Taking Partner Marital Adjustment into Consideration: Prediction of Partner Expressed Emotion from Nolen-Hoeksema's Theory of Coping

Step Predictor	Overall Model					Incremental Change		
	<u>B</u>	<u>β</u>	Multiple <u>R</u>	<u>R</u> ²	Adj. <u>R</u> ²	<u>t</u>	<u>sr</u> ²	<u>F</u>
1. DAS-PA	-.12	-.30	.40	.16	.15	-4.07**	.16	16.57**
2. DEP-P	.01	.05	.40	.16	.14	.11	.00	.01
3. RSQ-R	.27	.31	.48	.23	.20	2.81**	.07	4.04*
RSQ-D	.04	-.02				-.26		

Note.

*p < .05 **p < .01 (two-tailed tests)

1. DAS-PA = partner marital adjustment. 2. DEP-P = self-reported patient depressed mood. 3. RSQ-R = partner ruminative coping and RSQ-D = partner distractive coping.

made an independent contribution, even after partner marital adjustment was taken into account.

DISCUSSION

This study examined the utility of three models in predicting partner attitudes toward depressed patients: Coyne's interactional model, Swann and colleagues' theory of self-verification and Nolen-Hoeksema's theory of coping. Each model was tested in a conventional manner against the null hypothesis of no relations between the predictors specified by these theories and two measures of partner attitude. Next, the models were subject to a more stringent test by examining whether the variables specified by the models contributed to the prediction of partner attitudes once the partner's marital adjustment was taken into account. Overall, each model obtained some support, but the strength of that support depended on which dependent variable was examined (partner support/tolerance or expressed emotion). Moreover, with the exception of Nolen-Hoeksema's theory of coping, none of the theoretical variables of interest in this study were significant predictors of partner attitudes once partner marital adjustment was taken into account. The consistent relation between marital adjustment on the one hand, and partner attitudes on the other, suggests the viability of more general models to explain partner attitudes toward depressed persons. Such models may be more parsimonious than the specific theoretical models that have come to characterize the study of interpersonal processes in depression. The substantive findings of the present study will be presented, followed by an examination of the features of the design that may affect the interpretations that can be made. The final section of the thesis will include a discussion of the implications of this research for theory, research, and clinical practice.

The Testing of the Models

Hypothesis #1: Coyne's Interactional Theory of Depression

Coyne theorized that depressed persons get rejected by others because they engage in excessive reassurance seeking and thereby induce negative affect in others. Based on Coyne's interactional model, it was hypothesized that patient reassurance seeking and partner depressed mood would be positively correlated, and both would be reliable predictors of partner attitudes. As a stricter test, partner marital adjustment was taken into account, in an effort to determine whether the theoretical variables contributed anything beyond what could be explained by a global index of partner marital adjustment.

It was found that patient reassurance seeking and partner depressed mood were unrelated. As noted earlier, in the case of enduring relationships, patients' initial tendencies to seek reassurance may have been effectively discouraged by repeated negative responses by partners. Thus negative affect in partners may either be a matter of simple emotional contagion (e.g., Coyne, Downey, & Boergers, 1992), or a negative relationship history.

In discussing the results obtained by hierarchical multiple regression analysis, partner support/tolerance and expressed emotion will be considered in turn. Both partner depressed mood and patient reassurance seeking were significant predictors of support/tolerance. These results are in keeping with previous findings obtained with a sample of distressed college students and their roommates (Joiner et al. 1992). However, when the model was subject to a stricter test by entering partner marital adjustment into the equation, partner depression and patient reassurance seeking were not significant predictors. These findings suggest that partner marital adjustment is a stronger indicator of partner attitudes than the theoretical variables

proposed by Coyne.

Similar results were obtained when expressed emotion was the dependent variable. Both patient reassurance seeking and partner depressed mood were significant predictors of expressed emotion. The theoretical variables explained 5% more of the variance when expressed emotion, and not support/tolerance was the criterion variable. However, after partner marital adjustment was taken into account, neither of the two theoretical variables added to the significance of the equation.

It is important to note that succorance did not prove to be a significant predictor variable and could therefore not be used interchangeably with the reassurance seeking scale in tests of Coyne's interactional theory. One explanation is that the succorance subscale measures a more general trait dependency, whereas the reassurance seeking scale measures specific behaviours that occur in the context of a depressive episode. An examination of the items included in the succorance subscale indicates that they are unlikely to adequately assess interpersonal behaviours that occur specifically in the context of a depressive episode. Further, it is plausible that patients seek reassurance from their partners when they are depressed, but this behaviour may fluctuate with the patient's mood.

Taken together, a test of Coyne's interactional theory showed that the variables specified by the model were associated with partner support/tolerance and expressed emotion. However, when a more stringent test of the model was conducted, partner marital adjustment was the stronger predictor and the theoretical variables no longer contributed to the variance explained.

Hypothesis #2: Swann, Wenzlaff, et al.'s Theory of Self-Verification

Swann and colleagues theorized that depressed persons get rejected by their partners because out of a desire to make their worlds predictable and controllable, they attempt to confirm

their negative self-views by actively seeking negative feedback. Based on self-verification theory, it was hypothesized that patients would have more negative views of themselves than their partners would have of them. It was further hypothesized that the discrepancy between patient and partner appraisal would predict negative partner attitudes, given that patients would engage in noxious behaviours (e.g., negative feedback seeking) in an effort to close the gap between self and other appraisal. It was specifically hypothesized that this would hold even after controlling for the partner's appraisal of the patient. As a stricter test, partner marital adjustment was taken into account, in an effort to determine whether the theoretical variables contributed anything beyond what could be explained by a global index of partner marital adjustment. In discussing Hypothesis #2, support/tolerance and expressed emotion will be considered in turn.

The data from the present study indicate that a discrepancy between patient and partner appraisal (self-verification scores) did not predict partner support/tolerance. In fact, the only significant variable was partner appraisal, indicating that the more negatively partners feel about their depressed partners, the less they are supportive and tolerant. These findings do not support Swann, Wenzlaff, et al.'s assumptions and suggest that it is not necessary to consider the discrepancy between patient and partner appraisal in predicting support/tolerance. Rather, it is more simply a question of how negative partners feel toward their patient-partners. Further, when marital adjustment was controlled for, partner appraisal was no longer significant, suggesting that partner marital adjustment is a better predictor of partner support/tolerance than any of the variables specified by self-verification theory.

Similar findings were obtained with partner expressed emotion as the criterion variable. Patient self-verification did not predict partner expressed emotion. The only variable that predicted expressed emotion was partner appraisal. However, once partner marital adjustment

was entered into the equation, partner appraisal did not contribute anything to the equation. These findings suggest that the crucial variable postulated by self-verification theorists, namely the discrepancy between self and other appraisal, did not account for partner attitudes in the present study.

Why did self-verification theory prove to be a poor explanation for partner attitudes? In Swann, Wenzlaff, et al.'s defense, a measure of negative feedback seeking was not included in the present study and it was therefore not possible to determine if patients engage in this behaviour, and whether or not it is related to partner attitudes. However, in testing Coyne's (1976a) theory, a measure of patient reassurance seeking was included, and it was found to be positively correlated with discrepancies between self and other appraisal: A greater discrepancy between patient and partner appraisal was associated with higher levels of reassurance seeking. This finding suggests that patients may be attempting to obtain evidence that their partners do not view them as negatively as they view themselves, and they may even be seeking to counter their own self-view with a positive response from the partner. This is a very different explanation than the one offered by Swann and colleagues who suggest that people try to resolve the discrepancy between their more negative self-view and their partner's appraisal by convincing their partners to adopt a more negative perception of them than the one currently held.

A second explanation has to do with measurement issues. Critics may attribute the present findings to a simple confound, namely, that the measures of partner attitude (support/tolerance measured by the RDOS, and expressed emotion measured by the LEE) overlap with partner appraisal (measured by the PPA). Examination of the content of these measures, however, suggests it is not a simple matter of overlap. While the PPA measures

partners' appraisal of patients on 10 self-views central to self worth (e.g., intellectual capability, physical attractiveness, leadership ability, emotional stability), the support/tolerance and expressed emotion scales assess the partners' tolerance, supportiveness, emotional response, and attitude toward illness. Thus, these scales measure different constructs, and the findings cannot be reduced to confounding measures. Were Swann, Wenzlaff, et al.'s hypothesis valid, it is conceivable that the differences in the two measures would have allowed us to detect that partners do not want to be around people who try to convince them to adopt a more negative view of them in order to reduce the discrepancy between self and other appraisal.

A third explanation for the null findings is that self-verification processes may be more meaningful in the early stages of a relationship, and become less relevant once the partners have established their identities with each other. Given that the couples in the present study had been together for an average of 16 years, each person's perceptions of the other are by now well established and perhaps no longer an issue of concern. In this sense, self-verification theory may be more accurately coined -- a model of testing and discovery -- than a theory of the interpersonal processes that characterize enduring relationships.

Self-verification theory has been tested primarily with budding relationships, or fleeting contacts with the exception of one study of married couples (Swann, Hixon, et al. 1992). In their study of couples, Swann and his colleagues observed that the more participants believed that their partners' appraisals made them feel that they really knew themselves, the more committed they were to the relationship. From these findings, the authors inferred that because depressed people view themselves negatively, they are vulnerable to rejection because they actively seek such a response. While it may be true that there is a tendency for people to prefer the company of those who perceive them in the same manner in which they perceive themselves, the data here

do not support the assumption that attempts to close the gap between self and other appraisal culminates in negative partner attitudes. While depressed people may be wary of placing themselves in situations where they have to preserve an opinion or perception of themselves that they are not confident they can maintain, this does not mean that they actively contribute to the negativity that they encounter.

Given that self-verification theory has been tested primarily in fleeting relationships, it remains unknown what the behavioural correlates of a high or low discrepancy between self and other appraisal would be like in an enduring relationship. In the present study, there was a three point discrepancy between patients' appraisals of themselves, and partners' appraisals of patients. Although this difference was statistically significant, it is not clear what this means in terms of partners' attitudes toward their depressed partners.

Taken together, the results obtained in this study suggest that it is not the discrepancy between patient and partner appraisal that accounts for negative partner attitudes. Rather, negative attitudes by partners is more simply explained by how negative partners feel toward their depressed partners. The null findings obtained in this study raise the issue of how discrepancies between patient and partner appraisal are manifest in enduring relationships. It is plausible that self-verification theory is a better explanation of the processes that take place in the early stages of a relationship, before the partners are fully familiar with the identity of the other.

Hypothesis #3: Nolen-Hoeksema's Theory of Coping

Hypothesis #3 states that if Nolen-Hoeksema's theory of coping is a useful model in explaining partner attitudes toward depressed patients, then partner support/tolerance and expressed emotion would be predicted by patients' depressed mood and partners' coping style.

As a stricter test, partner marital adjustment was taken into account, in an effort to determine whether the theoretical variables contributed anything beyond what could be explained by a more global index of partner marital adjustment. In discussing Hypothesis #3, partner support/tolerance and expressed emotion will be considered in turn. Unlike Coyne and Swann, Wenzlaff, et al.'s model, Nolen-Hoeksema's theory of coping has not been presented as a way of understanding partners responses to depressed persons. However, the models of Coyne and Swann, Wenzlaff, et al. provide an underdeveloped view of the partner's contribution to interactional processes involving depressed persons. Nolen-Hoeksema's model seemed a promising way of elaborating on this contribution. Furthermore, it was argued that both Coyne and Swann and colleagues neglect the issue of gender differences in depression. Nolen-Hoeksema's theory of coping provides an explanation for why women are twice as likely as men to be depressed.

None of the theoretically relevant variables from Nolen-Hoeksema's theory of coping proved to be significant predictors of partner support/tolerance. However, when expressed emotion was the dependent variable, partner ruminative coping was significant. Moreover, after marital adjustment was taken into account, ruminative coping continued to make an independent contribution. Further studies are needed to explain the full range of partner characteristics contributing to their negative attitudes toward the depressed patient. A ruminative coping style is a promising candidate for further study, but Nolen-Hoeksema's coping variables are a small subset of partner personality and stress and coping variables that might be relevant.

It was initially hypothesized that female partners would report higher levels of ruminative coping than male partners. It was further expected that if the patient was male, he would be more likely to be subject to negativity from his partner than if the patient was female. In

addition, distractive coping was found to be unrelated to partner attitudes. Further, in testing Nolen-Hoeksema's model, gender of the patient did not predict partner attitudes. Thus, although some of the variables identified by Nolen-Hoeksema's theory are sensitive to gender differences, the theory as such does not provide an explanation for previous findings where women showed a greater intolerance of negative affect in men than vice versa.

Taken together, the testing of the hypotheses revealed that Swann, Wenzlaff, et al.'s theory of self-verification was the least effective model in predicting negative partner attitudes. Self-verification theory may be more directly relevant to the early stages of a relationship, when people are testing and discovering the other's identity, than it is to enduring relationships where processes of self-verification may no longer be operative. The predictive utility of Coyne's interactional model was supported. However, once partner marital adjustment was included amongst the predictor variables, the theoretical variables were no longer significant. Thus, partner marital adjustment appears to be the more reliable index of partner attitudes. Nolen-Hoeksema's theory of coping proved of little use in predicting support/tolerance, but ruminative coping was a significant predictor of expressed emotion. The inclusion of partner marital adjustment did not change the results, providing further evidence for the utility of considering how partners cope with the depressive symptoms of patients when attempting to explain negative partner attitudes.

It was presumed at the outset of the study, that in the case of all three models, expressed emotion would be a more appropriate dependent variable than support/tolerance. Indeed, with the exception of Swann, Wenzlaff, et al.'s model, the theoretical variables proved better predictors of expressed emotion than they were of support and tolerance. This may be because the LEE scale, used to measure partner expressed emotion, was originally developed to test

interpersonal processes in enduring relationships and not in brief encounters. It would seem that the LEE circumvented some problems associated with the RDOS, by being better adapted to enduring relationships and by phrasing the items in such a way as to allow partners an opportunity to express their discontent. Having said this, it is important to note that the differences in findings were modest. One way of understanding these results is that although the LEE circumvented some problems associated with the RDOS, it was originally developed for schizophrenia, not depression, and it may therefore not be as relevant. The LEE may not be as applicable to the circumstances of partners of depressed outpatients as it is to those of schizophrenic patients.

Partner Marital Adjustment

Why was partner marital adjustment a more reliable predictor than the theoretical variables of interest in this study? One relevant consideration is that the measure of marital adjustment used in this study is a global summary of partners' evaluation of the relationship and of their partner. The measure of marital adjustment used in this study, the Dyadic Adjustment Scale (DAS; Spanier, 1976), is a highly heterogeneous set of 32 items which tap diverse aspects of the respondents attitude toward the marriage and the partner, sources of disagreement, and shared interests. The attitudes toward the patient assessed in the current study can be viewed as simply facets of this complex set of partner attitudes toward the relationship. However, it should be noted that there was a high degree of consensus between partners and patients as to their level of marital adjustment. This finding suggests that marital adjustment is not merely a matter of subjective evaluation by the partner. Rather, the couple views the marital relationship in a similar manner.

A second explanation for why marital adjustment is a better predictor of partner attitudes

is that marital adjustment is a highly stable variable (Gottman, 1979) that may contribute both to the patient becoming depressed and to the partner's attitude when the patient is depressed. Consistent with this notion, Brown and Harris (1978) have shown that the quality of close relationships is a stable vulnerability factor that contributes to the onset of depression when a major life event occurs. Also, Leff and Vaughn (1985) have shown that much of the criticism directed toward depressed patients by partners refers to preexisting dissatisfactions with the relationship. Thus the observed level of marital adjustment in the present study may have predated the onset of depression and shaped partners' responses once the onset occurred.

Finally, while the results suggest that partner marital adjustment was a stronger predictor of partner attitudes than the theoretical variables of interest in this study, it is important to exert caution in interpreting these findings. One interpretation is that interpersonal theorists may be postulating specific processes in depression that exceed the capabilities of our crude techniques for measuring them. Admittedly, the results would have been more clear-cut if the theoretical variables had held up even after controlling for partner marital adjustment. However, it is conceivable that the processes that led to negative partner attitudes also led to their marital maladjustment. Because both negative partner attitudes and marital maladjustment may result from the interpersonal processes identified by these theories, it is perhaps an unfair test of the models to require that the variables of interest predict partner attitudes when marital maladjustment has been taken into account.

Gender Differences in Key Variables

The gender of the patient did not prove to be a significant predictor of partner attitudes in the present study. These results may be seen as surprising given that depressed male college students are more likely to be rejected by their interaction partners than distressed female college

students. However, past studies have examined neither clinical depression nor enduring relationships (e.g., Hammen & Peters, 1977; Joiner et al. 1992). The possibility remains that even if depressed men and women are equally likely to be rejected by their partners, different processes are involved. In general, interpersonal theories of depression have given too little attention to the gender differences in depression, and to how men and women involve themselves in close relationships. It is plausible to think that by recognizing gender differences and acknowledging that intimate relationships are generally with partners of the opposite sex, more complex interpersonal formulations of depression will emerge.

Despite the fact that male and female partners did not differ in their response to depressed patients, some gender differences were found. Male patients reported higher levels of distress than female patients. These findings are consistent with those reported by others (e.g., Johnson & Jacob, 1997). One explanation is that men who are in treatment are more depressed than women in treatment because men have a higher threshold for seeking help. The finding that male partners were also more distressed than female partners suggests that depression in a woman may be more indicative of a troubled relationship. The finding that male partners were more likely to distract than female partners is consistent with Nolen-Hoeksema's findings (Nolen-Hoeksema, 1991, 1991a), but it could also be due to the higher levels of distress in the male partners than in the female partners. In other words, the males were more distressed and therefore more likely to obtain higher scores on a measure of coping with depression. Overall, the few gender differences found were highly plausible, but interpretation of them is limited by the paucity of previous studies examining gender differences.

Limitations of the Study

This section will focus on the following issues affecting the generalizability of the findings: The use of a clinical sample and the difficulties it poses including selection biases; the limitations of a cross-sectional design; the difficulties associated with the study of enduring relationships; and the lack of standardized measures.

Selection Biases Inherent in the Utilization of a Clinical Sample

One of the strengths of the present study is that it involved a clinical sample in which the diagnosis was ascertained by clinical structured interview. Much of the work in this area is focused on college students selected on the basis of their scores on self-report measures of distress. Having said this, there are some difficulties associated with the study of a clinical population. There is potential for selection biases when studying samples of depressed persons drawn from clinical settings. As few as one third of all persons suffering from clinical depression actually seek treatment (Shapiro et al., 1984). Many of the depressed persons who seek treatment may do so either because of their marital problems rather than their depression, or because their depression has adversely affected their marriage. In either case, the relationship between depression and marital functioning may be different than what would be found in the larger population of married depressed persons in the community. How this affects the results of the present study is not clear. On the one hand, it could exaggerate the effects because a sample in which the marriages are particularly deteriorated was selected, and the partners are particularly negative in their attitudes. On the other hand, the restricted range of variables within such a clinical sample could also limit the size of relationships that could be found among them.

An additional set of potential selection biases are inherent in the study of partners of

depressed persons. Specifically, depressed persons whose partners had the most negative attitudes may have had the greatest difficulty enlisting their partners in this study. For their part, partners of depressed persons are often quite sensitive to any suggestion that they are the cause or are otherwise implicated in their partners' depression (Coyne, 1986), and they may be resistant to involvement in any research that carries this implication. Others have noted that studies requiring more than one partner or more than one family member to complete self-report measures may be biased in selecting only the more cohesive and satisfied relationships (Speer & Zold, 1971). Unfortunately, researchers do not typically report data concerning the effectiveness of recruitment procedures, nor do they report on the characteristics of partners who could not be enlisted in the research. In the present study, approximately 15% of patients declined participation for reasons related to the partner. Because the partners were not interviewed, the characteristics of these individuals are unknown. In the absence of such data, it remains a reasonable assumption that the characterization of the marriages of depressed persons in this study is a more benign one than would be obtained if such selection biases were not operative.

If this bias exists, it represents a sampling error, but one that is difficult to avoid. However, there may be an even more fundamental selection bias in that in order to be available for study, a couple has had to remain intact in the face of depression and the marital problems that are associated with it. Partners whose attitudes are so negative that the couple became divorced are excluded. There is ample evidence that depression erodes marital quality (Dew & Bromet, 1991), and some evidence that it leads to divorce (Briscoe & Smith, 1973). The processes these interpersonal theories predict may in fact occur, but if they have culminated in divorce, the couple is no longer available for study.

interpersonal theories predict may in fact occur, but if they have culminated in divorce, the couple is no longer available for study.

An additional problem with studying interpersonal theories of depression with a clinical sample is that little data are available concerning measures of theoretically relevant variables. It is therefore difficult to determine whether the measures functioned as intended in this population. A null finding could represent either an invalid hypothesis or an invalid test of a hypothesis with an inappropriate measure. Fortunately, normative data were available for some of the measures notably mood and marital adjustment. This facilitates characterization of the present sample in terms of past studies of depression or marital relationships, even if there are no previous tests of the specific theories with a sample of clinically depressed married persons. Thus, the present study represents a first effort toward understanding how interpersonal theories of depression fare when they are tested on a clinical sample of married depressed patients.

Limitations of a Cross-Sectional Design

A further limitation of the study is that it involved a cross-sectional design and though it may demonstrate the results of some key interpersonal processes associated with depression, it does not permit a capturing of these processes as they change over time. At best, it offers a snapshot of what is occurring at any given moment. At worst, interpersonal processes become crystallized over time and are undetected by way of a cross-sectional design. For example, an accumulation of negative interaction experiences may result in avoidance between partners that would obscure some of the theoretical relationships. Furthermore, what is observed in a cross-sectional study may be the product of repeated negative interactions, confounded by the history of such interactions that partners experienced with each other. In other words, the findings could be an effect of pre-existing conflict or negative attitudes that depressed persons and their partners

have toward each other. Unfortunately, such issues cannot be resolved by cross-sectional data, thereby limiting the extent to which the unique role of depression in the deterioration of marital relationships and vice versa can be understood.

A related issue concerns the direction of effects. Specifically, the interpersonal models that were tested in this research assume that the relations between variables are unidirectional (i.e. support/tolerance is predicted by aversive behaviours exhibited by depressed patients). Yet the proponents of the theories are describing what appears to be mutually causative processes. For example, partner support/tolerance may have precipitated reassurance seeking by the patient which was used to predict partner support/tolerance in the present study. A similar example pertains to the influence of partner marital adjustment. In this study, partner marital adjustment accounted for a considerable portion of the variance, giving the appearance that the theoretical variables were unimportant. However, as mentioned previously, it is plausible that the theoretically relevant variables can explain partner support/tolerance, but also influence marital adjustment. Unfortunately, these questions cannot be resolved by way of cross-sectional design, and as a result, the direction of the relations between the variables remains unknown.

One frequently named solution to the problems associated with cross-sectional data is to employ a longitudinal design. Yet, a longitudinal design is not a panacea and in the study of interpersonal processes in depression, it may not prove effective. More specifically, it is not known at what point in time interpersonal processes contribute to the decline of a relationship. This is particularly enigmatic in the case of marital relationships that have been ongoing for years. Conceivably, the temporal parameters of these interpersonal processes can be anywhere from immediate (i.e., the initial stages of the relationship) to something that occurs over time. Thus, before undertaking the enormous costs associated with a longitudinal design, researchers

need to be acknowledge the fact that the temporal parameters of these interpersonal processes are unknown, and the appropriate points of observation remain unidentified. In all likelihood, some of these processes dissipate over time and careful consideration is needed to identify a method that will allow these processes to be captured by the research design.

The Utilization of Self-Report Data

This research relied on self-report as opposed to observational data to study the interpersonal processes occurring in the marriages of depressed persons. While the strategy used in the present study has the virtue of providing utilizable patient and partner data, it may also miss processes that would be apparent to an observer even if missed by questionnaires. For example, there may not be correspondence between the reporting of high or low expressed emotion (EE) and what would be observed in an actual sample of behaviour. Hooley (1986) investigated the interactional correlates of high and low levels of expressed emotion in a sample of depressed patients and their partners. She reported that compared to low-EE partners, high-EE partners were more negative and less positive toward their depressed partners, both verbally and nonverbally, reflecting concurrent validity. However, she also observed that patients interacting with high-EE partners were not significantly more negative, either verbally or nonverbally. In fact, high levels of partner expressed emotion were associated with high levels of neutral verbal and nonverbal behaviour in patients. Thus, it appears that the behavioural correlates do not always concur with self-report data. This is an important consideration in the designing of treatment protocols where the objective is to identify and target specific behaviours that characterize couples in which one partner is depressed.

The Lack of Standardized Measures

In order to fully understand the substantive findings obtained for each of the three

models, a comment about the difference between the two dependent measures employed in this research is required. Recall that elevated scores on the support/tolerance scale indicate a supportive and tolerant attitude whereas low scores indicate lack of support and tolerance. Having said this, the items included in the scale do not specify what makes it difficult for the partner to be supportive and tolerant. Specifically, one cannot determine from the items, whether the difficulty lies with the ability of the partner (i.e., unable to show empathy), or whether it stems from the patient (i.e., lack of receptivity). In other words, is it the partner that has a hard time understanding in general, or the patient who is confusing? This crucial difference is not explored by this scale.

A second weakness inherent to the support/tolerance scale is that it has only been validated on college students who were asked to evaluate the extent to which they are supportive and tolerant of their roommates. Students who admit to being unsupportive of their roommates do not have to worry about violating any social norms. However, because the expectations are much greater in marriage, partners who endorse items suggesting intolerance and lack of support must be willing to admit to personal failures in their relationship (i.e., "It is hard for me to really care about my partner's problems"). An examination of the distribution of scores for the support/tolerance scale in this study, showed that the majority of the partners endorsed the items in such a way as to appear relatively supportive and tolerant. Thus, once again, there is evidence suggesting that the findings reported in this study may be a more benign representation of partner reactions than what actually takes place between partners.

The second dependent variable used in this study was expressed emotion. The LEE scale was originally designed for utilization with a schizophrenic population and their families. In this sense, the instrument is already adapted to the study of enduring relationships. Items such as "I

don't know how to handle his/her feelings when he/she is not feeling well", allow the partner to acknowledge a degree of negative attitude toward the patient that is less harsh and self-incriminating than the items on the support/tolerance scale. Furthermore, the scale taps some of the difficulties associated with living with an unwell person whose partners are likely to depend upon (i.e., "I don't panic when things start going wrong"). Thus, the expressed emotion scale differs from the support/tolerance scale in that it assesses some of the different expectations and obligations that go with living with a partner as opposed to a roommate.

The comparison of measures calls to our attention that the different scales used by researchers may not necessarily assess identical processes. One of the problems in this area of research is that theorists have yet to settle upon and employ standardized measures across studies. Presently, there is no agreement upon relevant measures, even though intuitively, the concepts seem related. In a previous section, it was pointed out that in the study of responses to depressed persons, some researchers examine expressed emotion, while others focus on rejection, rendering it difficult to compare the findings. Moreover, within camps, researchers employ different measures and methodologies. It is infrequent that researchers will use the same measure or comparable populations to test a same construct. For instance, although researchers are familiar with how measures such as the support/tolerance scale perform in laboratory studies, the utility of this measure in the study of enduring relationships is unknown. Thus, researchers have yet to establish how the various measures converge and differ from each other before conclusive statements regarding the efficacy of these models in relation to each other can be made. One solution would be to incorporate a behavioural checklist or behavioural observation data in studies with the various dependent variables used by researchers. This may help to clarify what each measure is assessing and how they differ from each other.

In summary, an examination of the basic features of the present study sheds light on some of the limitations of this research. Although the field is due for tests of interpersonal theories on clinical samples of married persons, the disadvantage to being the first to do so is that there is little data by which to compare the findings. Further, some of the inherent biases associated with clinical research must be acknowledged. The use of a cross-sectional design is adequate, yet this method offers little insight into the changes that take place in interpersonal processes over time. With regard to the use of self-report data, it is important to recognize that it fails to provide information regarding the behavioural correlates of the phenomena under study. Finally, it is important to bear in mind that the lack of availability of standardized measures to assess partner attitudes toward depressed patients renders it difficult to make comparisons between the proposed models.

Implications for Theory, Research, and Clinical Practice

Theoretical implications

The strength of a global measure of marital adjustment in predicting partner attitudes raises issues about whether it is better to focus on more global explanations of partner attitudes rather than to postulate very specific interpersonal processes as these models have. Certainly, the burden is on interpersonal theorists to explain how their models go beyond the simple observation that the marriages of depressed persons are distressed and may well have been so, before the onset of depression. Another issue is that these models seem more adapted to what can be observed in laboratory interactions between strangers than to processes occurring within long-term relationships. The limited success of these models in the present study may reflect

difficulties translating them into a set of hypotheses about enduring relationships and finding appropriate measures. Concepts like support/tolerance may refer to very different behaviours in an enduring relationship than in fleeting contacts between strangers. Furthermore, some of these interpersonal processes may prove self-effacing over time in that a lack of support or tolerance may inhibit reassurance seeking and the traces of this process having occurred will not be obvious in subsequent self-report or observed interactions.

Future Research

The results obtained from testing interpersonal theories of depression in this thesis point to interesting directions for future research. First, it is preferable that researchers employ a battery of measures so that presumed similarities and differences among their constructs can be demonstrated. The field is likely to benefit from a better understanding of what the various instruments actually measure and how they are related to each other. Furthermore, because most of the data available at this time are derived from self-report, observational data is needed before making definitive statements about the behavioural correlates of some of the interpersonal processes that were discussed in this thesis. Additionally, there is a need to develop new measures that are more adapted to the study of long-term relationships as opposed to fleeting contacts among strangers.

Second, the field is due for tests of interpersonal models in natural as opposed to laboratory settings. Specifically, in the laboratory, it is difficult to determine what processes the models are referring to, and what these processes have to do with enduring relationships. Thus, I recommend that the construction of interpersonal theories of depression emerge from an understanding of enduring relationships. One promising alternative to laboratory-based studies is the use of daily-diary methodology that captures fluctuations in patient and partner mood and

coping styles. In general, future research should give greater attention to how depression, and personal and marital problems are intertwined, and how the patterning of this evolves over time.

Third, there are immense difficulties in disentangling causal influences in a couple that is studied after it has accumulated a history of both marital difficulties and depression. Perhaps studies are needed of persons judged to be at risk for depression on the basis of earlier experience or a particular recent life event. However, such studies are likely to be costly and inefficient, in that most persons who are so judged to be at risk will not develop the disorder. With regard to longitudinal studies, it is important to first identify the relevant temporal patterning of these interpersonal processes before undertaking such a costly research design. Once again, daily-diary methodology may prove useful in overcoming some of these obstacles.

Finally, consideration of the character of the involvement of depressed persons' partners in their marriages sets a new research agenda, the results of which could have important social, theoretical, and therapeutic implications. Even if the behaviour of partners could largely be explained as a reaction to living with a depressed partner, it is conceivable that understanding and modifying partner behaviours would have important implications for the resolution of the depressive episode, reduction of residual difficulties, and perhaps even the prevention of future episodes.

Clinical Implications

What implications do the present results have for the treatment of married depressed persons? Most broadly speaking, they suggest that partners have negative reactions to depressed patients, and both patient and partner have a contribution to these reactions. In recent years, researchers and clinicians have demonstrated that couples therapy is effective in the treatment of depression as an alternative to individual approaches when it is applied to couples who are

maritally discordant and have a depressed member (e.g., Beach & O'Leary, 1992; Jacobson, Dobson, Fruzzetti, Schmalings, & Salusky, 1991). Couples therapy has been shown to be particularly effective for couples whose marital problems preceded the current depressive episode, and for couples who remain emotionally engaged despite their marital difficulties (Beach, Whisman, & O'Leary, 1994). Conversely, individual approaches appear to be more effective when marital problems are reported to have started only after the onset of the depressive episode. Although partner assisted interventions for depression are promising, success or failure of treatment is measured in terms of patient outcomes. It is important to give careful consideration to the specific needs of partners as well, particularly since many partners find themselves living with a depressed person over an extended period of time. The specific needs of partners can be directly addressed in educational groups, where it may also be easier to enlist them.

Negative partner attitudes can potentially be reduced if patients can recognize how they upset their partners (i.e., behaviours that stem from their depressed mood), and if the partners can learn to better manage the symptoms displayed by the patient. Specifically, both patients and partners are likely to benefit from educational groups that focus on the impact of depression on marital interactions. Previous research has shown that psychoeducational groups providing family members with information about depression and how best to cope with it are useful in increasing both the patient's and the partner's sense of competency in dealing with the illness (Anderson et al. 1986). Specific interventions can be directed toward patients and partners. For example, patients are likely to benefit from a better understanding of typical partner reactions to depression. The ambivalent behaviour of the partner can be explained as their tendency to oscillate between a) feeling sympathetic toward their patient-partner, and b) feeling anxious to

see their partner assume a greater portion of the responsibility for their disorder. One solution is to increase patients' sense of control over their illness. It has been argued in the literature that the medical model operative in outpatient psychiatry services, views mental disorders as illnesses rather than as problems in social learning. Consequently, patients become dependent on mental health professionals (Morrison, Bushnell, Hanson, Fentiman, & Holdridge-Crane, 1977), and do not learn to be resourceful in solving their own problems. As was mentioned in an earlier section of this thesis, partners come to feel frustrated with patients for shirking responsibility for their difficulties. Thus, if patients feel increasingly apt at resolving their own difficulties, they will be less inclined to burden their partners with quests for assistance. Moreover, if patients are familiar with typical partner reactions, perhaps they will be less inclined to personalize these reactions and to be preoccupied by their partners' negative attitudes and responses.

Likewise, clinical interventions can be directed toward the partner. For example, given that partners typically report high levels of distress, it may be useful if they were to monitor their mood and marital adjustment. The goal would be to provide them with coping strategies that will prevent them from becoming overly involved in the patient's illness to the point where the partners become resentful and unhelpful. In their paper on models of helping and coping, Brickman and his colleagues (Brickman, et al. 1982) discuss some of the dilemmas of helping, and argue in favour of a compensatory model whereby the individual, in this case the patient, is not held responsible for his/her problem, but is responsible for solutions. The role of the partner is thus to assist, but not to assume responsibility for the solution, because it may threaten the patient's status and the partner's resources, while also jeopardizing the solidarity of their relationship (Brickman, & Bulman, 1977). While these efforts may prove useful, some partners will be reluctant to participate in the treatment from fear that they will be blamed for the

patient's illness. One solution is to clarify that partners do not necessarily have to be part of the problem to be part of the solution, and to allow partners to participate in some sessions, without having to commit themselves to a full treatment protocol.

For some couples, psychoeducational groups may be most effective when used in combination with marital interventions, particularly with couples who report more severe marital maladjustment. However, for couples who do not report marital distress, psychoeducation may prove sufficient in warding off a decline in marital adjustment, as patients and partners become increasingly apt at managing the depressive symptoms displayed by the patient.

One line of inquiry has shown that the relatives of depressed persons carry specific burdens as a result of living with a depressed patient (Coyne et al. 1987). This finding was recently replicated in a study of the partners of depressed persons (Benazon & Coyne, 1996). The most frequently endorsed items were those that referred to the partner's attitudes or emotional reactions to the patient's behaviour, including being ashamed of the patient, being upset by the patient's lack of interest in social life, and being worried about future episodes (e.g., "Has your partner's feelings of worthlessness or being down on him/herself been upsetting to you?"). Partners may therefore benefit from cognitive therapies that assist people in distancing themselves from recurrent troubling thoughts. Those who are successful in distancing themselves from the patient's depression, may experience a decrease in their sense of burden.

Thus, clinical interventions can be developed to target both patient and partner behaviours such that no one partner is held entirely responsible for the impact of depression on the marital relationship. Moreover, a careful consideration of the roles played by each partner, represents a commitment to a truly interactional perspective on depression and its psychosocial sequelae.

Footnotes

¹ The analyses were first carried out excluding the seven couples in which both partners were depressed. The results were then compared with analyses that included all couples. Because the results did not differ, the analyses reported included all couples even if both partners were depressed.

² A t -test comparing in-episode and out-of-episode patients on a measure of marital adjustment was also conducted, revealing no significant difference between the two groups. This finding is presented in Table 2.

³ In the in-episode group, 37% of patients, and 30% of partners reported levels of marital distress below the cut-off of 100. In the out-of-episode group, 22% of patients and 28% of partners reported levels of distress below the cut-off of 100.

⁴ Patient and partner marital adjustment scores were highly correlated, $t(90) = .68$, $p < .05$, but not significantly different from each other, indicating that patients and partners perceive their marital relationship similarly. Moreover, this finding suggests that the complaints of depressed persons are not simply a product of cognitive distortion, but arise in the context of conflictful and unsupportive relationships.

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APPENDIX

Recruitment Scripts, Consent Forms, Questionnaires

To be used by physicians and therapists in approaching clients about their participation in this study:

A study is currently being conducted by some researchers working at the University of Ottawa. They are interested in exploring the nature of marital relationships, in which one or both members of the couple are experiencing emotional distress. They are in need of men and women who are either married or living with their partners, and the participation of your spouse is also needed. Participation in this study could involve two components. First, both you and your partner would be interviewed, individually, by a psychology intern about how you feel about various areas of your life. Based on the interviews you may be requested to participate in the next component of the study. In the second component, the researcher would distribute similar questionnaire packages to you and your spouse, which would include questions pertaining to how you feel about yourself, your partner, and your marital relationship. Because the researchers are interested in the perspective of each spouse, you would be asked to complete the questionnaires independently and not to consult your partner until after you have returned the questionnaires to the investigator.

It is important for you to recognize that your decision to participate in this study is entirely up to you, and will in no way affect the psychological services you are currently receiving. Your responses will be kept in strict confidence. Only the researchers will have access to your answers and your name will in no way be connected to the published results of this study. If you are interested in participating in this study, or would like more information about the research I will pass on your name and telephone number to Nili Benazon, the primary investigator.

Consent For Participants

Title of the Project: An Evaluation of Three Models of Interpersonal Functioning

Principal Investigator: Nili Benazon, Ph.D., Candidate

Purpose of the Research: I am volunteering to participate in a research study that is looking at how people's moods can impact on their marital relationships. I have been administered a telephone interview to which I gave oral consent. I am now agreeable to completing a set of questionnaires. I understand that approximately 50 couples are participating in this study.

Procedure: If I agree to participate in the study, I am asked to sign the two consent forms and fill out the enclosed questionnaires and return them along with one copy of the consent form in the stamped envelope that is provided.

Risks and Discomforts: The only potential risks specific to this study are social embarrassment and/or loss of privacy. I am encouraged to alert the investigator if I experience any negative effects as a result of my participation in the study. At any time I can decline to answer a question or even if I think that it is an invasion of privacy or feel that I would be embarrassed by the questions.

To help minimize the probability of embarrassment or loss of privacy, the following measures are taken:

1. Identifying information (i.e., names, addresses, telephone numbers) are removed from the record prior to coding data and kept in locked file cabinets.
2. My records are identified only by study number, which will be the only link between the record and the subject's identification.
3. Only the study committee and interviews have access to identifying information.
4. Analysis and publication of data will be performed by grouping the various characteristics of interest to make it impossible to identify specific individuals.

Alternatives to Participation: I understand that my participation in this study is completely voluntary and will not affect the services I or my partner may currently be receiving or may receive in the future.

Confidentiality: The information gathered as part of this study will be stored in a research file identified only by a code number. The key connecting my name to my code number will be stored in a separate, secure location. Information for scientific publications will not contain identifying information.

Request for more information: I understand that I may ask more questions about this study at any time. Nili Benazon (313-998-7719) will be available to answer questions as they arise. If I wish to discuss this study with a person who is not directly involved, I may contact a Patient Relations Representative (313-763-5456) who will answer questions concerning my rights as a research subject and/or as a patient at the University of Michigan. I will be given a copy of this consent form to keep.

Refusal or Withdrawal of Participation: I understand that I may refuse to participate or withdraw from this study at any time without prejudice to my present or future care at the University of Michigan.

Document of Consent: One copy of this consent form will be kept in a research folder and a second copy will be given to me to keep.

Consent of Subject:

I confirm that Nili Benazon has explained to me the purpose of this research, the procedures required and the possible risks and benefits. I have read and understand this consent form. Therefore, I agree to give my consent to participate as a subject in this research.

Participant

Date

Date of Birth

Witness

Date

Oral consent to be obtained before administering diagnostic interviews

We are interested in studying how certain kinds of emotional distress can affect marital relations. Thus we would like to interview you about how you are currently feeling. The interview will take approximately 30-45 minutes of your time. You have the right to refrain from answering any questions with which you are uncomfortable, and may terminate the interview at any time. Do you wish to give consent for this procedure?

Instructions for Completing the Questionnaire Package

Before you begin, I ask that you carefully read the consent form attached to the questionnaire package. If you agree to the procedures outlined in the consent form, please sign both copies: One copy is to be kept for our purposes and one copy is to be sent back to the investigator along with the completed questionnaires. It should not take you more than about 30-45 minutes to complete all the questionnaires in the package. Specific instructions are provided for each questionnaire. When answering the questions, I ask that you try to be as accurate as possible. There are no right or wrong answers, I am simply interested in your honest opinions. Although I encourage you to answer all the items on the questionnaires, you are certainly not obliged to answer any questions that you feel uncomfortable responding to. Please look over your questionnaire package before mailing them in case you overlooked any questions. I ask that you complete the questionnaires at your earliest convenience and that you return them in the stamped envelope that has been provided. If you experience any disturbing thoughts or emotions while completing the questionnaires, I strongly encourage you to discuss them with me.

I would like to extend my appreciation for your cooperation in this research project.

Nili Benazon, Ph.D., Candidate
University of Ottawa
(313) 998-7719

Descriptive Data Sheet

Age _____

Gender: male _____ female _____

What racial group do you most identify with?

White _____ SE Asian _____ Other (please specify): _____

Black _____ Native Indian _____

Oriental _____ Middle Eastern _____

What religion do you most identify with?

Catholic _____ Hindu _____

Protestant _____ Muslim _____

Jewish _____ Other: _____

Buddhist _____ None _____

Relationship Status: married _____ common-law _____

How long have you and your partner been living together? _____

How many children do you have? _____

Are you currently employed? Yes _____ No _____

Please indicate the highest educational degree you obtained:

high school _____ college _____ B.A. (or equivalent) _____

Master's degree (or equivalent) _____ Ph.D. (or equivalent) _____

What is your annual income as a couple? (in dollars) _____

Do You Take Medications? (if yes, please list them)

Do You Have Any Medical Problems? (if yes, please list them)

Have You Excessively Used Drugs or Alcohol in the Last Month?

Yes _____ No _____

Self-Perceptions Questionnaire (SAQ)

This questionnaire has to do with your attitudes about some of your activities and abilities. For the first 10 items below, you should rate yourself relative to other persons your own age by using the following scale:

A	B	C	D	E	F	G	H	I	J
bottom	lower	lower	lower	lower	upper	upper	upper	upper	top
5%	10%	20%	30%	50%	50%	30%	20%	10%	5%

An example of the way the scale works is as follows: if one of the traits that follows were "height", a woman who is just below the average in height would choose "E" for this question, whereas a woman who is taller than 80% (but not taller than 90%) would mark "H", indicating that she is in the top 20% on this dimension. Please indicate your response on the space that is provided.

- _____ 1. Intellectual / academic ability
- _____ 2. Social skills / social competence
- _____ 3. Artistic and / or musical ability
- _____ 4. Competency or skill at sports
- _____ 5. Physical attractiveness
- _____ 6. Leadership ability
- _____ 7. Common sense
- _____ 8. Emotional stability
- _____ 9. Luck
- _____ 10. Discipline

Partner Appraisal (PPA)

Using the same scale defined above, rate your partner on the following 10 traits.

- _____ 1. Intellectual / academic ability
- _____ 2. Social skills / social competence
- _____ 3. Artistic and / or musical ability
- _____ 4. Competency or skill at sports
- _____ 5. Physical attractiveness
- _____ 6. Leadership ability
- _____ 7. Common sense
- _____ 8. Emotional stability
- _____ 9. Luck
- _____ 10. Discipline

Marital Adjustment Questionnaire (DAS)

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list. (Please make a checkmark to indicate your answer).

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances	5	4	3	2	1	0
2. Matters of recreation	5	4	3	2	1	0
3. Religious matters	5	4	3	2	1	0
4. Demonstrations of affection	5	4	3	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	5	4	3	2	1	0
7. Conventionality (correct or proper behaviour)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0
10. Aims, goals, and things believed important	5	4	3	2	1	0
11. Amount of time spent together	5	4	3	2	1	0
12. Making major decisions	5	4	3	2	1	0
13. Household tasks	5	4	3	2	1	0
14. Leisure time interests and activities	5	4	3	2	1	0
15. Career decisions	5	4	3	2	1	0

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	0	1	2	3	4	5
19. Do you confide in your mate?	0	1	2	3	4	5
20. Do you ever regret that you married (or lived together)?	0	1	2	3	4	5
21. How often do you and your partner quarrel?	0	1	2	3	4	5
22. How often do you and your mate "get on each others' nerves"?	0	1	2	3	4	5

	Every Day	Almost Every Day	Occasionally	Rarely	Never
23. Do you kiss your mate?	4	3	2	1	0
24. Do you and your mate engage in outside interests together?	4	3	2	1	0

How often would you say the following events occur between you and your mate?

	Never	Less Than Once a Month	Once or Twice a Month	Once or Twice a Week	Once a Day	More Often
25. Have a stimulating exchange of ideas	0	1	2	3	4	5
26. Laugh together	0	1	2	3	4	5
27. Calmly discuss something	0	1	2	3	4	5
28. Work together on a project	0	1	2	3	4	5

There are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences in opinion or were problems in your relationship during the past few weeks (Check yes or no).

	Yes	No	
29.	0	1	Being too tired for sex
30.	0	1	Not showing love

31. The numbers on the following scale represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please circle the number which best describes the degree of happiness, all things considered, of your relationship.

Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
0	1	2	3	4	5	6

32. Which of the following statements best describes how you feel about the future of our relationship?

- 5 I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- 4 I want very much for my relationship to succeed, and will do all I can to see that it does.
- 3 I want very much for my relationship to succeed, and will do my fair share to see that it does.
- 2 It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- 1 My relationship can never succeed, and there is no more than I can do to keep the relationship going.

Support and Tolerance Scale (RDOS)

Indicate, on the scale provided, to what extent the following statements are true. There are no right or wrong answers. Please answer each statement openly and honestly. Reach each question carefully before responding. Circle in one letter.

1. It is hard for me to do what my partner needs me to do when she/he needs me

A	B	C	D	E	F	G
not at all						extremely

2. It is hard for me to understand my partner's problems.

A	B	C	D	E	F	G
not at all						extremely

3. It is hard for me to be supportive of my partner when she/he is needy.

A	B	C	D	E	F	G
not at all						extremely

4. It is hard for me to really care about my partner's problems.

A	B	C	D	E	F	G
not at all						extremely

5. It is hard for me to put my partner's needs before my own.

A	B	C	D	E	F	G
not at all						extremely

6. It is hard for me to be supportive of my partner when she/he frequently seeks reassurance from me.

A	B	C	D	E	F	G
not at all						extremely

7. It is hard for me to be supportive of my partner who is often unhappy or down.

A	B	C	D	E	F	G
not at all						extremely

8. I am tolerant of my partner when she/he is insecure.

A	B	C	D	E	F	G
not at all						extremely

9. I am tolerant of my partner when she/he is needy.

A	B	C	D	E	F	G
not at all						extremely

10. I am tolerant of my partner when she/he seeks reassurance from me as to whether I truly like her/him.

A	B	C	D	E	F	G
not at all						extremely

11. I allow my partner to depend on me.

A	B	C	D	E	F	G
not at all						extremely

12. I will stay in my relationship even if my partner is needy.

A	B	C	D	E	F	G
not at all						extremely

Partner Attitudes (LEE)

The following are a number of statements that describe the way in which you may have acted towards your partner when he/she displayed symptoms of depression. Please read each statement and indicated whether you have been acting in these ways toward your partner over the past three months.

Simply mark (T) if you feel that the item is TRUE, or (F) if you feel the item is FALSE.

- ____ 1. I say I understand if sometimes he/she doesn't want to talk
- ____ 2. I calm him/her down when he/she is upset
- ____ 3. I say he/she lacks self-control
- ____ 4. I am tolerant with him/her even when he/she doesn't meet my expectations
- ____ 5. I don't butt into his/her conversations
- ____ 6. I don't make him/her nervous
- ____ 7. I say he/she just wants attention when he/she says he/she is not well
- ____ 8. I make him/her feel guilty for not meeting my expectations
- ____ 9. I am not overprotective with him/her
- ____ 10. I lose control of my temper
- ____ 11. I am sympathetic toward him/her when he/she is not feeling well
- ____ 12. I can see his/her point of view
- ____ 13. I am always interfering
- ____ 14. I don't panic when things start going wrong
- ____ 15. I encourage him/her to seek outside help when he/she is not feeling well
- ____ 16. I don't feel that he/she is causing me a lot of trouble
- ____ 17. I don't insist on doing things with him/her
- ____ 18. I can't think straight when things go wrong
- ____ 19. I don't help him/her when he/she is upset or feeling unwell
- ____ 20. I put him/her down if he/she doesn't live up to my expectations
- ____ 21. I don't insist on being with him/her all the time
- ____ 22. I blame him/her for things not going well

- _____ 23. I make him/her feel valuable as a person
- _____ 24. I can't stand it when he/she is upset
- _____ 25. I leave him/her feeling overwhelmed
- _____ 26. I don't know how to handle his/her feelings when he/she is not feeling well
- _____ 27. I say he/she causes his/her troubles to occur in order to get back at me
- _____ 28. I understand his/her limitations
- _____ 29. I often check up on him/her to see what he/she is doing
- _____ 30. I am able to be in control in stressful situations
- _____ 31. I try to make him/her feel better when he/she is upset or ill
- _____ 32. I am realistic about what he/she can and cannot do
- _____ 33. I am always nosing into his/her business
- _____ 34. I hear him/her out
- _____ 35. I say it is not OK to seek professional help
- _____ 36. I get angry with him/her when things don't go right
- _____ 37. I always have to know everything about him/her
- _____ 38. I make him/her feel relaxed when I am around
- _____ 39. I accuse him/her of exaggerating when he/she says he/she is unwell
- _____ 40. I will take it easy with him/her, even if things aren't going right
- _____ 41. I insist on knowing where he/she is going
- _____ 42. I get angry with him/her for no reason
- _____ 43. When he/she is upset, I am a considerate person
- _____ 44. I support him/her when he/she needs it
- _____ 45. I butt into his/her private matters
- _____ 46. I can cope well with stress
- _____ 47. I am willing to gain more information to understand his/her condition, when he/she is not feeling well
- _____ 48. I am understanding if he/she makes a mistake
- _____ 49. I don't pry into his/her life
- _____ 50. I am impatient with him/her when he/she is not well
- _____ 51. I don't blame him/her when he/she is unwell

- _____52. I expect too much from him/her
- _____53. I don't ask a lot of personal questions
- _____54. I make matters worse when things aren't going well
- _____55. I often accuse him/her of making things up when he/she is not feeling well
- _____56. I "fly off the handle" when he/she doesn't do something well
- _____57. I get upset when he/she doesn't check in with me
- _____58. I get irritated when things don't go right
- _____59. I try to reassure him/her when he/she is not feeling well
- _____60. I expect the same level of effort from him/her, even if he/she doesn't feel well

Responses to Your Partner's Mood (RSQ)

People think and do many different things when they live with a partner who displays symptoms of depression. Please begin by indicating, in the space provided, the symptom displayed by your partner that bothers you the most. Examples of depressive symptoms are provided below, but you may describe one that is not included in the list. Then proceed to read each of the statements and indicate whether you never, sometimes, often or always think or do each one when your partner displays the symptom you have described. Please indicate what you generally do, not what you think you should do.

Symptoms sometimes displayed by depressed persons:

- * My partner has no energy or enthusiasm to do things we used to enjoy doing together e.g., outings, hobbies, sex, sports
- * My partner never wants to socialize anymore
- * My partner is moody, angry, irritable, or resentful of me
- * My partner is moody, angry, irritable, or resentful of the children
- * My partner tends to feel guilty and to be down on him/herself
- * My partner is pessimistic about the future
- * My partner has difficulty making everyday decisions
- * My partner appears indifferent to me
- * My partner constantly seeks reassurance from me that I care about him/her
- * My partner overreacts to minor stressors
- * I can't count on my partner to carry out his/her share of the household responsibilities
- * My partner is passive
- * My partner acts as if he/she doesn't care about me anymore
- * My partner is so self-absorbed, nothing else matters
- * My partner is depressing to be around

The symptom displayed by my spouse that bothers me the most:

Seeking Reassurance From Your Partner (DIRI)

Instructions: Please answer each of the following questions. Some of the questions are of a personal nature. There are no right or wrong answers to the questions. Please answer each question openly and honestly. Reach each question carefully before responding.

1) Do you find yourself often asking your partner how she/he truly feels about you? (Circle in one letter).

A	B	C	D	E	F	G
not at all						extremely

2) Do you frequently seek reassurance from your partner as to whether she/he really cares about you? (Circle in one letter).

A	B	C	D	E	F	G
not at all						extremely

3) Does your partner sometimes become irritated with you for seeking reassurance from her/him about whether she/he really cares about you? (Circle in one letter).

A	B	C	D	E	F	G
not at all						extremely

4) Does your partner sometimes get “fed up” with you for seeking reassurance from her/him about whether she/he really cares about you? (Circle in one letter).

A	B	C	D	E	F	G
not at all						extremely

Seeking Support from Others (PRF)

In the following page you will find a series of statements which a person might use to describe him or herself. Reach each statement and decide whether or not it describes you. If you agree with the statement or decide that it does describe you, answer (T) TRUE. If you disagree with the statement or feel that it is not descriptive of you, answer (F) FALSE. Please mark your answer on the space provided beside each item. Answer every statement either true or false, even if you are not completely sure of your answer.

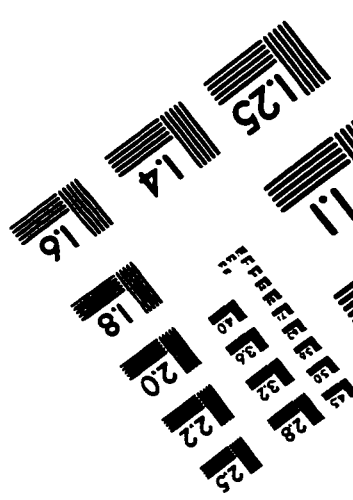
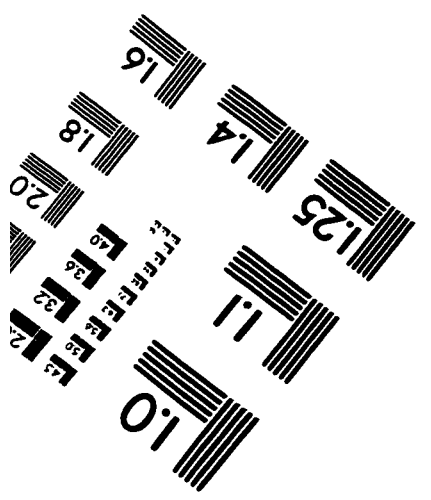
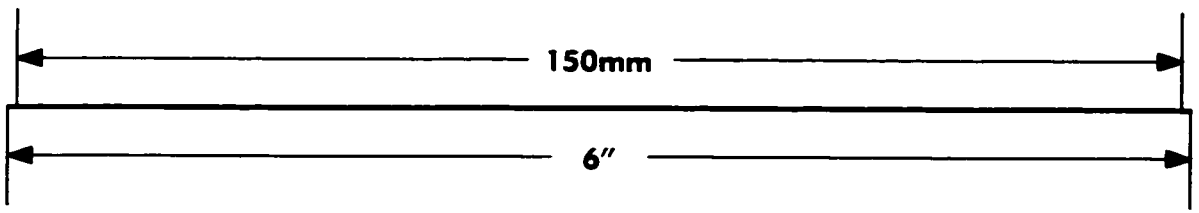
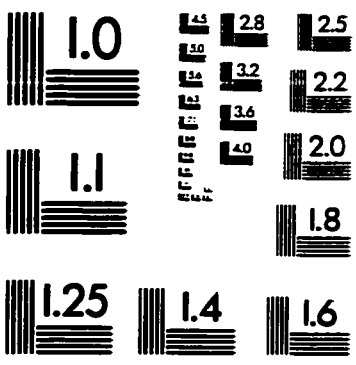
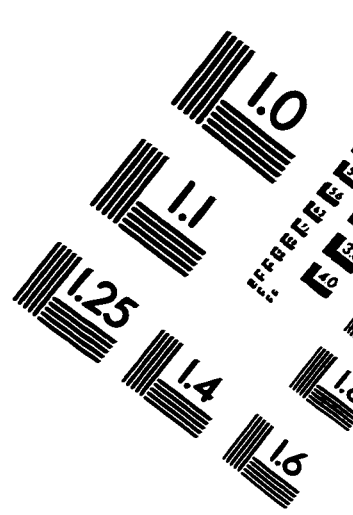
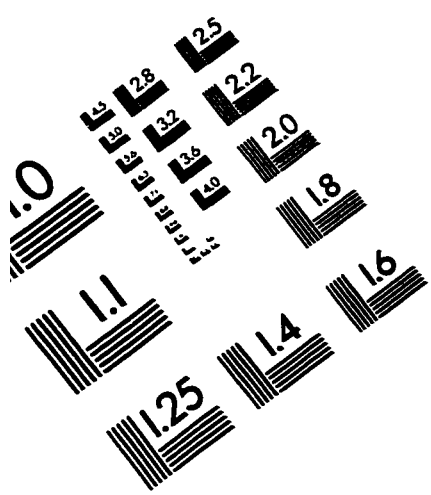
- ____ 1. If I feel sick, I don't like to have friends or relatives fuss over me
- ____ 2. I prefer to be married to a protective and sympathetic person
- ____ 3. I prefer not being dependent on anyone for assistance
- ____ 4. I try to share my burdens with someone who can help me
- ____ 5. My partner doesn't have to spend much time taking care of me
- ____ 6. I want to be sure someone will take care of me when I am old
- ____ 7. I usually make decisions without consulting others
- ____ 8. I prefer to face my problems by myself
- ____ 9. I like to ask other people's opinions concerning my problems
- ____ 10. When I was a child, I disliked it if my mother was always worrying about me
- ____ 11. If I ever think that I am in danger, my first reaction is to look for help from someone
- ____ 12. I would rather act on my own than have a superior help me
- ____ 13. I like to be with people who take a protective attitude toward me
- ____ 14. As a child, I disliked having to be dependent on other people
- ____ 15. I usually tell others of my misfortunes because they might be able to assist
- ____ 16. I often seek other people's advice

Mood Checklist (MAACL-R)

Directions: On this sheet you will find words which describe different kinds of moods and feelings. Mark an X in the boxes beside the words which describe how you generally feel. Some of the words may sound alike, but we want you to check all the words that describe your feelings. Work rapidly.

- | | | | | | | | | |
|----|---|--------------|----|---|--------------|-----|---|---------------|
| 1 | • | active | 45 | • | fit | 89 | • | peaceful |
| 2 | • | adventurous | 46 | • | forlorn | 90 | • | pleased |
| 3 | • | affectionate | 47 | • | frank | 91 | • | pleasant |
| 4 | • | afraid | 48 | • | free | 92 | • | polite |
| 5 | • | agitated | 49 | • | friendly | 93 | • | powerful |
| 6 | • | agreeable | 50 | • | frightened | 99 | • | quiet |
| 7 | • | aggressive | 51 | • | furious | 94 | • | reckless |
| 8 | • | alive | 52 | • | lively | 95 | • | rejected |
| 9 | • | alone | 53 | • | gentle | 96 | • | rough |
| 10 | • | amiable | 54 | • | glad | 97 | • | sad |
| 11 | • | amused | 55 | • | gloomy | 98 | • | safe |
| 12 | • | angry | 56 | • | good | 99 | • | satisfied |
| 13 | • | annoyed | 57 | • | good-natured | 100 | • | secure |
| 14 | • | awful | 58 | • | grim | 101 | • | shaky |
| 15 | • | bashful | 58 | • | happy | 102 | • | shy |
| 16 | • | bitter | 60 | • | healthy | 103 | • | soothed |
| 17 | • | blue | 61 | • | hopeless | 104 | • | steady |
| 18 | • | bored | 62 | • | hostile | 105 | • | stubborn |
| 19 | • | calm | 63 | • | impatient | 106 | • | stormy |
| 20 | • | cautious | 64 | • | incensed | 107 | • | strong |
| 21 | • | cheerful | 65 | • | indignant | 108 | • | suffering |
| 22 | • | clean | 66 | • | inspired | 109 | • | sullen |
| 23 | • | complaining | 67 | • | interested | 110 | • | sunk |
| 24 | • | contented | 68 | • | irritated | 111 | • | sympathetic |
| 25 | • | contrary | 69 | • | jealous | 112 | • | tame |
| 26 | • | cool | 70 | • | joyful | 113 | • | tender |
| 27 | • | cooperative | 71 | • | kindly | 114 | • | tense |
| 28 | • | critical | 72 | • | lonely | 115 | • | terrible |
| 29 | • | cross | 73 | • | lost | 116 | • | terrified |
| 30 | • | cruel | 74 | • | loving | 117 | • | thoughtful |
| 31 | • | daring | 75 | • | low | 118 | • | timid |
| 32 | • | desperate | 76 | • | lucky | 119 | • | tormented |
| 33 | • | destroyed | 77 | • | mad | 120 | • | understanding |
| 34 | • | devoted | 78 | • | mean | 121 | • | unhappy |
| 35 | • | disagreeable | 79 | • | meek | 123 | • | unsociable |
| 36 | • | discontented | 80 | • | merry | 124 | • | upset |
| 37 | • | discouraged | 81 | • | mild | 125 | • | vexed |
| 38 | • | disgusted | 82 | • | miserable | 126 | • | warm |
| 39 | • | displeased | 83 | • | nervous | 127 | • | whole |
| 40 | • | energetic | 84 | • | obliging | 128 | • | wild |
| 41 | • | enraged | 85 | • | offended | 129 | • | willful |
| 42 | • | enthusiastic | 86 | • | outraged | 130 | • | wilted |
| 43 | • | fearful | 87 | • | panicky | 131 | • | worrying |
| 44 | • | fine | 88 | • | patient | 132 | • | young |

IMAGE EVALUATION TEST TARGET (QA-3)



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