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# MARITAL THERAPY IN THE TREATMENT OF DEPRESSION: TOWARD A THIRD GENERATION OF THERAPY AND RESEARCH

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**ABSTRACT.** Two generations of outcome research demonstrate the potential efficacy of marital therapy in the treatment of depression. After reviewing treatment outcome studies on marital therapy for depression, we examine basic research linking aspects of the marital relationship to depressive symptoms. In doing so, we highlight a number of theoretical perspectives and research findings that can inform work with couples in which one spouse is depressed. Finally, we identify potential innovations that may lead to a third generation of marital interventions for depression and several avenues of inquiry for a third generation of outcome research on marital therapy for depression. © 1998 Elsevier Science Ltd

ARE MARITAL interventions the best available treatment approach for some depressed persons? Could marital interventions help in the prevention of later episodes of depression in some cases? If so, how can we identify the people who may respond especially well to marital therapy for depression, and how can we structure marital therapy to provide the greatest possible benefit? One approach to answering these questions is to examine available outcome research. As outcome studies accumulate, and as mediators and moderators of therapy outcome are examined, empirical guide-lines for clinical application will emerge. A different approach to the questions posed above is to identify relevant basic research and extrapolate to the clinical context. An explosion of basic research on personal relationships is expanding our understanding

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of the link between marital processes and depression. This creates an opportunity to construct more powerful marital interventions for depression.

A dilemma is created by the juxtaposition of these two different "empirical" approaches to therapy. Should we forge ahead to create newer and better marital interventions by adding, deleting, or modifying procedures in accordance with basic research findings? Or, should we attempt to replicate effects obtained in early outcome research, adhering closely to an established treatment manual? Overly strict adherence threatens to prolong the grip of a generation of therapy manuals even after the basic research indicates that changes are in order. However, overly rapid innovation threatens to produce a succession of interventions that are never sufficiently well tested to inspire full confidence in their use or to merit the label "well established."

Because it goes beyond the scope of the current review, we do not attempt to resolve the tension between these two empirical approaches to therapy. Instead, we offer a metaphor of "generations" of outcome research and so distinguish between further validation and attempts to develop newer and better treatment models. Marital therapy for depression is rooted in the basic science of personal relationships and it is inevitable that the procedures, strategies, and goals of therapy may change as that foundation advances. Accordingly, we offer the metaphor of "generations" of research to convey the sense of an evolving approach that nonetheless maintains a "family" resemblance over time. We recognize that this metaphor makes salient the tension between the desire to replicate effects using an established manual and the desire to add, delete or modify procedures on the basis of data-based developments. Because both types of empirically oriented approaches to therapy are important, we begin by identifying and reviewing briefly two generations of outcome research that support the utility of marital therapy as a treatment for depression. We then lay the groundwork for a third generation of marital therapy for depression by examining recent work on marital processes and depression. Finally, based on this recent work, we highlight innovations for treatment and new directions for research that may inform a third generation of marital therapy for depression.

## OUTCOME RESEARCH ON THE EFFECTIVENESS OF MARITAL THERAPY AS A TREATMENT FOR DEPRESSION

Outcome research establishes the efficacy of a treatment by demonstrating that when it is applied completely and to a suitable population, it results in measurable change. Interest in documenting the efficacy of psychotherapeutic interventions has led to the formation of the Task Force on Promotion and Dissemination of Psychological Procedures (1995) and the creation of standards that treatments should meet before being described as "empirically supported." Currently, these standards focus on crosssite replication and significant difference from a control group or equivalence with well-established treatments. Our review, therefore, examines in greater detail those studies that contrast marital therapy for depression with a control group or with a well-established individual treatment approach.

Two generations of research can be identified in outcome research addressing the efficacy of marital therapy for depression: a "first generation," or feasibility/demonstration stage, and a "second generation" or rigorous hypothesis-testing stage. We briefly review each before examining evidence on marital processes and depression. To bridge the gap between these two literatures we identify the need for a third generation of outcome research that utilizes basic empirical findings to refine interventions and to explicate predictors and mediators of therapy response.

# First Generation Research

A number of case studies and group comparisons have examined spousal involvement in therapy and various forms of marital therapy as a treatment for depression (for a review, see Beach, Sandeen, & O'Leary, 1990). However, these studies were quite limited. Case studies provide examples of successful treatment but do not demonstrate that the treatments generalize across an entire population. Additionally, they provide little indication of the boundaries of the treatment's effectiveness or of issues that may emerge for some, but not all, persons treated. Studies in this generation of research also either employed nonstandard or loosely-specified marital interventions, were focused on participants who did not meet current diagnostic criteria for a major depressive episode, unipolar type, or both. Although this first generation of research is encouraging, it does not provide a satisfactory answer to the question, "Is marital therapy an efficacious treatment for depressed persons?"

# Second Generation Research

In a second generation of research, reasonably well-specified marital therapies for depression have been used. Furthermore, the efficacy of marital therapy has been compared either to a control group or to the efficacy of widely-used individual therapies for depression. These studies indicate that conjoint marital therapy is better than no treatment and can be as effective in the treatment of depression as alternative individual approaches when applied to couples who are maritally discordant and contain a depressed partner. Second generation studies also provide evidence that the effect of marital therapy on depression is mediated by posttherapy marital satisfaction. In addition, findings suggest that it may be possible to identify "prescriptive indicators" for marital rather than individual therapy (i.e., indicators of differential response to the two approaches, see Hollon & Najavitis, 1988).

# Treatment Outcome Research: Basic Effects

Four outcome studies meet the criteria we described for second generation research. Each is described in turn.

Foley, Rounsaville, Weissman, Sholomaskas, and Chevron (1989). In this study, 18 depressed outpatients were randomly assigned to either individual interpersonal psychotherapy (IPT) or a newly-developed couple format version of IPT. This latter intervention was structured to include a focus on conjoint communication training, making it similar to BMT. This study included depressed husbands (n = 5) as well as wives (n = 13), but did not examine whether gender of the patient influenced response to treatment. Foley et al. (1989) found that participants in both treatments exhibited a significant reduction in depressive symptoms. However, they found no differential improvement on measures of depressive symptomatology between the two groups. Both interventions also produced equal enhancement of general interpersonal functioning. However, participants receiving couple IPT reported marginally higher marital satisfaction scores on the Locke-Wallace Short Marital Adjustment Test and scored significantly higher on one subscale of the DAS at session 16. Thus, compared to individual therapy, marital therapy proved as effective in reducing depressive symptomatology and somewhat more effective in enhancing the marital relationship.

Jacobson, Dobson, Fruzzetti, Schmaling, and Salusky (1991). Jacobson et al. (1991) randomly assigned 60 married women who had been diagnosed depressed to either BMT, individual CT, or a treatment combining BMT and CT. Couples were not selected for the presence of marital discord. In the half of the sample that reported some marital discord, BMT was as effective as CT in reducing depression. Further, only BMT resulted in significant improvement in marital adjustment for couples reporting some marital dissatisfaction. Supporting the Foley et al. (1989) results, these findings suggest that marital therapy may be as effective as an individual approach in relieving a depressive episode when provided to discordant-depressed couples. In these cases, marital therapy also may have the added benefit of enhancing marital functioning.

*Beach and O'Leary (1992).* Beach and O'Leary randomly assigned 45 couples in which the wife was depressed to one of three conditions: 1) conjoint Behavioral Marital Therapy (BMT), 2) individual cognitive therapy (CT), or 3) a 15 week waiting list condition. To be included in the study, both partners had to score in the discordant range of the Dyadic Adjustment Scale (DAS) and present clinically as discordant. BMT and CT both were equally effective in reducing depressive symptoms, and both were clearly superior to the wait-list control group. However, only BMT improved the marital relationship. Posttherapy, BMT produced a statistically significant (i.e., 20 point) increase in DAS scores compared to pretherapy. In contrast, wives in the CT and wait-list groups showed little change (-2 and 1 scale points for cognitive and wait-list groups, respectively). Replicating and extending the results of the Foley et al. (1989) and the Jacobson et al. (1991) studies, marital therapy was found to be as effective as an individual approach in relieving a depressive episode and more effective in enhancing marital functioning. In addition, marital therapy was found to be significantly better than wait-list.

*Emanuels-Zuurveen and Emmelkamp (1996).* In this study, 27 depressed outpatients were randomly assigned to either individual cognitive/behavioral therapy or communication-focused marital therapy. As in Foley et al. (1989), the sample for this study included both depressed husbands (n = 13) as well as depressed wives (n = 14). Participants in both treatments exhibited a significant reduction in depressive symptom, and there was no differential improvement between the two groups. In contrast, there was a significant, differential effect of treatment on marital outcomes, with the marital therapy condition producing substantially greater gains in marital satisfaction. In addition, there was a significant reduction in the depressed patient's criticism of the nondepressed partner only among those receiving marital therapy. Thus, this investigation replicated the pattern obtained in each of the three earlier studies; equivalent outcome for when the focus is depressive symptoms, better outcome in marital therapy when the focus is marital functioning.

Several caveats are noted by the authors. First, there was differential attrition between conditions with seven couples dropping out of the marital condition and two couples dropping out of the individual condition (of the original 36 couples). This provides a plausible rival hypothesis for the differential marital outcomes obtained for the two conditions. Second, depressive symptoms did not respond to individual therapy as well as they had in a prior study using the same manual and many of the same therapists, but with nondiscordant, depressed couples (Emanuels-Zuurveen & Emmelkamp, 1997). This may suggest that the particular version of individual, cognitive-behavioral therapy used was a poor fit for maritally discordant-depressed couples. Alternatively, it may be that maritally discordant-depressed spouses are more refractory to individual therapy than nondiscordant, depressed spouses.

*Mediation.* Two studies indicate that the effect of marital therapy on depression is mediated by changes in marital adjustment. Beach and O'Leary (1992) found that posttherapy marital satisfaction fully accounted for the effect of marital therapy on depression. Likewise, Jacobson et al. (1991) found that change in marital adjustment and depression covaried for depressed individuals who received marital therapy, but not for those who received cognitive therapy. Therefore, it appears that marital therapy may reduce level of depressive symptomatology primarily by enhancing the marital environment, whereas cognitive therapy appears to work through a different mechanism of change (i.e., cognitive change, see Whisman, 1993). Further research is needed to identify specific behavioral changes that contribute to this mediation (cf. Jacobson, Fruzzetti, Dobson, Whisman, & Hops, 1993; Sayers, Baucom, Sher, Weiss, & Heyman, 1991).

# Predicting Who Will Do Better in Marital Therapy for Depression

The second generation of research indicates that marital interventions are probably efficacious treatments for depression. However, information regarding differential response to treatment may highlight potential prescriptive indicators and so influence decisions about which treatment to use for which clients. Several attempts have been made to examine this issue.

"Marital problems" versus "cognitive errors." Beach and O'Leary (1992) investigated pretherapy marital environment and pretherapy cognitive style as two potential predictors of treatment outcome. A better pretreatment marital environment predicted less depressive symptomatology at posttreatment among wives receiving cognitive therapy. Furthermore, among wives in the cognitive therapy condition, more pretreatment cognitive errors predicted better marital functioning at posttreatment.<sup>1</sup> However, neither factor predicted outcome among wives

*Perceived etiology.* O'Leary, Risso, and Beach (1990) attempted to predict differential response to treatment from temporal order of problem onset. Women entering the treatment protocol were asked which problem came first, marital discord or depression. The correlation between temporal order ratings and residualized gains in marital satisfaction was significant in the cognitive therapy condition but nonsignificant in the marital therapy condition. Depressed patients who reported that their marital problems preceded their depression had poor marital outcomes if they were assigned to cognitive therapy, but positive marital outcomes if they were assigned to marital therapy. Conversely, for depressed patients who reported that depression preceded their marital problems, marital outcomes were equally positive in both conditions.

Addis and Jacobson (1996) also examined the relationship between clients' "reasons for depression" and their responses to treatment. They found that clients who viewed relationship factors as strongly related to their depression were less likely to

<sup>&</sup>lt;sup>1</sup>The measure of cognitive errors was the Cognitive Error Questionnaire rather than the more commonly used Dysfunctional Attitudes Scale (DAS). Elevated level of cognitive dysfunction as assessed by the DAS has not been shown to predict positive response to cognitive therapy (Whisman, 1993).

respond well to cognitive therapy. These clients completed less homework, viewed therapy as less helpful, and showed less improvement in level of depressive symptomatology. This work is in keeping with the assumption that therapy is most effective when there is a match between patient expectations and the treatment model (Whisman, 1993).

*Severity of depression.* The results of the Treatment of Depression Collaborative Research Program (TDCRP; Elkin et al., 1989) indicated that cognitive therapy might be a relatively ineffective treatment for severely depressed outpatients (but see Hollon et al., 1992, for a failure to replicate). With regard to marital therapy for depression, using a score of 30 on the BDI as the cutoff for severe depression (cf. Hollon et al., 1992), the recovery rate in the Beach and O'Leary (1992) sample did not differ as a function of severity for either cognitive therapy or marital therapy (Beach, 1996).

#### **Conclusions From Second Generation Outcome Research**

To summarize, in four independently conducted outcome studies, marital therapy for depression has been found to be as effective as empirically supported individual alternatives. In no case were there meaningful differences in the effect of marital and individual therapy on depressive symptoms at posttreatment, However, in each study significant differences or clear trends toward significance were found in the effect of marital and individual therapy on marital satisfaction at posttreatment. This suggests that small sample sizes are not an adequate explanation of equivalent outcomes with regard to depression. Further, in one of the studies marital therapy was compared to a wait-list control group and found superior, suggesting that weakness of individual approaches to treatment of depression in the context of marital discord also is not a sufficient explanation of the obtained pattern of results. In addition, preliminary evidence indicates that the mechanism of change in marital therapy is improved marital satisfaction.

Second generation research on marital therapy for depression has also highlighted possible prescriptive indicators for marital therapy, at least in so far as marital outcomes are considered. There is good reason for considering marital therapy instead of individual therapy when (1) the depressed partner is relatively more concerned about marital problems than about her depression, (2) marital problems are viewed by the depressed patient as having preceded and perhaps having caused the depressive symptoms, or (3) cognitive errors or "individual" symptoms are less salient to the depressed person than her marital problems. In these cases, clients may benefit as much from marital therapy as from individual approaches for their depression, and may benefit more from marital therapy in terms of relationship outcomes. At present, there is no consistent evidence that severity of the depressive episode is a prescriptive indicator for type of psychotherapy.

In brief, second generation research provides strong, initial support that well-specified, manualized forms of marital therapy can alleviate symptoms for people diagnosed with a major depressive disorder. However, several caveats should be noted. First, much of the available data pertain primarily to couples in which the wife is depressed. Second, outcome results are most readily generalized to outpatient rather than inpatient settings. Third, the data are silent with regard to the potential utility of combined marital and pharmacological approaches. Finally, marital therapy as a treatment for depression requires the active participation of both patient and spouse. Securing such participation may be a serious limitation to the implementation of marital therapy for depression in some cases (Coyne, 1996; Emanuels-Zuurveen & Emmelkamp, 1996a).

## **RECENT WORK ON MARITAL PROCESSES AND DEPRESSION**

The processes relating marital behavior to depression have been divided into positively and negatively valenced subsets. Although this distinction was initially drawn because of its utility in guiding clinical activity (Beach et al., 1990), division of marital transactions into positively and negatively valenced transactions is consistent with what is known about the underlying structure of affective experience (Watson, Clark, & Tellegen, 1988), the structure of affect in close relationships (Fincham, Beach, & Kemp-Fincham, 1997; Fincham & Linfield, 1997) and with recent proposals regarding couple typologies (Fruzzetti, 1996). Therefore, we examine research regarding the roles of negative and positive processes in depression. First, however, we examine the pivotal assumption that marital dissatisfaction and depression covary and examine empirical attempts to assess direction of causality. We then examine other new research that expands our understanding of the relationship between marital processes and depression.

#### Marital Dissatisfaction Covaries With Depression

A large body of empirical evidence encompassing a wide array of research designs and assessment strategies shows a robust association between depressive symptomatology and marital distress. A representative epidemiological study based on over 3,000 interviews found a 25-fold increase in the relative risk of major depression for people in unhappy marriages (Weissman, 1987). A representative self-report questionnaire study found a ten-fold increase in risk for depression among discordant relative to non-discordant spouses in a sample of 328 newly married couples (O'Leary, Christian, & Mendell, 1994). Finally, in a representative study of mildly maritally discordant couples interested in therapy, Cascardi, O'Leary, Lawrence, and Schlee (1995) found that 22% of discordant wives met diagnostic criteria for current major depressive episode using the Structured Clinical Interview for *DSM-III-R*, compared to 8% of non-discordant wives.

As suggested by these examples, the concurrent relationship between marital discord and depression is robust across samples, stages of family development, and definitions of the two constructs. In addition, this relationship continues to be replicated across laboratories and discipline boundaries (e.g., Demo & Acock, 1996; Hock, Schirtzinger, Lutz, & Widaman, 1995; Schafer, Wickrama, & Keith, 1996; Thompson, Whiffen, & Blain, 1995; Vega et al., 1996; Vinocur, Price, & Caplan, 1996). The existence of this association raises the question of whether there is a causal relation between marital problems and depression.

## Is There a Causal Relation Between Marital Problems and Depression?

Possible causal relationships between marital discord and depression include an effect of marital discord on depression, an effect of depression on marital discord, or a bidirectional pattern of causation. To tease apart these possibilities, a range of causal models have been investigated using structural equation modeling approaches (Beach et al., 1995; Burns, Sayers, & Moras, 1994; Fincham, Beach, Harold, & Osborne, 1997). **Beach et al.** (1995). In a national random probability sample of women working fulltime (N = 577), Beach et al. (1995) found a significant effect of marital satisfaction on depressive symptomatology 1 year later. Women who endorsed low levels of marital satisfaction showed greater future depressive symptoms. This effect remained even after controlling for the association between marital satisfaction and depression at the initial assessment. Accordingly, the prospective effect of marital satisfaction on depression for women may be generalizable to a broad cross-section of employed women. For men, controlling for initial depressive symptoms reduced the prospective effect of marital satisfaction on depression to nonsignificance.

**Burns et al.** (1994). Burns et al. (1994) investigated relationship satisfaction and depression in a sample of 115 patients receiving cognitive therapy for depression. Married patients (n = 68) rated their marital relationship and unmarried patients (n = 47) rated their closest intimate relationship. Reciprocal effects between relationship satisfaction and depression were investigated. Burns et al. (1994) found no evidence that depression exerted a causal effect on relationship satisfaction. However, they found a significant, albeit weak, effect of relationship satisfaction on depression.

Fincham et al. (in press). Fincham et al. (1997) examined a series of complimentary causal models in a sample of 150 newlywed couples. Couples were assessed at two time points separated by an 18 month interval. Replicating earlier work, marital satisfaction and depressive symptomatology were related to each other cross-sectionally. For husbands there were significant cross-lagged effects from earlier marital satisfaction to later depressive symptomatology and from earlier depressive symptomatology to later marital satisfaction. In contrast, marital satisfaction affected later depressive symptomatology among wives whereas depressive symptoms did not exert a significant effect on later marital satisfaction. Accordingly, the Fincham et al. (1997) study suggests that the flow of causality from marital dissatisfaction to depression may be more pronounced when it is the wife rather than the husband who is depressed.

Together, these results replicate and extend the pivotal hypothesis of covariation between marital discord and depression. Marital problems predict increased depressive symptoms or greater maintenance of depressive symptoms. In addition, the Fincham et al. (1997) study suggests that the nature of the causal relationship between marital discord and depression may differ for men and women.

## Negative Partner Behavior and Depression

Some partner behaviors may be particularly predictive of depressive symptoms or major depression, and may exert effects beyond their effect on marital satisfaction. More specifically, partner criticism, partner abuse, and trust violations all have received attention as potentially potent precursors of spousal depression. At the same time, these apparently disparate behaviors may share important characteristics and so provide clues about the processes by which the spouse may instigate or sustain partner depression.

**Partner criticism.** Vaughn and Leff (1976) found that depressed people were particularly vulnerable to family tension and to hostile statements made by family members. Schless, Schwartz, Goetz, and Mendels (1974) demonstrated that this vulnerability to marital and family-related stresses persisted even after recovery. Expanding on these

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results, Hooley, Orley, and Teasdale (1986; Hooley, 1986; Hooley & Teasdale, 1989) found that level of "expressed emotion," an index in which implied criticism of the target individual figures prominently, predicted relapse of depression. Likewise, Mundt, Fiedler, Ernst, and Bakenstrass (1996) found that "covert criticism" and long chains of negative marital interaction predicted relapse for a subgroup of endogenously depressed patients. Similarly, in earlier observational work, Hautzinger, Linden, and Hoffman (1982) reported that spouses of depressed partners seldom agreed with their partners, often offered help in an ambivalent manner, and often evaluated their depressed partners negatively. Accordingly, criticism and negative interaction with partners appear common in couples with a depressed partner. In addition, these findings raise the possibility that undermining the depressed person's self-view or agreeing with negative aspects of that self-view may contribute to relapse in depression. Research to date leaves open the question of whether the effect of spousal criticism is mediated through its effect on satisfaction, through its effect on self-view, or through some other mechanism.

## Partner abuse

*Physical abuse.* Some level of physical violence characterizes approximately 30% of all marriages in the USA (Pagelow, 1992), and clinical observations suggest that many battered women suffer from major depression. Cascardi and O'Leary (1992) found that 52% of the women seeking services at a domestic violence facility scored 20 or greater on the Beck Depression Inventory, suggesting a high rate of diagnosable depression in this population. Similarly, Andrews and Brown (1988) found elevated rates of depression for women in violent relationships. However, physically aggressive couples also display more overall hostility and psychological abuse than do other discordant couples (e.g., Burman, Margolin, & John, 1993; Cordova, Jacobson, Gottman, Rushe, & Cox, 1993). Likewise, women who have been physically abused in their marriage typically report lower marital satisfaction (Bauserman & Arias, 1992; Cascardi et al., 1995; Edelson, Eisikovits, Guttman, & Sela-Amit, 1991). Therefore, the effects of low marital satisfaction and concomitant psychological abuse, rather than physical abuse per se, may account for much of the increase in depressive symptomatology associated with physical abuse.

*Psychological abuse.* Women in physically abusive relationships often report that psychological abuse has more negative effects than does physical abuse (Folingstad, Rutledge, Berg, Hause, & Polek, 1990). In a sample of 68 battered women, Arias (1995) found that psychological abuse was more strongly associated with depressive symptoms than physical abuse, and this association remained significant after controlling for physical abuse. In contrast, level of physical abuse was not significantly associated with depression after controlling for level of psychological abuse. Accordingly, one possible mediator of the effect of physical violence on depression is the level of verbal humiliation, overcontrol, and criticism expressed by the partner (i.e., psychological abuse). In turn, this raises the possibility that the effect of abuse on depression is mediated through lower marital satisfaction or more negative self-view.

**Other extreme, negative partner behavior.** Christian-Herman, O'Leary, and Avery-Leaf (1997) proposed that threatening partner behaviors, such as affairs and other trust violations, may be sufficient to prompt an episode of depression. They found that 36% of women experiencing such events were clinically depressed, despite no prior history of major depression (according to the Structured Clinical Interview for the DSM-III-

*R*). This may be compared to an expected incidence of 1-2% for an unselected sample of women who have never experienced a prior episode of depression. Consonant with this finding, in their investigation of the role of severe stress in depression Brown and colleagues reported that over 25% of all severe, threatening events were due to spouse behavior (Brown, Andrews, Harris, Adler, & Bridge, 1986). "Humiliation events," such as the discovery of a partner's affair, were found to be particularly potent in precipitating an episode of depression. As is implied by the term "humiliation event," such events are presumed to influence self-view.

In summary, the three most commonly identified negative behaviors appear to have in common two mechanisms linking them to elevated levels of depression. Each appears potentially linked to lower partner marital satisfaction and each may have a strong negative impact on the partner's self-view. Expressed emotion indices capture negative views of the partner that may be conveyed both covertly and overtly and they are also related to conflicted marital interaction. Likewise, physical victimization both reduces marital satisfaction and is strongly associated with psychological abuse and other behaviors that may undermine one's self-view. Finally, trust violations may affect both relationship satisfaction and self-concept.

# Negative Marital Processes Attributable to the Depressed Spouse

Hammen's (1991) stress-generation theory posits that depressed individuals generate additional stressors in their environment, particularly in their interpersonal environment, which subsequently exacerbate depressive symptomatology. Hammen's model suggests that, in addition to the effect of marital dissatisfaction and various other stresses on later depressive symptoms, depressive symptoms should lead to a variety of marital difficulties and increase marital stress (and perhaps dissatisfaction). The theory is supported in broad brush by findings that depressed persons are often perceived to be a burden by their spouses (Coyne, Kahn, & Gotlib, 1987; Coyne et al., 1987), and that spouses may often be silently upset with a depressed partner (Biglan, Rothlind, Hops, & Sherman, 1989). In a direct test of stress generation theory, Hammen (1991) compared unipolar depressed women to bipolar, medically ill, and control group women. She found that unipolar depressed patients experienced more stressful life events than controls, and that stressful interpersonal events were the most elevated among the unipolar depressed group. Mechanisms of stress-generation in marriage attributable to depressed spouses include negative support behavior, role performance decrements, problem-solving deficits, and cognitive distortions. Research on each mechanism is reviewed below.

*Negative support behavior.* Depressed persons are less effective at providing or eliciting support (Rook, Pietromonaco, & Lewis, 1994), but the role of these difficulties in precipitating relationship stress has only recently been examined. Davila, Bradbury, Cohan, and Tochluk (in press) operationalized stress-generation behaviors as levels of positive and negative (e.g., criticism, rejection, blaming, exaggerating problems, inattentiveness) support behavior generated during two 10-min interactions, along with preinteraction expectations. Providing strong support for stress generation among wives, wives with greater levels of depressive symptomatology showed more negative (but not less positive) support behaviors and expectations. In keeping with Hammen's (1991) theory, negative support behaviors mediated the effect of prior depressive symptoms on later marital stress. In turn, marital stress predicted more depressive symptoms.

Schmaling and Jacobson (1990) found that even the nondiscordant, depressed wives in their sample responded negatively to their partners during problem solving discussions. This suggests that some level of negative behavior toward the spouse is characteristic of depressed persons during potentially conflictual interactions rather than being attributable entirely to marital dissatisfaction. Indeed, couples with a depressed partner are more intentionally negative, more verbally and non-verbally negative, and more hostile than other couples (e.g., McCabe & Gotlib, 1993). Accordingly, providing negative support behaviors to the partner may be an important way in which depressed individuals set the stage for future negative behavior by the partner.

*Poor role performance.* Failure to perform well in various roles related to work or family is another potentially important area of marital stress generation in depression. Role dysfunction has been reported to continue even after a major depressive episode remits (Bothwell & Weissman, 1977). Likewise, persons with significant, non-clinical depressive symptoms exhibit substantially poorer performance at work and at home compared to persons with a variety of other ailments (Wells et al., 1989). In a study of 495 adults, Beach, Martin, Blum, and Roman (1993a) found that role functioning was related to level of depressive symptoms. This decreased functioning was reported both by the depressed person, by spouses and by others close to the depressed person. Accordingly, role performance decrements are apparent to both self and others and may constitute an important source of stress-generation in marriage. Alternatively, role performance decrements may occasion a negative self-view that is "verified" by the spouse. The impact of such "negative verification" experiences is discussed below.

**Problem-solving deficits.** Christian, O'Leary, and Vivian (1994), found that among discordant couples, depression was associated with poorer self-reported problem-solving skills in both husbands and wives. At the same time, negative behavior displayed during problem solving discussions is a robust cross-sectional correlate of marital satisfaction (Weiss & Heyman, 1997), suggesting that poor marital problem solving is a potential source of stress-generation in marriage.

Much of the research on problem solving difficulties in depression has been influenced by the coercion model (Biglan et al., 1989) which identifies depressive behavior (i.e., self-derogation, physical and psychological complaints, and displays of depressed affect) as a functional, albeit coercive, set of behaviors that are most likely to reinforced when there is a high level of negative verbal behavior in the home environment. It has been found that partners react to depressive behavior differently than they do to critical/aggressive behavior both emotionally (Biglan et al., 1989) and behaviorally (e.g., Hops et al., 1987). In particular, partners are much less likely to respond to depressive behavior with verbal aggression than they are to reciprocate verbal aggression (Beach, Brooks, Nelson, & Bakeman, 1993). For spouses who are fearful of angering their partners, the different pattern of partner response may render depressive behavior a highly reinforced pattern of behavior (note the similarity to Coyne's, 1976a, hypothesis). In addition, depressive behavior is most likely to appear in the context of potentially conflictual discussions with the partner (Schmaling & Jacobson, 1990), suggesting that depressive behavior is, in part, a response to the stress of such circumstances. Thus, the coercion model may provide a framework for understanding the way in which depressive behavior supplants more adaptive problemfocused coping behavior in marital dyads. Accordingly, the coercion model may provide guidance in reducing stress-generation effects associated with poor problem solving or with depressive behavior more generally.

*Marital cognition.* A fourth possible avenue for stress-generation in depression is the recruitment of negatively-valenced marital cognition. Depression is associated with depressogenic patterns of thinking, and recovery from depression often leads to remission of depressogenic thinking patterns. Therefore, depression also could serve to recruit negatively-valenced marital cognition such as a negative expectation about the partner or the future of the relationship. Supporting this view, Davila et al. (1997) found that spouses' expectations for upcoming interactions were influenced by level of depressive symptoms. If this effect extends to other types of marital cognition, and is independent of marital satisfaction, this may be an important avenue of marital stress-generation in depression.

Marital attributions, one specific type of cognition, have been extensively investigated with regard to discordant, depressed couples. Attributions account for unique variance in marital satisfaction even after controlling for depression/negativity affectivity (e.g., Fincham & Bradbury, 1993; Karney, Bradbury, Fincham, & Sullivan, 1994), or attributions associated with depression (e.g., Horneffer & Fincham, 1996). In addition, negative marital attributions appear to characterize marital distress rather than clinically diagnosed depression (Fincham, Beach, & Bradbury, 1989; Townsley, Beach, Fincham, & O'Leary , 1991). It does not appear that depression influences satisfaction by recruiting negative marital attributions. The possibility remains, however, that depression recruits cognition relevant to the marital context (e.g., personalization) or negative expectations for marital interaction as in the Davila et al. (1997) study. Accordingly, this should remain an area of investigation.

In sum, changes associated with depressive symptomatology may set the stage for negative partner behavior or the depressed person's own marital dissatisfaction in a number of ways. More specifically, it appears that depressed persons may direct more negative conversational behavior toward partners, expect to have poorer quality interactions with partners, perform more poorly in roles salient to the partner, and display poorer problem-solving.

## **Depression and Partner Satisfaction**

In most studies showing an effect of depression on later marital dissatisfaction, the effects are intrapersonal (e.g., Davila et al., 1997). In contrast, studies of interpersonal effects involving one partner's depressive symptoms on the other's marital satisfaction have been sparse. Beach and O'Leary (1993) found that for men, but not for women, level of depressive symptomatology predicted later marital distress for both the self and the partner. Likewise, Cascardi et al. (1995) found that depressive episodes prior to marriage may place both partners at increased risk of subsequent marital discord (see also Gotlib, 1996<sup>2</sup>). Accordingly, we review two additional mechanisms of stress generation that may link depression with partner dissatisfaction: negative affect induction and feedback-seeking behavior.

*Induced affect.* Meta-analysis of several studies investigating Coyne's (1976a, 1976b) interactional theory of depression suggest that depressed persons induce negative affect in others and are rejected by others (Segrin & Dillard, 1992). However, in these investigations negative affect induction does not account for the rejection of depressed persons (Gurtman, 1986). Nonetheless, if negative affect leads to lower satisfaction

<sup>&</sup>lt;sup>2</sup> Alternatively, these effects may be due to neuroticism (or other characteristics associated with depression) rather than to depression per se (Kelley & Conley, 1987).

only over relatively long lags (as for men in the Fincham et al., 1997, study), it may be that the impact of negative affect induction has been missed by designs that focused on relatively short-term effects only. The average duration of a depressive episode is nine months and half of all depressed persons experience more than one episode. Therefore, the potential for prolonged negative affect induction in the partner is clear. If negative affect induction works in the way predicted by Coyne, but only over time lags of several months, it may be that negative affect induction will be found to lead to rejection as longer time frames are used to investigate this effect. Alternatively, it may be necessary to examine other characteristics of the nondepressed partner, or other characteristics of the depressed spouse to identify the conditions under which negative affect induction results in rejection.

Feedback seeking. Coyne's interactional theory of depression also suggests that demands for reassurance and support may lead to partner rejection (Coyne, 1976a, 1976b; Coyne et al., 1987). Supporting the theory, significant associations between reassurance- seeking and depression have been found (e.g., Joiner, Alfano, & Metalsky, 1992, 1993; Joiner & Metalsky, 1995; Katz & Beach, 1997a). Expanding on Coyne's theory, Joiner and Metalsky (1995) proposed that both reassurance-seeking and negative feedback-seeking may be important in accounting for the negative impact of depression on others. Reassurance-seeking reflects an interest in positive feedback but negative feedback-seeking reflects an interest in negative, self-verifying feedback. Therefore, the depressed person's interest in both types of feedback may create confusing interpersonal demands. Further, in keeping with Coyne's original theory, these demands may be intensified as the individual becomes more depressed. This leads to the prediction that the three-way interaction of depression, reassurance-seeking, and negative feedback-seeking should predict rejection by others. Evidence supporting the Joiner and Metalsky (1995) theory was found among male (but not female) roommate dyads. This suggests that men may be prone to reject others who engage in high levels of both reassurance-seeking and negative feedback seeking, particularly if the other is depressed.

Extending and replicating the Joiner and Metalsky (1995; Joiner et al., 1993) theory in the realm of romantic relationships, Katz and Beach (1997a) found that men were most likely to report relationship dissatisfaction when their partners reported elevated depressive symptoms in conjunction with elevated levels of reassurance-seeking and negative feedback-seeking. Accordingly, it appears that Joiner and Metalsky (1995) have outlined a mechanism that may explain some of the effect of depressive symptoms on partner relationship satisfaction.

#### **Positive Marital Processes and Depression**

In the original marital discord model of depression (Beach et al., 1990), five types of positive, supportive partner behavior were highlighted as potentially important for buffering negative events and alleviating depression: enjoyable time spent together, positive listening, tangible assistance, self-esteem support, and intimacy/confiding. These behaviors are often perceived as supportive and positive by spouses; engaging in such behaviors is related to more positive ratings of supportiveness by spouses and lower levels of depressive symptoms over time (Cutrona & Suhr, 1994). Further, spouses are uniquely positioned to offer both the bulk of such supportive interactions (Beach, Martin, Blum, & Roman, 1993b) and to be the most effective support providers in terms of increasing overall life satisfaction (Wan, Jaccard, & Ramey, 1996). Ac-

cordingly, there is ample reason to attend to the potential impact on depression of positive partner behavior. Indeed, there may be circumstances under which positive partner behaviors are uniquely beneficial in helping to end a longstanding episode of depression (see Fresh Start below). At the same time, recent research offers two cautionary notes. First, because depressed persons often have low self-esteem, it is important to examine the situations in which agreement from the partner may have negative rather than positive effects (see Negative Verification below). Second, responses to partner support appear to be more idiosyncratic than previously thought (see Social Support below).

*Fresh start events.* Brown and colleagues proposed the Life Events Model of recovery from depression (Brown, Adler, & Bifulco, 1988; Brown, Lemyre, & Bifulco, 1992). This model was based on research demonstrating that a change in life circumstance can relieve depression if it produces the perception that either a significant difficulty has been relieved or one has gotten a fresh start (in life). Importantly, it is not necessary for a "fresh start" event (such as reconciliation with a spouse) to resolve all the difficulties confronting an individual in order to prompt recovery; the event only needs to provide the promise of resolving at least one serious problem. This research suggests that the particular pattern of positive behavior offered by a spouse in marital therapy may not always be crucial. Rather, it may be of importance that the depressed patient construe the new positive behavior by the partner and the marital therapy context itself as reflecting an opportunity for real change in the relationship.

*Negative self-verification: Behavior that appears positive and has a negative effect.* In the original marital discord model positive partner behavior was viewed as always related to less depressive symptomatology. Recent empirical and theoretical developments have rendered this view untenable. Self-verifying feedback from the partner, normally a positive event in relationships, has been identified as a predictor of increased depressive symptoms when the self-views being verified are negative. In the same way, verbal self-disclosure, long viewed as a hallmark of intimacy, may render more toxic a partner's expressions of negative views about a depressed spouse, particularly beliefs congruent with the spouse's own self-views.

Self-verification theory (Swann, 1983) suggests that people seek and prefer partner feedback that confirms their self-view. Thus, Individuals with low self-esteem should seek out and prefer less positive feedback from partners. In addition, beyond the point at which positive feedback is verifying, the receipt of more positive feedback from the partner should not result in gains in relationship satisfaction. The receipt of verifying feedback about negative self-views may be termed "negative verification." Verification has positive effects on relationship quality (Katz, Beach, & Anderson, 1996; Schafer et al., 1996). Yet, if negative verification increases subjective certainty regarding one's negative attributes (e.g., Pelham & Swann, 1994), it may render these self-views more stable (e.g., Swann & Predmore, 1985). Accordingly, negative self-verification could intensify the depressogenic effects of negative self-views while increasing relationship satisfaction. This may provide an insidious avenue of negative marital influence on depressive symptoms.

The effects of partner verification on relationship satisfaction and depressive symptoms was investigated by Katz and Beach (1997b). As in prior research, self-verification had a positive effect on relationship adjustment (Katz et al., 1996; Schafer et al., 1996). However, when targets' negative self-views were verified by partners, the effect of negative self-views on depressive symptoms was intensified. The effect of negative verification on depressive symptoms were independent of marital satisfaction. This suggests that verifying the partner's negative self-view may have negative implications for the partner's depression even as it increases positive feelings about the romantic relationship.

Parallel effects have been reported in the area of partner violence. Arias, Lyons, and Street (1997), investigated the effect of intimacy and perceived partner acceptance on the associations among partner violence, marital satisfaction, and depression in a sample of 66 married women. Partner violence exerted a direct negative effect on marital quality. However, the effect of partner violence on depression was moderated by perceived intimacy and perceived acceptance by the partner. For women who were victimized, perceptions of greater intimacy and acceptance by the partner were related to more depressive symptoms. As in the Katz and Beach (1997b) study, some apparently "positive" behaviors by the nondepressed partner, while increasing relationship satisfaction, may simultaneously increase depressive symptoms experienced by the depressed partner. In particular, feeling supported by and accepted by the partner could increase the depressogenic effect of abusive remarks and behavior.

*Social support: The idiosyncratic nature of positive supportive behavior.* Perceived support rather than received support best predicts individual reactions (Wethington & Kessler, 1986). In fact, received support is often unrelated to various psychological symptoms (e.g., Barrera, 1986) and does not show stress-buffering effects (Cohen & Wills, 1985). One solution to the problem posed by the relatively weak effects of specific supportive behaviors has been to look for personality or cognitive factors that may influence perception of support (e.g., Fincham & Bradbury, 1990; but see Tesser & Beach, in press, for a "contextual" solution).

In a provocative analysis of this problem, Lakey and Lutz (1996) note that the interaction of support behavior with a range of individual characteristics and expectations may be important. Lakey, McCabe, Fisicario, and Drew (1996) had participants rate a range of possible support providers on general level of perceived support. Data from three samples indicated that characteristics of both the supporters and the perceivers influenced ratings of supportiveness. However, in each study, the Perceiver × Supporter interaction accounted for the greatest amount of variance in support judgments. That is, using multiple raters and multiple support scenarios, they found a highly significant interaction between particular perceivers and the specific supportive behaviors offered by different possible supporters. They concluded that "supportiveness is in the eye of the beholder" (Lakey & Lutz, 1996, p. 451). Their findings suggest that one problem in identifying a discrete set of supportive behaviors that can be taught to all spouses is that different individuals may vary widely in the specific behaviors they see as supportive. Accordingly, it may be necessary to assess positive behaviors in an ideographic and context-sensitive manner to find greater evidence for an effect of positive partner behavior on depressive symptomatology.

Extending Lakey and Lutz's (1996) findings, recent research by Pasch, Bradbury, and Sullivan (1997) indicates that supportive behavior exhibited during interaction contributes to the feeling of being supported even after controlling for level of marital satisfaction. In particular, during discussion of a problem experienced by the wife, more positive and less negative support behavior by the husband was related to the wife feeling supported. Interestingly, less negative behavior by the wife in soliciting support was also related to the wife's feeling of being supported. Accordingly, although there may be considerable variability in the types of behaviors that convey support in

a particular dyad, there appears to be ample room for changes in supportive behavior to influence the extent to which partners feel supported.

## TOWARD A THIRD GENERATION OF MARITAL THERAPY FOR DEPRESSION

As Kurt Lewin noted, there is nothing quite so practical as a good theory. Many of the studies reviewed above have been informed by new theoretical developments which potentially provide a road map for increasing the efficacy and/or effectiveness of marital interventions for depression. By drawing on such theoretical advances, we can identify new targets of intervention and provide new suggestions regarding therapeutic strategy. Indeed, one challenge for third generation interventions is to refine marital interventions on the basis of an increased understanding of the links between marital processes and depression, and so enhance both efficacy and effectiveness. To do less would be to reach premature closure on marital interventions for depression and potentially result in an underestimate of their utility.

#### New Points of Therapeutic Intervention

One implication of the research reviewed above is that marital therapy for depression should be expanded to include new targets of intervention. Especially important will be new components of marital therapy that better target reciprocal processes connecting marriage and depression, such as negative verification, feedback-seeking, and stress-generation effects. These processes represent potential viscious cycles that may lock depressed persons into longer or more serious episodes of depression. Because these processes may not be addresed adequately in current versions of marital therapy for depression (or in individual therapy approaches), including them as new points of intervention offers hope of substantially enhanced efficacy. Also important will be incorporation of ways to highlight marital therapy as a potential "new start" in the marital relationship, and ways to provide idiographic assessment of spousal "support" behaviors that can be targeted to maximize treatment impact.

*Negative verification.* Negative verification effects suggest the need to uncover marital transactions that may not be reported as "negative," but nonetheless may have an important effect on recovery. Spousal agreement with negative beliefs about the self may intensify the effect of these self-beliefs on recovery. At the same time, negative verification may be relatively "invisible" to both partners because it does not cause distress and is not associated with conflict. To identify negative self-verification processses, it will be necessary to assess areas in which the depressed spouse makes global negative evaluations of the self and views the partner as agreeing. All such cases of perceived partner negative verification are likely to merit attention. In cases where the perception is "incorrect" (i.e., the partner does not agree with the negative selfevaluation), intervention efforts may proceed as a special case of cognitive therapy (e.g., helping the depressed spouse examine his or her beliefs in a supportive framework). In cases were the partner does agree, however, it will be important to develop interventions to help the nondepressed partner's evaluation change in tandem with the depressed spouse's self-evaluation. By the same token, there may be opportunities to identify areas in which the depressed spouse has positive self-beliefs but views the partner as overlooking or not agreeing with them. In this case, there may be an opportunity for marital therapists to utilize the spouse to reinforce beliefs that are changing in a positive direction and so strengthen their impact.

Feedback-seeking effects. Feedback-seeking effects highlight the need to identify requests from the depressed spouse that may be unanswerable and may serve to decrease empathy from the nondepressed partner. Some depressed spouses are preoccupied with concerns that their partners may leave them, and anxiety about the partner leaving may intensify the depressogenic effects of marital distress for women (e.g., Arias, Beach, Ronfeldt, & Brody, 1996). The challenge associated with reassurance-seeking is to provide partners with ways to handle the complexity and intensity of the requests often associated with depression as well as their own negative reactions. To do so, it may be necessary to help the nondepressed partner identify a source of their negative reaction. An attachment explanation may prove useful in this regard in many cases (e.g., Kobak, Ruckdeschel, & Hazan, 1994; Notarius, Lashley, & Sullivan, 1997). After identifying that they have negative reactions, partners may be provided with new responses that provide support at a general level but do not encourage either reassurance seeking or negative feedback seeking. In particular, partners may be encouraged to provide both statements of affection and compliments spontaneously, but not to provide either reassurance or negative feedback in response to reassurance or feedback-seeking. Correctly implemented, such an intervention may both decrease the depressed patients preoccupation while simultaneously decreasing the nondepressed partner's desire to withdraw.<sup>3</sup>

Stress-generation effects. Depressed individuals may benefit from new interventions designed to reduce their contribution to the marital difficulties which exacerbate their depression. In particular, interventions designed to remedy depression-specific obstacles to problem-solving and support provision in marriage are likely to be important. Although effective marital treatments for depression already include both problemsolving and communication training components, stress-generation effects focus particular attention on the depressed person's negative expectancies for problem-solving interactions, and their tendency to criticize. Because many distressed couples reciprocate negative behaviors, negative expectancies and criticism may prompt either a destructive pattern of partner behavior or lead to partner verification of a negative selfview. Accordingly, new interventions to reduce negative behavior from the depressed person to the partner seem warranted. At the same time, results of the Emanuels-Zuurveen and Emmelkamp (1996a) study suggest that existing communication focused interventions may already have some effect in reducing partner directed criticism.

The coercion model highlights the importance of providing depressed individuals with an alternative to depressive behavior that can be utilized in potential conflict situations and that is associated with a low probability of partner verbal aggression. Problem solving behaviors may be one such alternative. In addition, it may be sufficient to safely reduce the identified patient's avoidance of partner verbal aggression. In either case, decreased avoidance of problem areas should lead to decreased utilization of depressive behavior.

*Fresh start events.* Drawing on Brown et al.'s (1988) research, entry into marital therapy may become a potent intervention in its own right if marital therapy is presented as making a "fresh start" in the relationship. This is particularly important because the promise of ameliorating an area of adversity may precipitate recovery from longstanding depression (for a related discussion, see Ilardi & Craighead, 1994). To the extent

<sup>&</sup>lt;sup>3</sup> Reassurance seeking would be conceptualized as an anxiety driven behavior and treated like a "worry behavior" (see Brown, O'Leary, & Barlow, 1993).

that the depressed spouse comes to view marital therapy as an opportunity for a "fresh start" in their marriage, there may be substantial changes in depressive symptomatology even before substantive behavioral change has occurred in transactions with the spouse. Interestingly, the relatively rapid reduction in depressive symptoms early in marital therapy (Beach et al., 1990) suggests that in many cases the perception of a fresh start may result from having the couple begin to engage in positive joint activities and engage in more frequent caring behavior. Finding ways to maximize this early response to treatment will be important.

Rapid early change in marital therapy suggests that much of the benefit from marital therapy for depression may derive from accepting the rationale of treatment and seeing the potential for positive change in one's life. Conversely, failure to respond to marital therapy may derive from an inability to accept the rationale for treatment or to believe that change in one's marriage is possible. In keeping with emerging treatment guidelines for the use of marital therapy in the context of depression, one way to maximize the chance that therapy will be viewed as a potential new start is to refer individuals to different treatments depending on the personal salience and predicted maleability of different problem areas. Alternatively, it may be possible to enhance the sense that marital therapy is a fresh start by having the therapist emphasize this in various ways (i.e., this program is designed to offer you and your partner a new beginning in your relationship) or by beginning treatment with an explicit focus on fundamental life change (i.e., this course begins with skills to help you tap powerful forces that can change the way you view yourself, your partner, and your relationship).

*Social support.* An implication of the social support literature is that it is critical to help patients and their partners view each other as supportive, caring, and committed to the relationship. This suggests the value of adopting an idiographic approach in which the therapist focuses on reactions to spousal offers of support and helps to increase the frequency of those supportive behaviors that are already part of the couple's repertoire. Accordingly, third generation interventions may increase ideographic assessment of successful support provision by the partner and identify those behaviors that are or have been successful in the past. Such behaviors could then be encouraged in a manner similar to the usual treatment of caring behaviors. That is, supportive behaviors that work could be emphasized, encouraged, and tracked by both partners. Recent work by Bradbury and Pasch (1992) on the coding of social support provides a thorough list of behaviors that meet normative standards of supportiveness across a variety of situations (see also Pasch et al., 1997). Such lists may provide a useful starting point for ideographic assessment.

When standard listener and speaker skills are not being used by a couple, third generation interventions are likely to continue to emphasize skills training. In particular, because reflective listening and noncritical validation are often perceived as supportive regardless of context (Cutrona, 1996), reflective listening skills are likely to be useful.

*Reducing "toxic" partner behavior.* The basic research on specific partner behaviors related to depression indicates that some categories of negative partner behavior may be rather common among those seeking marital therapy for depression. To the extent that these particular problem areas require special attention prior to the initial of standard marital therapy procedures, marital therapy for depression may need to be modified accordingly. For example, the presence of physical abuse in relationships may require some modifications in treatment (see O'Leary, 1996). At a minimum,

greater attention to the abusive partner and attention to breaking the cycle of abuse seems important prior to beginning work on enhancing positive interactions. Likewise, when extramarital affairs precipitate depression, it may be necessary to modify the course of treatment to deal with special issues.

In sum, recent research suggests the potential importance of presenting marital intervention for depression as a life change experience (Fresh Start), adding new components to treatment that provide greater attention to the depressed person's contribution to their own marital difficulties (Feedback Seeking, Stress Generation), attending to nonconflictual yet damaging processes (Negative Verification), and adopting a more idiographic approach in the application of marital therapy for depression (Social Support, Toxic Partner Behavior). In each case, considerable work is needed before changes in current formats can be recommended based on empirical results. Still, the broad outlines of the new points of intervention to be examined in third generation research seem increasingly clear.

# UNDERSTANDING THE TREATMENT PROCESS: IMPLICATIONS FOR THIRD GENERATION OUTCOME RESEARCH

Below we underscore the importance of re-examining mediation and moderation of treatment effects as our treatment models become more sophisticated. Outcome designs that focus on elucidating the effect of Marital Therapy vs. Wait list are likely to be a useful first step in this regard (see Beach, 1991, for a more extended discussion).

# **Re-Examination of Mediators and Moderators of Outcome**

Research aimed at developing new techniques tied to the new points of intervention highlighted by the basic research should be a priority. However, simply adding additional interventions or "modules" of therapy does not ensure either that an intervention package will be acceptable to consumers or that it will work better than its constituent parts. Accordingly, it is important to establish that third generation interventions are both efficacious and effective. At the same time, because new interventions are tied to specific hypothesized mediating goals, it may be possible to examine third generation treatments using designs that allow for tests of mediation. To the extent that specific interventions can be shown to produce change in particular mediating goals of therapy, this will allow for greater flexibility in clinical application. Likewise, as those populations likely to be helped by marital approaches are specified, it will be important to use designs that allow for examination of moderators of treatment effects. Identifying moderators of the effects of marital therapy for depression is a potentially important first step toward identifying potential "prescriptive" indicators for marital therapy (cf. Hollon & Najavitis, 1988). An informative discussion dealing with these issues in the case of Cognitive Therapy for Depression can be found in Whisman (1993).

*Mediation.* An important initial step in conducting third generation research on the efficacy of marital therapy for depression will be to develop ways to measure the changes hypothesized to mediate treatment effects. This poses two related challenges. First, it is necessary to propose a change model that specifies the targets of change that are hypothesized to result in improvement. Targets of change highlighted by the current review and by the marital discord model of depression fall into one of six categories: (1) inducing the perception of a "fresh start," in the relationship, (2)

decreasing negative verification effects, (3) changing "stress-generating" behavior by the depressed person, (4) decreasing feedback-seeking by the depressed person, (5) increasing perceived caring, social-support, and other effective forms of couple coping, and (6) decreasing particularly "toxic" partner behaviors. However, each of these targets of change is expected to influence depression only to the extent that marital satisfaction and negative self-view are influenced. That is, only these two "higher order" targets of change are expected to mediate the effect of marital therapy on depression. The other targets highlighted in this review are instrumental in producing or maintaining change on either own or partner marital satisfaction (e.g., stress-generation, feedback seeking, social support, toxic partner behavior) or change in negative self-view (e.g., fresh start, negative verification, feedback seeking, effective coping), and so are only indirectly related to change in depression. Thus, only the two "higherorder" mediating goals of therapy (marital satisfaction and negative self-view) would be examined as mediators of the effect of marital therapy on depressive symptoms using standard mediational analyses (Baron & Kenny, 1986).

One approach to the examination of the other targets of treatment would be to examine them as mediators of the effect of treatment on more specific outcomes. For example, the success of interventions related to feedback-seeking might be assessed using reductions in partner withdrawal as the outcome measure. Similarly, the success of interventions related to negative verification effects might be assessed using certainty of the patient's negative self-view as the outcome measure. Alternatively, in keeping with their hypothesized role in changing marital satisfaction or negative self-view, each of the "lower level" mediators might be examined using the two "higher level" mediators as the outcome variables.

However, it is important to add a cautionary note. Both the "higher order" mediators identified above are themselves the subject of considerable ongoing empirical attention. New developments suggest that unipolar, self-report assessments of satisfaction and self-view may be inadequate to capture important aspects of the change produced by therapy (Fincham & Linfield, 1997; Fincham et al., 1997).

*Moderation.* It is important to develop prescriptive guidelines for the application of marital therapy for depression. A two-stage process seems most appropriate to identify moderators of the effect of marital therapy on depression. First, potential moderators that are theoretically informed could be examined in the samples required for the tests of mediation described above. Second, to the extent that variables proved to be moderators of treatment response, these variables could then be examined in subsequent comparisons of marital therapy and other forms of psychotherapy to see if they also predicted differential response to psychotherapeutic intervention.

For marital therapy, some broad guidelines have been adduced already. For example, marital therapy appears most likely to reduce depression if the couple is experiencing and reporting marital problems. This does not appear to be true for individual or pharmacological interventions. In addition, on the basis of one study each, it appears that earlier onset of marital problems than depression, greater problems associated with the marital relationship, and fewer cognitive errors, predict worse response to cognitive but not marital therapy. In each case, if replicated, the results represent potential indicators for marital therapy.

It will also be useful to examine possible moderators with regard to alternate formats for marital therapy for depression. Because the issue of tailoring treatment to fit particular couples is important, third generation research should include investigation of optional marital formats along with assessment of couple characteristics that may predict differential response to the alternative formats.

Some practical questions for third generation research. An obvious oversight to be remedied in future research is the lack of data regarding the combined efficacy of marital therapy and pharmacotherapy. Because marital therapy and pharmacotherapy appear to work through different mechanisms, they may have strong potential for additive effects (see Friedman, 1975). The IPT literature also indicates strong potential additive effects of an interpersonally-focused intervention in combination with antidepressant medication (Klerman, DiMascio, Weissman, Prusoff, & Paykel, 1974; Rounsaville, Klerman, & Weissman, 1981; Weissman, Klerman, Prusoff, Sholomskas, & Padian, 1981). The combination of marital therapy and antidepressant medication might prove particularly useful within a maritally discordant population. Again, mediational analyses may illuminate more of the ways in which these treatments combine, advancing theory as well as providing practical information.

A serious gap in the extant literature is the failure to examine the effects of marital therapy on sexual functioning in depression. Yet, sexual problems may be of considerable concern to partners, and a source of some tension in the relationship. In addition, because some forms of pharmacotherapy may be effective in enhancing sexual responsiveness as well as other somatic symptoms of depression, combining pharmacotherapy with marital therapy could prove especially useful both for the remission of depression and for the enhancement of marital and sexual satisfaction. If so, this suggests a possible rationale for combination treatments that include both marital or sex therapy in combination with antidepressant medication.

Also conspicuous by its absence is research on depressed husbands. While depression is only half as prevalent among men as women, it nonetheless a major public health problem that merits attention. There are ample clues in the basic literature to suggest that spouse involvement when the husband is the identified patient will need to be configured somewhat differently than when the wife is the identified patient. At the same time, the two small samples that included males suggest that marital therapy may be accepted by at least some depressed males. At present, however, outcome data are best viewed as indicating that marital therapy is probably efficacious in the treatment of depressed women. Work clarifying the optimal role for the partner in the treatment of men who are depressed is important and timely.

As was suggested by Emanuels-Zuurveen and Emmelkamp (1996), there may be a role for spouse involvement in therapy for those depressed persons who are not reporting marital discord. However, the optimal way to configure spouse involvement in such cases requires additional attention. Of particular interest is the possibility that interventions involving the partner may help to reverse possible negative verification effects.

Finally, we must address the issue of the effectiveness (or the acceptability to potential consumers) of marital therapy as a treatment of depression in women. A salient issue in this regard is husband willingness to participate in therapy (Coyne, 1996). Unfortunately, while the extent of this problem may vary across sub-populations, the dimensions of the problem and its covariates are largely unknown. Because a conjoint format is required for those forms of marital therapy tested to date, partner nonparticipation is a very serious potential obstacle. Given the importance of husband involvement in marital therapy for depression, issues related to facilitating spouse involvement have been underresearched.

## SUMMARY AND CONCLUSION

The next generation of marital interventions for depression has a strong foundation upon which to build.

Results of second generation outcome research show that established forms of marital therapy can go far both in improving marital satisfaction and in decreasing depressive symptoms. Second generation marital therapy for depression is manualized and emphasizes enhancing communication, resolving relationship problems, and increasing positive exchanges in the dyad. At the same time, there is a growing empirical literature suggesting new targets for therapeutic attention and a new perspective on the process of change in marital therapy for depression. By drawing on this growing literature, third generation interventions should be more efficacious than their second generation counterparts. However, more complex interventions may require greater attention to explication of the mediating goals of therapy if they are to provide a useful and flexible clinical framework. Accordingly, as a third generation of outcome research begins, it will be important to examine process and outcome concurrently. In addition, several practical issues of clinical importance have been overlooked during the second generation of outcome research and these will require attention. Hence, although current marital approaches to depression provide a solid foundation for future advances, there is a clear direction for growth and change. In sum, both continuing the second generation of outcome research and beginning the third generation appear to be viable options.

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